

# Ring Index

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This index lists the heterocyclic parent ring systems and has been compiled from the occurrences of those systems and their derivatives in Volumes 1-15 in the text, tables, equations, and schemes. Heterocycles have been included when they occur as a starting material, isolable intermediate, or a product, but not when they are reported as a nonisolable intermediate or a solvent.

Compounds are generally classified according to their fully unsaturated parent compound (but see below). Thus substituted, partially saturated, and fully saturated derivatives of, for example, pyrrole are all indexed under pyrrole. Benzo and similar derivatives are included under the most unsaturated parent system (e.g., quinoline, thienofuran, etc.). For any given heterocyclic parent only one indicated hydrogen isomer appears in the text, typically the most stable or the lowest numbered form; thus all instances of pyran, whether of the 2H- or 4H-form, are indexed under 2H-pyran. The charges and additional valences for any heterocyclic parent structure are not indicated.

The overall style follows that used in Chemical Abstracts and the first two editions of Comprehensive Heterocyclic Chemistry, but in order to keep the size of the index within reasonable bounds more attention has been paid to the monocyclic and bicyclic rings and only systems containing up to six fused rings have been included. For the same reason a limit on individual ring size in any system has been placed at 12 atoms. Also complexes of metals, clusters and carcass structures are not included.

Heterocyclic systems can be named by various methods, depending on ring size, the presence of metal atoms, the availability of trivial names, etc. For this index the naming of the heterocyclic parents has generally followed the practices of IUPAC. Thus Hantzsch-Widman names have been employed for monocyclic systems and for the other systems when the smallest ring size is five atoms or more, but replacement nomenclature has usually been followed for bicyclic and higher systems when they contain three- and four-membered rings. The drawing of compounds and naming was done using CS ChemDraw Ultra program with an application of ACS setting.

In addition to the name and structure of each parent system, the ring numbering of the system has also been given in every case.

Index entries are divided into two categories, primary and secondary. Primary index entries (page numbers printed in bold) occur when a significant part of a chapter is devoted to a particular ring system. Secondary index entries occur when a heterocyclic system is mentioned in a chapter devoted to other systems. This may be, for example, as a starting material or as a product, or in a discussion comparing properties.

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AsCP Phospharsirane 1, 718		CGe <sub>2</sub> Digermirane 1, 749–793	
AsSiTe 1H-Tellurarsasilirene 1, 679–693		ClrSi Siliridacyclopropane 1, 749–793	
BXY X,Y- C,N, elements 1, 513–537; 1, 720		C(M)N Metallaziridine 1, 749–793	
CAs(M) Metallaarsirane 1, 749–793		C(M)P Metallaphosphirane 1, 749–793	
CB <sub>2</sub> Diborirane 1, 759		C(M)S Metallathiirane 1, 749–793	
3H-Diborirene 1, 759		C(M)Si Metallasilirane 1, 749–793	
CCoP Phosphacobaltacyclopropane 1, 749–793		CMnN Azamanganacyclopropane 1, 749–793	
CFeP Phosphaferracyclopropane 1, 749–793		CMnP Phosphamanganacyclopropane 1, 749–793	
CFeS Thiaferracyclopropane 1, 749–793		CMoP Phosphamolybdacyclopropane 1, 749–793	
CGeS Thiagermirane 1, 787		CMoS Thiamolybdacyclopropane 1, 749–793	
Thiagermirene 1, 787		CNNi Azanickelacyclopropane 1, 749–793	
CGeSe Selenagermirane 1, 787		CNO Oxaziridine 1, 559–621	
CGeTe Telluragermirane 1, 787		Oxazirine 1, 559–621	

CNP 2H-Azaphosphirene 1, 712, 715		CORe Oxarhenacyclopropane 1, 749–793	
CNRe Azarhenacyclopropane 1, 749–793		COS Oxathiirene 1, 641–677	
CNS Thiazirene 1, 623–640		COTi Oxatitanacyclopropane 1, 749–793	
Thiazirene 1, 623–640		COV Oxavanadacyclopropane 1, 749–793	
CNSe Selenazirine 1, 679–693		COW Oxatungstacyclopropane 1, 749–793	
CNSi Azasiliridine 1, 773, 773–774		COZr Oxazirconacyclopropane 1, 749–793	
CNV Azavanadacyclopropane 1, 749–793		COsP Phosphosmacyclopropane 1, 749–793	
Azatumgacyclopropane 1, 749–793		COsS Thiosmacyclopropane 1, 749–793	
CNZr Azazirconacyclopropane 1, 749–793		COsSe Selenosmacyclopropane 1, 749–793	
CNbO Oxaniobacyclopropane 1, 749–793		COsTe Tellurosacyclopropane 1, 679–693	
CN <sub>2</sub> Diaziridine 1, 539–557		CO <sub>2</sub> Dioxirane 1, 641–677; 6, 150f	
3H-Diazirine 1, 539–557; 5, 508		CPPt Phosphaplatinacyclopropane 1, 749–793	
COFe Oxaferracyclopropane 1, 749–793		CPRe Phospharhenacyclopropane 1, 749–793	
COOs Oxosmacyclopropane 1, 749–793		CPRu Phospharuthenacyclopropane 1, 749–793	

CPSb Phosphastibirane 1, 719		Disilirene 1, 770	
CPSe Selenaphosphirene 1, 679–693		C <sub>2</sub> Sn <sub>2</sub> Distannirane 1, 786	
CPSi Phosphasilirane 1, 773–774		C <sub>2</sub> S <sub>2</sub> Dithiirane 1, 641–677	
CPW Phosphatungstacyclopropane 1, 749–793		Dithiirane 1, 641–677	
CPb <sub>2</sub> Diplumbirane 1, 770		C <sub>2</sub> B Borirane 1, 513–537	
CPdS Thiapalladacyclopropane 1, 749–793		1H-Borirene 1, 513–537	
CP <sub>2</sub> Diphosphirane 1, 695–747, 696, 720, 733		C <sub>2</sub> Ge Germirane 1, 483–512	
1H-Diphosphirene 1, 715		C <sub>2</sub> N Aziridine 1, 1–104; 6, 100; 7, 290, 290; 9, 337; 2, 82	
3H-Diphosphirene 1, 713, 720, 733		1H-Azirine 1, 82; 1, 105–172; 4, 522, 8, 500	
CSW Thiatungstacyclopropane 1, 749–793		2H-Azirene 1, 105–172, 151; 6, 155f; 6, 165f	
CSZr Thiazirconacyclopropane 1, 749–793		C <sub>2</sub> O Oxirane 1, 173–233; 2, 351, 2, 783, 784	
CSeSi Selenasilirene 1, 641–677		Oxirene 1, 173–233, 215; 6, 153f; 6, 169f; 6, 182–183	
CSiW Silatungstacyclopropane 1, 749–793		C <sub>2</sub> P Phosphirane 1, 457–481	
CSi <sub>2</sub> Disilirane 1, 770		1H-Phosphirene 1, 457–481; 2, 896; 2, 931	

C <sub>2</sub> S Thiirane 1, 299–390; 2, 416		C <sub>2</sub> Te Tellurirane 1, 433–453	
Thiirene 1, 299–390; 6, 182; 8, 662		GeSi <sub>2</sub> Disilagermacycloprop-1-ene 6, 669	
C <sub>2</sub> Se Selenirane 1, 433–453		Ge <sub>2</sub> Si Siladigermacyclopropane 2, 954–955; 3, 1206	
Selenirene 1, 433–453		1-Sila-2,3-digermacycloprop-2-ene 2, 964, 969	
C <sub>2</sub> Si Silirane 3, 1213–1214		Ge <sub>3</sub> Trigermilicyclopropane 2, 955; 3, 1206	
1H-Silirene 1, 483–512; 2, 931; 3, 1214		1H-Trigermirene 2, 964	
C <sub>2</sub> Sn 1H-Stannirene 1, 483–512		PSeC Selenaphosphorirane 1, 679–693	
C(M)O Metallaoxirane 1, 749–793	 M = metal	Si <sub>3</sub> Trisilacyclopropane 2, 955	

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C(X)(Y)(Z) 1,2,3-Trisheteroactane 2, 939–972	 X, Y, Z = O, S, N, P, As, Se, Ge Sn	[1,3]Digermetane 2, 907–938	
1,2,3-Trisheteroactene 2, 939–972	 X, Y, Z = O, S, N, P, As, Se, Ge Sn	[1,2]Digermete 2, 911, 926; 9, 932	
CGe <sub>2</sub> O [1,2,4]Oxadigermetane 1, 782		C <sub>2</sub> NO 4H-1,2-Oxazete 2, 689–711	
CGe <sub>2</sub> S [1,2,4]Thiadigermetane 1, 782		[1,2]Oxazetidine 2, 689–711	
CGe <sub>2</sub> Se [1,2,4]Selenadigermetane 1, 782		[1,3]Oxazetidine 2, 689–711	
CN <sub>2</sub> P [1,3,2]Diazaphosphetidine 2, 939–972		C <sub>2</sub> NS 2H-[1,2]Thiazete 2, 713–773	
C <sub>2</sub> As <sub>2</sub> [1,3]Diarsetane 2, 889; 9, 893		4H-1,2-Thiazete 2, 713–773	
C <sub>2</sub> GeO [1,2]Oxagermetane 2, 924, 924–925		[1,3]Thiazetidine 2, 713–773, 759	
C <sub>2</sub> GeS [1,2]Thiagermetane 2, 917		C <sub>2</sub> NSe [1,2]Selenazetidine 2, 853–874	
C <sub>2</sub> GeSe 2H-[1,2]Selenagermete 2, 853–874		C <sub>2</sub> N <sub>2</sub> 1,2-Diazete 2, 623–687	
C <sub>2</sub> GeTe [1,2]Telluragermetane 2, 853–874		1,3-Diazete 2, 623–687	
C <sub>2</sub> Ge <sub>2</sub> [1,2]Digermetane 1, 489; 2, 917		[1,2]Diazete 2, 667	
		1,2-Dihydro-[1,2]diazete 2, 623–687	

1,2-Dihydro-[1,3]diazete 2, 623–687		[1,2]Dioxetane 2, 775–794	
1,4-Dihydro-[1,2]diazete 9, 440; 2, 623–687		1,2-Dioxete 2, 775–794	
3,4-Dihydro-[1,2]diazete 2, 623–687		C <sub>2</sub> PSe [1,2]Selenaphosphetane 2, 853–874	
[1,2]Diazetidene 2, 623–687		[1,3]Selenaphosphetane 2, 853–874	
[1,3]Diazetidene 2, 623–687		C <sub>2</sub> PSi 1,2-Dihydro-[1,2]phosphasiletane 1, 701f; 2, 907–938; 2, 907–938	
C <sub>2</sub> OS 1,2-Oxathietane 2, 795–809		[1,2]Phosphasiletane 2, 917	
1,3-Oxathietane 2, 795–809		C <sub>2</sub> Ps [1,3]Diphosphetane 2, 876	
[1,2]Oxathietane 2, 795–809		C <sub>2</sub> P <sub>2</sub> 1,2-Diphosphete 1, 469; 2, 875–905	
C <sub>2</sub> OSe 1,3-Oxaselenetane 2, 853–874		1,3-Diphosphete 2, 876; 9, 838, 839	
[1,2]Oxaselenetane 2, 853–874		1,2-Dihydro-[1,2]diphosphete 1, 469, 469	
C <sub>2</sub> OSi 2H-1,2-Oxasiletane 2, 907–938		C <sub>2</sub> SSi 2H-1,2-Thiasiletane 2, 907–938	
[1,3]Oxasiletane 2, 912–913, 924, 925		[1,3]Thiasiletane 2, 912–913	
C <sub>2</sub> OTe [1,2]Oxatelluretane 2, 853–874		C <sub>2</sub> Sb <sub>2</sub> [1,2]Distibetane 2, 889	
C <sub>2</sub> O <sub>2</sub> 1,3-Dioxetane 2, 775–794; 9, 397		C <sub>2</sub> SeTe 1,3-Selenatelluretane 2, 853–874	

C <sub>2</sub> Se <sub>2</sub> 1,2-Diselenete 2, 853–874		Metallacyclobutenes 2, 555–621	 M = W, Mo, Ti, Re, Os, Ir, Pt, Pd
1,3-Diselenetane 2, 853–874		Boretane 2, 555–621	
[1,2]Diselenetane 2, 853–874		C <sub>3</sub> (M) Metallacyclobutanes 2, 555–621	 M = W, Mo, Ti, Re, Os, Ir, Pt, Pd
C <sub>2</sub> Si <sub>2</sub> 1,2-Dihydro-1,2-Disilete 1, 508–509		C <sub>3</sub> As Arsete 2, 479–512	
1,2-Disilete 2, 853–874; 2, 907–938		Arsete 2, 555–621	
[1,3]Disiletane 2, 521		C <sub>3</sub> B Borete 2, 555–621	
[1,3]Disiletane 2, 907–938, 910, 918, 918, 921, 922		C <sub>3</sub> B Boretane 2, 555–621	
C <sub>2</sub> SnTe [1,2]Tellurastannetane 2, 853–874		C <sub>3</sub> Bi Bismuthete 2, 479–512; 2, 555–621	
C <sub>2</sub> S <sub>2</sub> 1,3-Dithietane 2, 811–852; 6, 469f; 6, 476f		C <sub>3</sub> Co 1-Cobaltacyclobuta-1,3-diene 2, 555–621	
1,2-Dithiete 2, 811–852		C <sub>3</sub> Fe 1-Ferracyclobuta-1,3-diene 2, 555–621	
[1,2]Dithietane 2, 811–852		C <sub>3</sub> Ge Germetane 2, 513–554	
C <sub>2</sub> Te <sub>2</sub> 1,3-Ditelluretane 2, 853–874		C <sub>3</sub> Ir 1-Iridacyclobuta-1,3-diene 2, 555–621	
C <sub>3</sub> B 2,3-Dihydro-boretane 2, 555–621		C <sub>3</sub> Mo 1-Molybdacyclobuta-1,3-diene 2, 555–621	
		C <sub>3</sub> N Azete 2, 704–705; 2, 94, 96; 5, 224; 6, 173f	

Azetidine 1, 38f, 88; 2, 239–319, 240; 9, 323; 2; 3, 36		Thietane 2, 389–428	
1,2-Dihydro-azete 2, 87		C <sub>3</sub> Sb 1,2-Dihydro-stibete 2, 505	
2,3-Dihydro-azete 2, 87		C <sub>3</sub> Se Selenetane 2, 463–477	
C <sub>3</sub> Ni 1-Nickelacyclobuta-1,3-diene 2, 555–621		2H-Selenete 2, 463–477	
C <sub>3</sub> O 2H-Oxete 2, 321–364		C <sub>3</sub> Si Siletane 1, 494	
Oxetane 2, 321–364		C <sub>3</sub> Ta 1-Tantalacyclobuta-1,3-diene 2, 555–621	
C <sub>3</sub> P 1,2-Dihydro-phosphete 4, 1164; 14, 921–922		C <sub>3</sub> Te Telluretane 2, 463–477	
C <sub>3</sub> Pd 1-Palladacyclobuta-1,3-diene 2, 555–621		2H-Tellurete 2, 463–477	
C <sub>3</sub> Pt 1-Platinacyclobuta-1,3-diene 2, 555–621		C <sub>3</sub> Ti Titanetane 2, 555–621	
C <sub>3</sub> Re 1-Rhenacyclobuta-1,3-diene 2, 555–621		C <sub>3</sub> W Tungstetane 2, 555–621	
C <sub>3</sub> Rh 1-Rhodacyclobuta-1,3-diene 2, 555–621		C <sub>3</sub> Zr Zirconetane 2, 555–621	
C <sub>3</sub> S 2H-Thiete 2, 389–428		P <sub>2</sub> Se <sub>2</sub> 1,3,2,4-diselenadiphosphethane 6, 575	

# 5

As <sub>5</sub> 1 <i>H</i> -Pentarsole 6, 604 <i>f</i>		4,5-Dihydro-[1,2,3,4]oxatriazole 6, 425–439	
CBN <sub>3</sub> 2 <i>H</i> -[1,2,3,4]Triazaborole 6, 620		CN <sub>3</sub> P 1 <i>H</i> -1,2,3,4-Triazaphosphole 6, 583–601	
CNOSeSi [1,3,5,2]Oxaselenazasilole 6, 667		5 <i>H</i> -1,2,4,3-Triazaphosphole 6, 583–601	
CNP <sub>2</sub> Se 2,3-Dihydro-[1,4,2,3]selenazadiphosphole 6, 528 <i>t</i>		CN <sub>3</sub> S 1,2,3,4-Thiatriazole 6, 441–484; 6, 486 <i>t</i> ; 6, 487 <i>t</i> ; 6, 494	
CN <sub>2</sub> PS 1,3,4,2-Thiadiazaphosphole 6, 583–601		2,5-Dihydro-[1,2,3,4]thiatriazole 1, 630, 631	
CN <sub>2</sub> PSi [1,3,2,4]Diazaphosphasilolidine 6, 667		4,5-Dihydro-[1,2,3,4]thiatriazole 5, 507	
CN <sub>2</sub> P <sub>2</sub> 1 <i>H</i> -1,2,3,5-Diazadiphosphole 6, 583–601		1,2,3,5-Thiatriazole 6, 443 <i>t</i> ; 6, 485–498	
5 <i>H</i> -1,4,2,3-Diazadiphosphole 6, 583–601		CN <sub>3</sub> Si 1 <i>H</i> -1,2,4,3-Triazasilole 6, 494	
CN <sub>2</sub> Se <sub>2</sub> 1,2,3,5-Diselenadiazole 6, 517–581		CN <sub>4</sub> 1 <i>H</i> -Tetrazole 5, 444; 5, 598; 6, 257–423; 5, 215 <i>t</i> ; 6, 465 <i>f</i> ; 6, 478	
CN <sub>2</sub> S <sub>2</sub> 1λ <sup>4</sup> -[1,2,3,5]Dithiadiazole 6, 517–581		CP <sub>4</sub> 1 <i>H</i> -Tetraphosphole 6, 583–601	
3λ <sup>4</sup> -[1,3,2,4]Dithiadiazole 6, 517–581		[1,2,3,4]Tetraphospholane 2, 967	
CN <sub>3</sub> O 1,2,3,4-Oxatriazole 6, 425–439; 6, 478		CS <sub>4</sub> [1,2,3,4]Tetrathiolane 1, 668–669	
1,2,3,5-Oxatriazole 6, 425–439			

C <sub>2</sub> (E <sub>2</sub> )(M) 1,3-dihetero-2-metalla-lane 6, 691–737		C <sub>2</sub> BS <sub>2</sub> 1,3,2-Dithiaborole 6, 615–654	
	M = Al, In, Ga, Ge, Sn, Pb E = N, P, O, S, Se, Te	C <sub>2</sub> GeSi <sub>2</sub> 1H-[1,2,3]Disilagermole 6, 664, 669	
C <sub>2</sub> AsN <sub>2</sub> 1H-[1,2,4]Diazarsole 6, 604f; 6, 605t; 6, 607f		C <sub>2</sub> NOP 1,3,2-Oxazaphosphole 6, 583–601	
2H-1,2,3-Diazarsole 6, 604f; 6, 605t		[1,3,2]Oxazaphospholidine 1, 584	
1,3,2-Diazarsole 6, 604f; 6, 605t; 6, 605r; 6, 607f; 6, 608; 6, 608–609		1,4,2-Oxazaphosphole 6, 583–601	
1,4,2-Diazarsole 6, 604f; 6, 605t; 6, 606–607		C <sub>2</sub> NOS 3H-1,2,4-Oxathiazole 6, 61–104	
C <sub>2</sub> AsP <sub>2</sub> 1H-1,2,4-Diphospharsole 6, 604f; 6, 609f		5H-[1,2,4]Oxathiazole 6, 61–104	
1H-[1,2,4]Diphospharsole 6, 604f; 6, 609f		[1,2,4]Oxathiazolidine 6, 61–104	
C <sub>2</sub> BNO [1,3,2]Oxazaborolidine 6, 615–654		[1,3,4]Oxathiazole 6, 105–144	
C <sub>2</sub> BN <sub>2</sub> [1,3,2]Diazaborolidine 6, 615–654		[1,3,4]Oxathiazolidine 6, 105–144	
2,3-Dihydro-1H-[1,3,2]diazaborole 6, 615–654		1,4,2-Oxathiazole 6, 105–144	
C <sub>2</sub> BO <sub>2</sub> 1,3,2-Dioxaborole 6, 615–654		[1,4,2]Oxathiazole 6, 105–144	
[1,3,2]Dioxaborolane 1, 354f; 6, 615–654		C <sub>2</sub> NOSe 1,2,5-Oxaselenazole 6, 517–581	

C<sub>2</sub>NO<sub>2</sub>3H-[1,2,4]Dioxazole  
6, 61–1041H-1,2,4-Azadiphosphole  
6, 583–601[1,2,4]Dioxazolidine  
6, 61–1042H-[1,3,4]Azadiphosphole  
1, 700[1,3,2]Dioxazolidine  
6, 37–59C<sub>2</sub>NSSe  
3H-1,2,4-Thiaselenazole  
6, 517–581[1,3,2]Dioxazole  
6, 37–591,2,3-Thiaselenazole  
6, 517–581[1,4,2]Dioxazolidine  
6, 105–1441,2,5-Thiaselenazole  
6, 517–581[1,4,2]Dioxazole  
6, 105–144C<sub>2</sub>NSSi  
[1,3,2]Thiazasilolidine  
6, 665–666C<sub>2</sub>NPS2,5-Dihydro-[1,4,2]thiazaphosphole  
6, 583–601C<sub>2</sub>NSe<sub>2</sub>  
1,2,3-Diselenazole  
6, 517–5811,2,4-Thiazaphosphole  
6, 583–6011,3,2-Thiazaphosphole  
6, 583–601C<sub>2</sub>NS<sub>2</sub>  
3H-[1,2,3]Dithiazole  
6, 1–361,3,5-Thiazaphosphole  
6, 583–6013H-1,2,4-Dithiazole  
6, 461f; 6, 463f; 6, 466fC<sub>2</sub>NPSe2,5-Dihydro-[1,4,2]selenazaphosphole  
6, 583–6015H-[1,2,3]Dithiazole  
6, 1–361,3,5-Selenazaphosphole  
6, 583–6015H-[1,2,4]Oxathiazole  
6, 61–104[1,2,3]Dithiazolidine  
6, 1–36C<sub>2</sub>NPdSe1,2,3-Selenapalladazole  
6, 517–581[1,3,2]Dithiazole  
6, 37–59[1,3,2]Dithiazolidine  
6, 37–59C<sub>2</sub>NP<sub>2</sub>1H-1,2,3-Azadiphosphole  
6, 583–601[1,4,2]Dithiazolidine  
6, 105–144

[1,4,2]Dithiazole 6, 105–144		2H-[1,2,3]Diazaphosphole 6, 583–601	
[1,2,4]Oxathiazolidine 6, 61–104		1H-1,2,4-Diazaphosphole 6, 583–601	
1λ <sup>4</sup> -[1,2,3]Dithiazole 5, 554; 8, 426; 6, 1–36		1H-1,3,2-Diazaphosphole 6, 583–601	
		2H-1,4,2-Diazaphosphole 6, 583–601	
C <sub>2</sub> N <sub>2</sub> (M) 1,3,2-Diazametallalidine 6, 691–737	 M= Al, In, Ga, Ge, Sn, Pb	C <sub>2</sub> N <sub>2</sub> S [1,2,4]Thiadiazole 1, 545; 5, 467–486	
C <sub>2</sub> N <sub>2</sub> O 2,3-Dihydro-[1,2,4]oxadiazole 5, 243–314		4,5-Dihydro-[1,2,4]thiadiazole 5, 467–486	
4,5-Dihydro-[1,2,4]oxadiazole 5, 259		2,5-Dihydro-[1,2,4]thiadiazole 5, 467–486	
2,3-Dihydro-[1,3,4]oxadiazole 5, 397–466		2,3-Dihydro-[1,2,4]thiadiazole 5, 467–486	
2,5-Dihydro-[1,3,4]oxadiazole 5, 417		1,2,3-Thiadiazole 5, 467–486; 4, 1030f, 1030f; 5, 132; 6, 442; 6, 478f; 6, 479f; 6, 487	
Furazan (1,2,5-oxadiazole) 5, 280; 5, 315–395; 5, 507; 5, 131f		1,2,4-Thiadiazole 1, 545; 1, 633; 5, 487–513; 6, 441–484	
1,2,3-Oxadiazole 5, 591; 5, 211–241		4,5-Dihydro-[1,2,4]thiadiazole 5, 487–513	
1,2,4-Oxadiazole 5, 243–314; 5, 197		2,5-Dihydro-[1,2,4]thiadiazole 5, 487–513	
[1,2,4]Oxadiazolidine 5, 243–314		2,3-Dihydro-[1,2,4]thiadiazole 5, 487–513	
1,3,4-Oxadiazole 5, 253–254; 5, 397–466; 5, 598, 6, 468f		[1,2,4]Thiadiazolidine 5, 487–513	
C <sub>2</sub> N <sub>2</sub> P 1H-1,2,3-Diazaphosphole 6, 583–601		1,2,5-Thiadiazole 5, 515–565; 6, 495f	
		2,3-Dihydro-[1,2,5]thiadiazole 5, 515–565	

2,5-Dihydro-[1,2,5]thiadiazole  
5, 515–565

C<sub>2</sub>N<sub>3</sub>

1H-1,2,3-Triazole  
5, 554; 5, 1–158; 6, 442



[1,2,5]Thiadiazolidine  
5, 515–565



2H-[1,2,3]Triazole  
5, 1–158



1,3,4-Thiadiazole  
5, 567–605; 5, 215*t*



1H-1,2,4-Triazole  
1, 548; 5, 253, 253–254;  
5, 159–209; 5, 215*t*; 6, 165*t*; 6, 487



[1,3,4]Thiadiazolidine  
5, 567–605



2H-[1,2,3]Triazole  
5, 252



2,3-Dihydro-[1,3,4]thiadiazole  
5, 567–605



2,5-Dihydro-[1,3,4]thiadiazole  
5, 567–605

C<sub>2</sub>OPS

[1,3,2]Oxathiaphospholane  
1, 320

C<sub>2</sub>N<sub>2</sub>Sb

1,4,2-Diazaarsolide anions  
6, 604*f*; 6, 605*t*; 6, 608*f*

C<sub>2</sub>OPtSe

1,3,2-Oxaselenaplatinole

C<sub>2</sub>N<sub>2</sub>Se

1,2,3-Selenadiazole  
1, 436, 440–441; 4, 1149; 6, 517–581

C<sub>2</sub>OS<sub>2</sub>

1,2,3-Oxadithiole  
6, 145–190



1,2,4-Selenediazole  
6, 517–581



1,2,5-Oxadithiole  
6, 145–190



1,2,5-Selenadiazole  
6, 517–581

C<sub>2</sub>O<sub>2</sub>(M)

1,3,2-Dioxametallalidine  
6, 691–737



M = Al, In, Ga, Ge, Sn, Pb

1,3,4-Selenediazole  
6, 517–581

C<sub>2</sub>N<sub>2</sub>Si

2,3-Dihydro-1H-[1,3,2]diazasilole  
6, 655–690

C<sub>2</sub>O<sub>2</sub>S

1,2,3-Dioxathiole  
6, 145–190



[1,3,2]Diazasilolidine  
6, 655–690



1,3,2-Dioxathiole  
6, 145–190



[1,4,2]Diazasilolidine  
6, 668

C<sub>2</sub>O<sub>2</sub>Si

1,3,2-Dioxasilole  
6, 655–690

C<sub>2</sub>N<sub>2</sub>Te

1,2,5-Telluradiazole  
6, 517–581

C<sub>2</sub>O<sub>3</sub>

1,2,3-Trioxole  
6, 145–190



1,2,4-Trioxolane 6, 149–150; 6, 191–256		C <sub>2</sub> Se <sub>2</sub> (M) 1,3,2-Diselenametallalidine 6, 691–737		M = Al, In, Ga, Ge, Sn, Pb
C <sub>2</sub> PSe <sub>2</sub> 1,2,3-Diselenaphosphole 6, 517–581, 528 <i>t</i>		C <sub>2</sub> Se <sub>2</sub> Pd 1,3,2-Diselenapalladole 6, 517–581		
2,5-Dihydro-[1,2,5]selenadiphosphole 6, 528 <i>t</i>		C <sub>2</sub> Se <sub>2</sub> Sn 1,3,2-Diselenastannole 6, 517–581		
C <sub>2</sub> P <sub>2</sub> (M) 1,3,2-Diphosphametallalidine 6, 691–737		C <sub>2</sub> Se <sub>2</sub> Ti 1,3,2-Diselenatitanole 6, 517–581		M = Al, In, Ga, Ge, Sn, Pb
C <sub>2</sub> P <sub>2</sub> Sb 1,4,2-Diphosphostibolide anions 6, 604 <i>f</i> ; 6, 610 <i>f</i> ; 6, 610 <i>f</i> ; 6, 611 <i>f</i>		C <sub>2</sub> Se <sub>3</sub> 1,2,3-Triselenole 6, 517–581		
C <sub>2</sub> P <sub>2</sub> Se 2,3-Dihydro-[1,2,3]selenadiphosphole 6, 529 <i>t</i>		C <sub>2</sub> Si <sub>3</sub> [1,2,4]Trisilolane 6, 666		
1,2,4-Selenadiphosphole 6, 517–581; 6, 610 <i>f</i>		C <sub>2</sub> S <sub>2</sub> (M) 1,3,2-Dithiametallalidine 6, 691–737		M = Al, In, Ga, Ge, Sn, Pb
C <sub>2</sub> P <sub>2</sub> Si 2,3-Dihydro-1H-[1,2,3]diphosphasilole 1, 701 <i>f</i>		C <sub>2</sub> S <sub>3</sub> 1,2,4-Trithiolane 1, 668–669; 6, 469 <i>f</i>		
2,3-Dihydro-1H-[1,3,2]diphosphasilole 6, 671		1,2,3-Trithiole 6, 145–190		
1,3,2-Diphosphasilolane 6, 671		C <sub>2</sub> Te <sub>2</sub> (M) 1,3,2-Ditellurometallalidine 6, 691–737		M = Al, In, Ga, Ge, Sn, Pb
C <sub>2</sub> P <sub>2</sub> Te 1,2,4-Telluradiphosphole 6, 517–581; 6, 610 <i>f</i>		C <sub>3</sub> (E)Se 1,3-oxaselenolane 4, 1119–1153		
C <sub>2</sub> P <sub>3</sub> 1H-1,2,3-Triphosphole 6, 583–601		C <sub>3</sub> STe [1,3]Thiatellurolane 4, 1119–1153		
1H-1,2,4-Triphosphole 1, 700 <i>f</i> ; 6, 583–601		C <sub>3</sub> SeTe 1,3-Selenatellurolane 4, 1119–1153		



1,3-Ditellurolane  
4, 1119–1153



[1,3]Stannaborolane  
4, 1225–1241



[1,3]Thiarsole  
4, 1174



2,3-Dihydro-1H-[1,3]stannaborole  
4, 1225–1241



1H-1,2-Azaborole  
4, 1189–1224



1H-1,2-Diborole  
4, 1189–1224



[1,2]Azaborolidine  
4, 1189–1224



1H-1,3-Diborole  
4, 1225–1241



[1,3]Azaborolidine  
4, 1225–1241



[1,2]Diborolane  
4, 1208, 1210, 1211



[1,3]Diborolane  
4, 1225–1241



1,2-Oxaborole  
4, 1189–1224



2,3-Dihydro-1H-[1,3]diborole  
4, 1233–1234



1H-1,2-Phosphaborole  
4, 1189–1224



[1,3]Azagermolidine  
4, 1278–1279



2,3-Dihydro-1,3-thiaborole  
4, 1229–1230



Isoxazole  
5, 554; 6, 96–97, 99; 7, 279f; 4, 365–485



1,2-Thiaborole  
4, 1189–1224



Isoxazolidine  
2, 419–420; 4, 365–485



[1,3]Thiaborolane  
4, 1225–1241



Oxazole  
1, 12; 4, 487–543; 6, 154–160;  
6, 155f; 7, 280



[1,2]Silaborolane  
4, 1208, 1210



Oxazolidine  
1, 18, 26f, 38f; 4, 487–543; 5, 202



[1,3]Silaborolane  
4, 1225–1241; 4, 1295



2,3-Dihydro-isoxazole  
4, 365–485



2,5-Dihydro-isoxazole  
4, 365–485



4,5-Dihydro-isoxazole 4, 365–485		C <sub>3</sub> NSe Isoselenazole 4, 755–790	
2,3-Dihydro-oxazole 4, 487–543		Selenazole 4, 791–821; 4, 1123–1124	
2,5-Dihydro-oxazole 1, 85; 4, 487–543		Selenazolidine 4, 791–821	
4,5-Dihydro-oxazole 4, 487–543		4,5-Dihydro-selenazole 4, 791–821	
C <sub>3</sub> NP 1H-1,2-Azaphosphole 4, 1155–1167		C <sub>3</sub> NSi [1,3]Azasilolidine 4, 1281, 1282, 1297	
1H-1,3-Azaphosphole 4, 1169–1188		C <sub>3</sub> NTe Isotellurazole 4, 1091–1117	
3H-[1,3]Azaphosphole 4, 1169–1188		Isotellurazolidine 4, 1091–1117	
C <sub>3</sub> NS Isothiazolidine 4, 545–633		Tellurazole 4, 1119–1153	
Isothiazole 2, 764, 765; 4, 545–633; 6, 457f; 6, 487		2,3-Dihydro-isotellurazole 4, 1091–1117	
Thiazole 1, 333; 5, 215f; 6, 442; 6, 459f; 8, 577–578, 578; 8, 633f; 8, 662, 663, 664; 4, 635–754		2,5-Dihydro-isotellurazole 4, 1091–1117	
Thiazolidine 1, 36f; 8, 663, 664; 4, 635–754; 5, 202		4,5-Dihydro-isotellurazole 4, 1091–1117	
2,3-Dihydro-thiazole 4, 635–754		C <sub>3</sub> N <sub>2</sub> 2,3-Dihydro-1H-imidazole 4, 143–364	
2,5-Dihydro-isothiazole 004, 545–633		2,5-Dihydro-1H-imidazole 4, 143–364	
2,5-Dihydro-thiazole 4, 635–754		4,5-Dihydro-1H-imidazole 4, 143–364	
4,5-Dihydro-isothiazole 4, 545–633		2,3-Dihydro-1H-pyrazole 4, 1–141	

4,5-Dihydro-1H-pyrazole 4, 1-141; 8, 638-639		5H-[1,2]Oxathiole 4, 823-839	
4,5-Dihydro-3H-pyrazole 4, 1-141		C <sub>3</sub> OSe [1,2]Oxaselenolane 4, 1091-1117, 1101, 1103	
1H-Imidazole 1, 38f; 4, 143-364; 6, 173f; 6, 473; 6, 474f; 6, 492f		3H-1,2-Oxaselenole 4, 1091-1117	
2H-Imidazole 4, 143-364		1,3-Oxaselenole 4, 1119-1153	
4H-Imidazole 4, 143-364		C <sub>3</sub> OSi [1,2]Oxasilolane 1, 492, 493	
Imidazolidine 1, 39f; 1, 548; 4, 143-364		[1,3]Oxasilolane 4, 1272	
1H-Pyrazole 4, 1-141; 5, 211-241; 5, 569; 5, 594; 6, 485-498; 6, 561f; 6, 562f; 6, 571f; 7, 259; 8, 638-639		C <sub>3</sub> OTe [1,2]Oxatellurolane 4, 1091-1117, 1103	
3H-Pyrazole 4, 1-141		1,3-Oxatellurolane 4, 1119-1153	
4H-Pyrazole 4, 1-141		1,3-Oxatellurole 4, 1119-1153	
Pyrazolidine 4, 1-141		3H-1,2-Oxatellurole 4, 1091-1117	
C <sub>3</sub> OP 1,2-Oxaphosphole 4, 1155-1167		C <sub>3</sub> O <sub>2</sub> [1,2]Dioxolane 4, 823-839	
1,3-Oxaphosphole 4, 1169-1188		[1,3]Dioxolane 4, 841-891	
C <sub>3</sub> OS [1,3]Oxathiolane 4, 841-891		1,3-Dioxole 4, 841-891; 6, 179f	
[1,2]Oxathiolane 4, 823-839		Dioxolium 4, 841-891	
[1,3]Oxathiole 4, 868		C <sub>3</sub> PS 1,2-Thiaphosphole 4, 1155-1167	

C <sub>3</sub> P <sub>2</sub> 1,3-Diphosphole 4, 1155–1167		1,3-Dithiole 4, 955–1090	
1H-1,2-Diphosphole 4, 1155–1167		3H-1,2-Dithiole 2, 843	
2,3-Dihydro-1H-[1,3]diphosphole 4, 1155–1167		1λ <sup>4</sup> -[1,3]Dithiole 4, 955–1090	
C <sub>3</sub> SSe 1,3-Thiaselenolane 4, 1119–1153		C <sub>3</sub> Te <sub>2</sub> 1,3-Ditellurolane 4, 1119–1153	
1,3-Thiaselenole 4, 1119–1153		1,3-Ditellurole 4, 1119–1153	
C <sub>3</sub> SSi [1,3]Thiasilolane 4, 1280		3H-1,2-Ditellurole 4, 1091–1117	
C <sub>3</sub> SeTe 1,3-Selenatellurolane 4, 1119–1153		C <sub>4</sub> Si 1H-Silole 3, 1207	
1,3-Selenatellurole 4, 1119–1153		C <sub>4</sub> Ge 1H-Germole 3, 1207	
3H-1,2-Selenatellurole 4, 1091–1117		C <sub>4</sub> Sn 1H-Stannole 3, 1207	
C <sub>3</sub> Se <sub>2</sub> 1,3-Diselenolane 4, 1119–1153		C <sub>4</sub> Pb 1H-Plumbole 3, 1207	
1,3-Diselenole 4, 1119–1153; 6, 547f		1H-metallole 3, 1243–1304	
3H-1,2-Diselenole 4, 1091–1117		C <sub>4</sub> Al Alumolane 3, 1261	
C <sub>3</sub> S <sub>2</sub> [1,2]Dithiolane 2, 419–420		C <sub>4</sub> As 1H-Arsole 3, 1149–1179	
[1,3]Dithiolane 4, 955–1090			

M = Mg, Al, Ti, Zr, Gf, Fe, Ru,  
Os, Co, Rh, Ir, Ni, Pd, Pt

C<sub>4</sub>B

Borolane

3, 1225–1241



1H-Borole

3, 1225–1241



2,3-Dihydro-1H-borole

3, 1225–1241



2,5-Dihydro-1H-borole

3, 1225–1241; 4, 1217

C<sub>4</sub>Bi

1H-Bismole

3, 1149–1179

C<sub>4</sub>Ge

1H-Germole

3, 1181–1223



1H-Germole

3, 1207

C<sub>4</sub>N

2,5-Dihydro-oxazole

1, 86, 86; 3, 321



2,3-Dihydro-1H-pyrrole

1, 28f



2,5-Dihydro-1H-pyrrole

3, 321, 322, 334



Pyrrolidine

1, 34f



1H-Pyrrole

3, 1–43; 3, 269–351; 3, 353–388,  
3, 45–268; 6, 173t;  
6, 442; 6, 475f; 6, 487; 6, 747fC<sub>4</sub>O

2,3-Dihydro-furan

3, 389–406; 3, 462;  
3, 497–569

2,5-Dihydro-furan

1, 77f; 3, 418, 420, 462; 3, 497–569;  
3, 571–623

Furan

3, 389–406; 3, 407–496; 3, 497–569;  
3, 571–623; 6, 160f; 6, 168f; 6, 155t;  
6, 161t; 6, 173t; 6, 458f; 6, 530; 6, 577f

Furane

1, 180, 181; 3, 389–406; 3, 468;  
3, 497–569; 3, 571–623C<sub>4</sub>P

2,3-Dihydro-1H-phosphole

3, 1029–1147



2,5-Dihydro-1H-phosphole

1, 459, 468; 3, 1029–1147; 7, 1031



Phospholane

3, 1029–1147



1H-Phosphole

3, 1029–1147

C<sub>4</sub>Pb

1H-Plumbole

3, 1207

C<sub>4</sub>S

2,3-Dihydro-thiophene

2, 421t; 3, 625–739; 3, 741–841;  
3, 931–974; 3, 843–930

2,5-Dihydro-thiophene

1, 422; 3, 625–739;  
3, 741–841; 3, 843–930

Tetrahydro-thiophene

3, 625–739; 3, 793; 3, 843–930



Thiophene

3, 625–739; 3, 741–841; 3, 931–974;  
3, 843–930; 5, 215t; 6, 161t; 6, 442;  
6, 443t; 6, 487; 6, 487t; 6, 546; 6, 562fC<sub>4</sub>Sb

1H-Stibole

3, 1149–1179

C<sub>4</sub>Se

2,3-Dihydro-selenophene

3, 994



Selenophene  
 3, 975–1006; 6, 540f; 6, 542;  
 6, 540f; 6, 543f



1*H*-Silole  
 3, 1207



Tetrahydro-selenophene  
 3, 994, 994



C<sub>4</sub>Sn  
 1*H*-Stannole  
 3, 1181–1223, 1191, 1193



C<sub>4</sub>Si  
 2,3-Dihydro-1*H*-silole  
 3, 1181–1223



C<sub>4</sub>Sn  
 1*H*-Stannole  
 3, 1207



2,5-Dihydro-1*H*-silole  
 3, 1181–1223, 1195



C<sub>4</sub>Te  
 Tellurophene  
 3, 1007–1028



Silolane  
 3, 1181–1223



1*H*-Silole  
 1, 493–494; 3, 1181–1223



N<sub>5</sub>  
 1*H*-Pentazole  
 6, 739–757



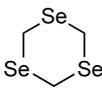
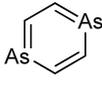
## 6

CN <sub>5</sub> Pentazine 9, 715–735		2H-1,2,4,6-Thiatriazine 9, 737–789	
CS <sub>5</sub> Pentathiane 9, 761		C <sub>2</sub> N <sub>4</sub> 1,2-Dihydro-[1,2,4,5]tetrazine 9, 641–714	
C <sub>2</sub> AsNS <sub>2</sub> 4H-[1,3,5,2]Dithiazarsinine 9, 894		1,4-Dihydro-[1,2,4,5]tetrazine 9, 641–714	
C <sub>2</sub> NOSP [1,2,3,6]Oxathiazaphosphinine 9, 523–567		1,6-Dihydro-[1,2,4,5]tetrazine 9, 641–714	
C <sub>2</sub> N <sub>2</sub> OS 1,2,3,5-Oxathiadiazine 9, 737–789		1,2,3,4-Tetrahydro-[1,2,4,5]tetrazine 9, 641–714	
[1,2,4,5]Oxathiadiazinane 9, 760		1,2,3,4-Tetrazine 9, 715–735	
1,4,3,5-Oxathiadiazine 9, 737–789		1,2,3,5-Tetrazine 9, 715–735	
C <sub>2</sub> N <sub>2</sub> O <sub>2</sub> 1,4,2,5-Dioxadiazine 9, 737–789		1,2,4,5-Tetrazine 6, 494; 9, 641–714	
[1,4,2,5]Dioxadiazine 9, 739–740		[1,2,4,5]Tetrazinane 9, 641–714	
C <sub>2</sub> N <sub>2</sub> S <sub>2</sub> 1,2,4,5-Dithiadiazine 9, 737–789		C <sub>2</sub> O <sub>2</sub> S <sub>2</sub> [1,3,2,4]Dioxadithiane 2, 804	
1,4,2,5-Dithiadiazine 6, 476f; 8, 892		C <sub>2</sub> O <sub>4</sub> 1,2,4,5-Tetroxane 9, 737–789	
C <sub>2</sub> N <sub>3</sub> O 5,6-Dihydro-4H-[1,2,3,4]oxatriazine 9, 739		C <sub>2</sub> P <sub>4</sub> 1,3,5-Triphospha-bicyclo[2.2.2]octa-2,5-diene 9, 841	
C <sub>2</sub> N <sub>3</sub> S 2H-1,2,4,5-Thiatriazine 9, 768		C <sub>2</sub> S <sub>4</sub> 1,2,4,5-Tetrathiane 9, 737–789	

C <sub>3</sub> AsN <sub>2</sub> [1,3,2]Diazarsinane 9, 880, 891		1,2,6-Oxathiazine 9, 523–567	
C <sub>3</sub> AsO <sub>2</sub> [1,3,2]Dioxarsinane 9, 885		1,4,2-Oxathiazine 9, 523–567	
C <sub>3</sub> AsP <sub>2</sub> [1,3,2]Diphospharsinane 9, 893		1,4,3-Oxathiazine 9, 523–567	
C <sub>3</sub> As <sub>3</sub> [1,2,3]Triarsinine 9, 893		2H,6H-1,5,2-Oxathiazine 9, 523–567	
[1,2,4]Triarsinine 9, 893		2H,4H-1,3,4-Oxathiazine 9, 523–567	
[1,3,5]Triarsinine 9, 893		4H-1,3,2-Oxathiazine 9, 523–567	
C <sub>3</sub> BN <sub>2</sub> 1,3,2-Diazaborine 9, 961–1008		4H-1,3,5-Oxathiazine 9, 523–567	
C <sub>3</sub> BO <sub>2</sub> 4H-1,3,2-Dioxaborin 9, 961–1008		6H-[1,3,5]Oxathiazine 5, 507; 6, 90	
C <sub>3</sub> B <sub>3</sub> [1,3,5]Triborinane 9, 975		C <sub>3</sub> NOSe 6H-[1,3,5]Oxaselenazine 9, 827	
C <sub>3</sub> NOP [1,3,2]Oxazaphosphinane 9, 858		C <sub>3</sub> NO <sub>2</sub> 1,4,2-Dioxazine 9, 523–567	
C <sub>3</sub> NOS [1,2,3]Oxathiazinane 9, 523–567		2H-1,5,2-Dioxazine 9, 523–567	
[1,2,3]Oxathiazinane 1, 143–144		4H-1,3,2-Dioxazine 9, 523–567	
1,2,3-Oxathiazine 9, 523–567		4H-1,3,5-Dioxazine 9, 523–567	
1,2,4-Oxathiazine 9, 523–567		C <sub>3</sub> NP <sub>2</sub> [1,2,4]Azadiphosphinine 2, 883	

[1,2,5]Azadiphosphinine 9, 839		[1,2,4]Oxadiazinane 9, 301-343	
[1,3,4]Azadiphosphinine 9, 839		[1,2,5]Oxadiazinane 9, 301-343	
C <sub>3</sub> NS <sub>2</sub> 1,2,3-Dithiazine 9, 523-567		[1,3,4]Oxadiazinane 9, 401-455	
1,3,4-Dithiazine 9, 523-567		[1,3,5]Oxadiazinane 9, 457-521	
[1,3,5]Dithiazinane 9, 523-567		2H-1,2,4-Oxadiazine 9, 301-343	
1,4,2-Dithiazine 9, 523-567		2H-1,2,6-Oxadiazine 9, 355-400	
[1,4,2]Dithiazinane 9, 523-567		2H-1,3,4-Oxadiazine 9, 401-455	
4H-1,3,2-Dithiazine 9, 523-567		2H-1,3,5-Oxadiazine 9, 457-521	
4H-1,3,5-Dithiazine 9, 523-567		4H-[1,3,4]Oxadiazine 9, 401-455	
C <sub>3</sub> NSe <sub>2</sub> [1,4,2]Diselenazine 2, 868		4H-[1,3,5]Oxadiazine 9, 457-521	
[1,4,2]Diselenazine 9, 829		6H-[1,2,5]Oxadiazine 9, 345-354	
C <sub>3</sub> N <sub>2</sub> O 3,5-Diaza-pyrylium 9, 457-521		6H-[1,3,4]Oxadiazine 9, 401-455	
3,6-Dihydro-2H-[1,3,5]oxadiazine 9, 457-521		6H-[1,2,5]Oxadiazine 9, 347	
5,6-Dihydro-4H-[1,3,4]oxadiazine 9, 401-455		C <sub>3</sub> N <sub>2</sub> P [1,2,3]Diazaphosphinane 9, 848	

[1,3,2]Diazaphosphinine 9, 837		2H-1,2,6-Thiadiazine 5, 555-556; 9, 355-400	
[1,3,2]Diazaphosphinane 9, 848		4H-[1,2,6]Thiadiazine 9, 355-400	
[1,3,2]Diazaphosphinine 7, 1031, 1013		1λ <sup>4</sup> -[1,2,6]Thiadiazine 9, 355-400	
[1,3,5]Diazaphosphinane 9, 851		[1,3,4]Thiadiazinane 9, 401-455	
[1,4,2]Diazaphosphinane 9, 851		2H-1,3,4-Thiadiazine 9, 401-455	
[1,5,2]Diazaphosphinane 9, 850		6H-[1,3,4]Thiadiazine 9, 401-455	
1,2-Dihydro-[1,3,2]diazaphosphinine 9, 843		1λ <sup>4</sup> -[1,3,5]Thiadiazine 9, 472	
C <sub>3</sub> N <sub>2</sub> S 2,3-Dihydro-1λ <sup>4</sup> -[1,2,6]thiadiazine 9, 355-400		4H-[1,3,4]Thiadiazine 9, 401-455	
3,6-Dihydro-2H-[1,2,6]thiadiazine 9, 355-400		2H-1,3,5-Thiadiazine 9, 457-521	
3,6-Dihydro-2H-[1,3,5]thiadiazine 9, 457-521		[1,3,5]Thiadiazinane 9, 457-521	
5,6-Dihydro-4H-[1,3,4]thiadiazine 9, 401-455		4H-[1,3,5]Thiadiazine 9, 457-521	
2H-1,2,3-Thiadiazine 9, 291-299		C <sub>3</sub> N <sub>2</sub> Se 2H-[1,3,5]Selenadiazine 6, 561f; 9, 829	
2H-1,2,4-Thiadiazine 9, 301-343		C <sub>3</sub> N <sub>3</sub> 1,2-Dihydro-[1,2,4]triazine 9, 95-196	
2H-1,2,5-Thiadiazine 9, 345-354		2,5-Dihydro-[1,2,3]triazine 9, 1-93	

1,2,3,4-Tetrahydro-[1,2,3]triazine 9, 1-93		C <sub>3</sub> O <sub>3</sub> [1,2,4]Trioxane 9, 569-640	
1,2,3,6-Tetrahydro-[1,2,4]triazine 9, 95-196		1,3,5-Trioxane 9, 569-640	
1,2,5,6-Tetrahydro-[1,2,3]triazine 9, 1-93		[1,3,5]-Triphosphinine 4, 1182-1183, 1183-1184; 9, 839, 840	
1,2,5,6-Tetrahydro-[1,2,4]triazine 9, 95-196		C <sub>3</sub> Se <sub>3</sub> 1,3,5-Triselenane 9, 820	
1,2,3-Triazine 9, 1-93		C <sub>3</sub> S <sub>2</sub> Sn [1,3,2]Dithiastanninane 9, 921-922	
1,2,4-Triazine 7, 298; 9, 95-196		C <sub>3</sub> S <sub>3</sub> [1,2,3]Trithiane 9, 569-640	
[1,2,4]Triazinane 9, 95-196		[1,2,4]Trithiane 9, 569-640	
1,3,5-Triazine 9, 197-290; 9, 457-521		[1,3,5]Trithiane 8, 863; 9, 569-640	
[1,3,5]Triazinane 9, 197-290		4H-[1,2,3]Trithiine 9, 569-640	
C <sub>3</sub> OS <sub>2</sub> [1,3,5]Oxadithiane 9, 569-640		[1,2,4]Trithiine 9, 569-640	
C <sub>3</sub> O <sub>2</sub> P [1,3,2]Dioxaphosphinane 9, 862		C <sub>4</sub> AsN [1,3]Azarsinine 7, 1045-1046	
[1,3,5]Dioxaphosphinane 9, 863		C <sub>4</sub> As <sub>2</sub> 1,2-Diarsenin 9, 885	
C <sub>3</sub> O <sub>2</sub> S [1,3,2]Dioxathiane 9, 569-640		1,3-Diarsenin 9, 885	
4H-1,3,2-Dioxathiin 6, 160f		1,4-Diarsenin 9, 885	

1,2,3,6-Tetrahydro-[1,2]diarsinine 9, 883		Morpholine 8, 461-511	
C <sub>4</sub> BN [1,2]Azaborinane 9, 975		[1,2]Oxazinane 8, 333-371	
C <sub>4</sub> BN 1,2-Dihydro-[1,2]azaborinine 9, 972, 972, 973		[1,3]Oxazinane 2, 336; 8, 373-459	
C <sub>4</sub> BO [1,2]Oxaborinane 9, 975		2H-1,2-Oxazine 8, 333-371	
C <sub>4</sub> BP 1,4-Dihydro-[1,4]phosphaborinine 9, 973		2H-1,3-Oxazine 8, 373-459	
C <sub>4</sub> B <sub>2</sub> 1,4-Dihydro-[1,4]diborinine 4, 1239; 9, 973-974		2H-1,4-Oxazine 5, 220f; 5, 234-235; 5, 235; 6, 155t; 6, 161t; 6, 165t	
C <sub>4</sub> Ge <sub>2</sub> 1,4-Dihydro-[1,4]digermine 3, 1206		4H-[1,3]Oxazine 8, 389	
C <sub>4</sub> NO 3,6-Dihydro-2H-[1,2]oxazine 8, 333-371		4H-[1,4]Oxazine 8, 461-511	
4-Aza-pyrylium 8, 461-511		4-Aza-pyrylium 8, 461-511	
5,6-Dihydro-4H-[1,2]oxazine 8, 339-340		C <sub>4</sub> NP [1,2]Azaphosphinine 9, 837	
5,6-Dihydro-2H-[1,3]oxazine 8, 373-459		[1,2]Azaphosphinane 9, 843	
5,6-Dihydro-4H-[1,3]oxazine 8, 386-387, 393		[1,3]Azaphosphinane 9, 846	
3,6-Dihydro-2H-[1,4]oxazine 8, 461-511		[1,4]Azaphosphinane 9, 846	
C <sub>4</sub> NO 3,4-Dihydro-2H-[1,4]oxazine 8, 461-511		1,4-Azaphosphorin 9, 837	

C<sub>4</sub>NS

3,4-Dihydro-2H-[1,2]thiazine  
8, 513–566



1 $\lambda^4$ -[1,2]Thiazine  
8, 513–566



3,4-Dihydro-2H-[1,3]thiazine  
8, 567–605



2H-1,3-Thiazine  
8, 567–605



3,4-Dihydro-2H-[1,4]thiazine  
8, 607–675



6H-[1,3]Thiazine  
8, 513–566



3,6-Dihydro-2H-[1,2]thiazine  
8, 513–566



4H-[1,3]Thiazine  
8, 567–605



3,6-Dihydro-2H-[1,3]thiazine  
8, 567–605



2H-1,4-Thiazine  
8, 607–675



3,6-Dihydro-2H-[1,4]thiazine  
8, 607–675



1 $\lambda^4$ -[1,4]Thiazine  
8, 607–675



5,6-Dihydro-4H-[1,2]thiazine  
8, 513–566



4H-[1,4]Thiazine  
8, 607–675



5,6-Dihydro-2H-[1,2]thiazine  
8, 513–566



Thiomorpholine  
8, 607–675



5,6-Dihydro-4H-[1,3]thiazine  
8, 567–605



C<sub>4</sub>NSe  
5,6-Dihydro-4H-[1,3]selenazine  
4, 813



[1,2]Thiazinane  
8, 513–566



[1,2]Selenazinane  
9, 820



[1,3]Thiazinane  
8, 567–605



4H-[1,3]Selenazine  
9, 820



2H-1,2-Thiazine  
8, 513–566



5,6-Dihydro-4H-[1,3]selenazine  
9, 820



4H-[1,2]Thiazine  
8, 513–566



Selenomorpholine  
9, 826



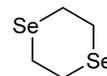
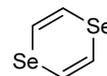
6H-[1,2]Thiazine  
8, 513–566

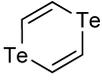


C<sub>4</sub>N<sub>2</sub>  
Pyrazine  
5, 590; 6, 566f; 8, 273–331



1,2-Dihydro-pyrazine 8, 273–331		Piperazine 7, 79f	
1,4-Dihydro-pyrazine 8, 297–299, 312		1,2,3,4-Tetrahydro-pyrimidine 8, 117–272; 8, 179	
2,3-Dihydro-pyrazine 8, 297		C <sub>4</sub> OP [1,2]Oxaphosphinane 9, 853	
1,4-Dihydro-pyridazine 5, 435–436		C <sub>4</sub> OS [1,2]Oxathiane 8, 677–738	
1,6-Dihydro-pyridazine 8, 3		[1,3]Oxathiane 8, 739–856	
1,2-Dihydro-pyrimidine 8, 117–272; 8, 179		[1,4]Oxathiane 8, 873	
1,4-Dihydro-pyrimidine 8, 179		[1,4]Oxathiane 1, 650	
1,6-Dihydro-pyrimidine 8, 179		1,2-Oxathiin 8, 677–738	
2,5-Dihydro-pyrimidine 8, 179		1,4-Oxathiin 8, 857–905	
3,4-Dihydro-quinazoline 8, 117–272; 8, 179		4H-1,3-Oxathiin 8, 739–856	
Hexahydro-pyridazine 8, 37		3,4-Dihydro-[1,2]oxathiine 8, 677–738	
Pyridazine 8, 1–116		3,6-Dihydro-[1,2]oxathiine 8, 677–738	
Pyrimidine 1, 91; 6, 155t; 6, 545f; 8, 117–272		4H-[1,3]Oxathiine 8, 739–856	
Hexahydro-pyrimidine 8, 117–272; 8, 179		6H-[1,3]Oxathiine 8, 739–856	

C<sub>4</sub>OSe[1,2]Oxaselenine  
9, 804[1,4]Diphosphinane  
9, 846C<sub>4</sub>O<sub>2</sub>[1,2]Dioxane  
8, 677-738[1,3]Diphosphinine  
9, 837[1,3]Dioxane  
8, 739-856C<sub>4</sub>SSe  
2,3-Dihydro-[1,4]thiaselenine  
9, 815[1,4]Dioxane  
8, 871[1,2]Thiaselenine  
9, 8062,3-Dihydro-[1,4]dioxine  
8, 871, 872C<sub>4</sub>SSi  
[1,3]Thiasilinane  
9, 9193,4-Dihydro-[1,2]dioxine  
8, 677-738C<sub>4</sub>Se<sub>2</sub>  
2,3-Dihydro-[1,4]diselenine  
9, 8153,6-Dihydro-[1,2]dioxine  
8, 677-7383,4-Dihydro-[1,2]diselenine  
9, 8101,2-Dioxin  
8, 677-738[1,3]Diselenane  
9, 791-8341,4-Dioxin  
8, 857-905[1,4]Diselenane  
9, 8024H-1,3-Dioxin  
6, 155r1,4-Diselenin  
2, 868; 9, 795[1,2]Dioxine  
8, 677-738[1,2]Diselenine  
9, 806C<sub>4</sub>PS[1,2]Thiaphosphinane  
9, 857C<sub>4</sub>Si<sub>2</sub>  
1,2-Dihydro-[1,2]disilene  
9, 913-960C<sub>4</sub>P<sub>2</sub>[1,2]Diphosphinane  
9, 8451,4-Dihydro-[1,4]disilene  
9, 913-960[1,3]Diphosphinane  
9, 8461,2-Disilin  
9, 913-960

1,3-Disilin 9, 913-960		[1,4]Ditellurine 9, 817	
1,4-Disilin 9, 913-960		C <sub>5</sub> B Borinine 7, 1039-1048, 7, 1049-1066	
[1,2]Disilinane 9, 918		Germine 7, 1039-1048	
[1,3]Disilinane 9, 920-921		Siline 7, 1039-1048	
3,4,5,6-Tetrahydro-[1,2]disilene 9, 920		Stannine 7, 1039-1048	
C <sub>4</sub> S <sub>2</sub> 3,4-Dihydro-[1,2]dithiine 8, 1-116		Plumbine 7, 1039-1048	
3,6-Dihydro-[1,2]dithiine 1, 320; 2, 831-834; 8, 1-116		1,2-Dihydro-borinine 7, 1051, 1051-1052	
[1,2]Dithiane 8, 1-116		C <sub>5</sub> As Arsenin 7, 1039-1048	
[1,3]Dithiane 9, 628		C <sub>5</sub> Bi Bismin 7, 1039-1048	
[1,3]Dithiane 8, 739-856		C <sub>5</sub> N 1,2-Dihydro-pyridine 7, 179	
4H-1,3-Dithiin 6, 173f; 8, 739-856		1,4-Dihydro-pyridine 7, 179, 188; 7, 269, 274-275	
1,2-Dithiin 8, 1-116		3,4-Dihydro-pyridine 7, 178-179, 179, 179	
1,4-Dithiin 8, 857-905		C <sub>4</sub> Te <sub>2</sub> 1,4-Ditellurine 9, 739	
C <sub>4</sub> Te <sub>2</sub> 1,4-Ditellurine 9, 739		1,2,3,4-Tetrahydro-pyridine 1, 29f, 30; 7, 179, 199	

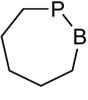
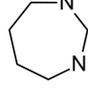
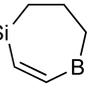
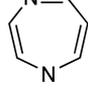
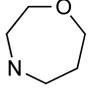
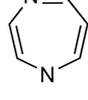
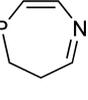
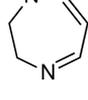
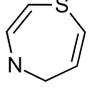
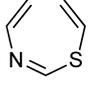
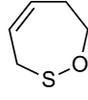
1,2,3,6-Tetrahydro-pyridine 7, 205		Phosphorin 2, 896; 3, 1102, 1119; 7, 1003–1003	
2,3,4,5-Tetrahydro-pyridine 7, 194		C <sub>5</sub> S 1 $\lambda$ <sup>4</sup> -Thiopyran 7, 727–954	
Piperidine 1, 33f, 34f, 34f, 34f; 7, 199, 208; 7, 217–308		3,4-Dihydro-2H-thiopyran 7, 727–954	
Pyridine 5, 234–235; 6, 155t; 6, 161t; 6, 473f; 6, 608; 6, 551f; 6, 551f; 6, 574f; 7, 1–40; 7, 41–99; 7, 101–169; 7, 171–216; 7, 217–308; 7, 309–336		3,6-Dihydro-2H-thiopyran 7, 727–954	
C <sub>5</sub> O 3,4-Dihydro-2H-pyran 7, 337–418; 7, 419–699; 7, 701–726		Tetrahydro-thiopyran 7, 727–954	
3,6-Dihydro-2H-pyran 7, 337–418; 7, 419–699; 7, 701–726		2H-Thiin 7, 727–954	
Tetrahydro-pyran 7, 337–418; 7, 419–699; 7, 701–726		C <sub>5</sub> Sb Stibinine 7, 1039–1048	
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C <sub>5</sub> P 1,2-Dihydro-phosphinine 7, 1023–1024		4H-Selenopyran 7, 955–1001	
1,2,3,4-Tetrahydro-phosphinine 7, 1015–1016		1 $\lambda$ <sup>4</sup> -Selenopyran 7, 955–1001	
Phosphinane 7, 1003–1003		C <sub>5</sub> Sn 1,4-Dihydro-stannine 7, 1061f	

C<sub>5</sub>Te3,6-Dihydro-2H-telluropyran  
7, 955-10011λ<sup>4</sup>-Telluropyran  
7, 955-1001Tetrahydro-selenopyran  
7, 955-1001N<sub>3</sub>P<sub>3</sub>  
Triazatriphosphinine  
9, 842, 8424H-Selenopyran  
7, 955-1001

## 7

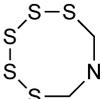
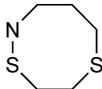
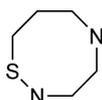
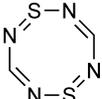
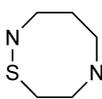
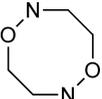
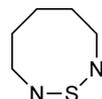
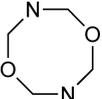
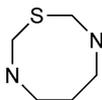
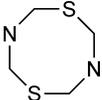
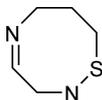
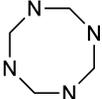
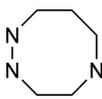
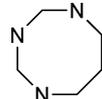
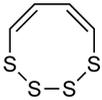
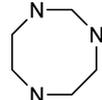
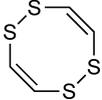
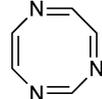
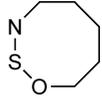
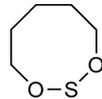
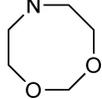
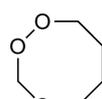
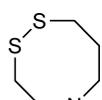
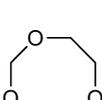
CN <sub>3</sub> S <sub>3</sub> 1,3,5,2,4,6-Trithiatiazepine 13, 529–569		C <sub>3</sub> N <sub>4</sub> 2,3,4,5-Tetrahydro-1H-[1,2,4,6]tetrazepine 13, 563	
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C <sub>2</sub> NS <sub>4</sub> 1,2,3,6,4-Tetrathiazepine 13, 529–569		C <sub>4</sub> MSi <sub>2</sub> 1,5,3-Disilametallapane 14, 989	
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C <sub>2</sub> N <sub>2</sub> S <sub>3</sub> 1,3,5,2,4-Trithiadiazepine 13, 529–569		C <sub>4</sub> NOS 1,3,5-Oxathiazepine 13, 489–527	
1,3,5,2,4-Trithiadiazepine 13, 529–569		C <sub>4</sub> NO <sub>2</sub> [1,3,2]Dioxazepane 13, 395	
C <sub>2</sub> O <sub>2</sub> Si <sub>3</sub> [1,3,2,4,7]Dioxatrisilepane 14, 1005		[1,5,2]Dioxazepane 13, 433–487, 455, 462	
C <sub>2</sub> S <sub>5</sub> 1,2,3,5,6-Pentathiepane 1, 670; 13, 545–546, 553		[1,5,3]Dioxazepane 13, 496–497	
C <sub>3</sub> NO <sub>2</sub> S 6,7-Dihydro-[1,3,2,4]dioxathiazepine 13, 547		1,3,5-Dioxazepine 13, 489–527	
C <sub>3</sub> N <sub>2</sub> OS 2,5-Dihydro-[1,6,3,4]oxathiadiazepine 13, 546		C <sub>4</sub> NS <sub>2</sub> [1,2,5]Dithiazepane 13, 459, 474	
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1,2,5-Thiadiazepine 13, 433–487		C <sub>4</sub> O <sub>2</sub> Si [1,3,2]Dioxasilepane 14, 1005	
[1,2,7]Thiadiazepine 13, 390		C <sub>4</sub> O <sub>3</sub> [1,2,5]Trioxepane 13, 468	
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C <sub>4</sub> N <sub>3</sub> 4,5-Dihydro-1H-[1,2,4]triazepine 13, 418f		C <sub>4</sub> S <sub>3</sub> [1,2,5]Trithiepane 5, 473; 13, 433–487, 459, 475	

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1,3,5-Trithiepin 013, 489–527		2,3,4,7-Tetrahydro-[1,2]thiazepine 13, 240, 240	
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C <sub>5</sub> BSi 4,5,6,7-Tetrahydro-1H-[1,4]silaborepine 14, 987		[1,4]Diazepane 13, 183–235	
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1,3-Thiazepine 13, 245–254		C <sub>5</sub> OS 6,7-Dihydro-3H-[1,2]oxathiepine 2, 844	

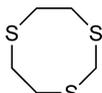
6,7-Dihydro-5H-[1,2]oxathiepine 13, 313		C <sub>5</sub> S <sub>2</sub> 6,7-Dihydro-5H-[1,4]dithiepine 13, 372	
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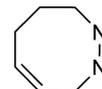
$C_2NS_5$ [1,2,3,4,5,7]Pentathiazocane 14, 526, <b>517–546</b>		[1,6,2]Dithiazocane 14, 511	
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$C_5NS_2$ [1,2,5]Dithiazocane 14, 496–497		1,3,6-Trioxocane 14, 493, 499	



[1,3,6]Trithiocane  
14, 500



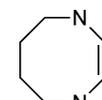
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14, 101, 118–119



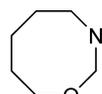
[1,2]Oxazocane  
14, 121



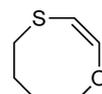
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14, 270f



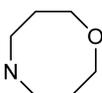
[1,3]Oxazocane  
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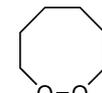
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14, 295



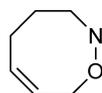
[1,5]Oxazocane  
14, 386, 398



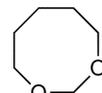
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[1,2]Dioxocane  
14, 139



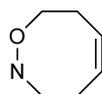
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14, 121



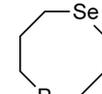
[1,3]Dioxocane  
14, 234



3,4,7,8-Tetrahydro-2H-[1,2]oxazocine  
14, 121



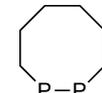
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[1,5]Selenaphosphocane  
14, 932



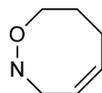
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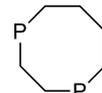
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14, 925–926



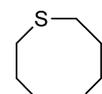
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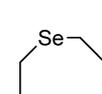
[1,4]Diphosphocane  
14, 924–925



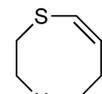
[1,5]Thiazocane  
14, 409



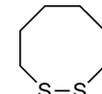
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[1,5]Diselenocane  
2, 470



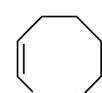
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14, 282–283



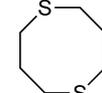
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14, 160



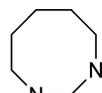
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14, 135



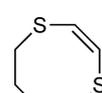
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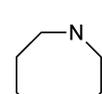
[1,3]Diazocane  
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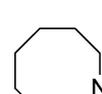
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14, 296



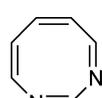
[1,5]Diazocane  
14, 306



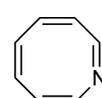
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Azocane  
14, 7



1,3-Diazocine  
14, 118

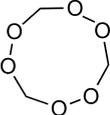
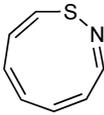
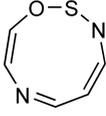
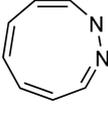
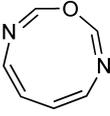
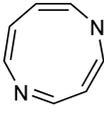
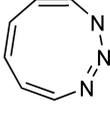
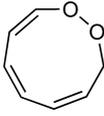
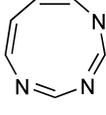
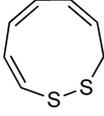
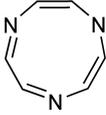
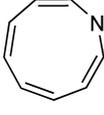
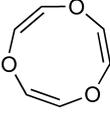
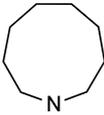
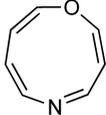
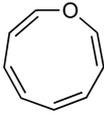


Azocine  
14, 1–47



3,4-Dihydro-azocine 14, 7		3,4,7,8-Tetrahydro-2H-oxocine 14, 65 <i>f</i>	
1,2,3,4,5,6-Hexahydro-azocine 14, 7		C <sub>7</sub> P Phosphocane 14, 920	
1,2,3,4,5,8-Hexahydro-azocine 14, 7		C <sub>7</sub> S 3,4,5,6-Tetrahydro-2H-thiocine 14, 93	
1,2,3,4,7,8-Hexahydro-azocine 14, 7		Thiocane 14, 95, 96	
1,2,3,8-Tetrahydro-azocine 7, 204		3,4-Dihydro-1λ <sup>4</sup> -thiocine 7, 831 <i>t</i>	
C <sub>7</sub> O Oxocane 14, 49–88		1 <i>Z</i> ,3 <i>Z</i> ,5 <i>Z</i> ,7 <i>Z</i> -Thiacine 14, 93–94	
5,6-Dihydro-4H-oxocine 14, 73 <i>f</i>			

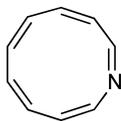
## 9

$C_3O_6$ 1,2,4,5,7,8-Hexoxonane 14, 547-611		$C_7NS$ 1,2-Thiazonine 14, 547-611	
$C_5N_2OS$ 3H-1,2,3,7-Oxathiadiazonine 14, 547-611		$C_7N_2$ 1H-1,2-Diazonine 14, 547-611	
$C_6N_2O$ 1,3,8-Oxadiazonine 14, 547-611		1H-1,5-Diazonine 14, 547-611	
$C_6N_3$ 1H-1,2,3-Triazonine 14, 547-611		$C_7O_2$ 3H-1,2-Dioxonine 14, 547-611	
1H-1,3,5-Triazonine 14, 547-611		$C_7S_2$ 3H-1,2-Dithionine 14, 547-611	
1H-1,4,7-Triazonine 14, 547-611		$C_8N$ 1H-Azonine 14, 547-611	
$C_6O_3$ 1,4,7-Trioxonine 14, 547-611		Azonane 14, 547-611	
$C_7NO$ 1,5-Oxazonine 14, 547-611		$C_8O$ Oxonine 14, 547-611	

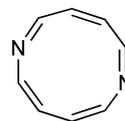
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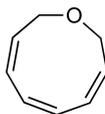
C<sub>9</sub>N  
Azecine  
14, 613–666



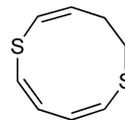
C<sub>8</sub>N<sub>2</sub>  
1,6-Diazecine  
14, 613–666



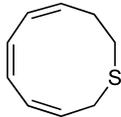
C<sub>9</sub>O  
2H-Oxonine  
14, 547–611



C<sub>8</sub>S<sub>2</sub>  
1,6-Dithiecin  
14, 751–801



C<sub>9</sub>S  
2H-Thiecin  
14, 751–801

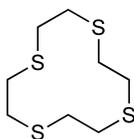


# 12

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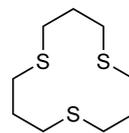
$C_8S_4$

1,4,7,10-Tetrathia-cyclododecane  
1, 335; 14, 751–801



$C_9S_3$

1,5,9-Trithia-cyclododecane  
2, 404; 14, 751–801



# 3,3

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$CTe_2-CTe_2$

$1\lambda^4,3\lambda^4$ -Ditellura-bicyclo[1.1.0]butane  
2, 864



$C_2P-C_3$

2-Phospha-bicyclo[1.1.0]butane  
1, 442



$C_2N-C_2N$

1-Azabicyclo[1.1.0]butane  
1, 142



# 3,4

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CP<sub>2</sub>-C<sub>2</sub>P<sub>2</sub>

1,3,5-Triphospha-bicyclo[2.1.0]pent-2-ene  
1, 700*f*, 711, 736



C<sub>2</sub>S-C<sub>4</sub>

5-Thia-bicyclo[2.1.0]pentane  
1, 393



C<sub>2</sub>O-C<sub>3</sub>O

1,4-Dioxa-spiro[2.3]hexane  
2, 371



5-Thia-bicyclo[2.1.0]pent-2-ene  
1, 398



C<sub>2</sub>O-C<sub>4</sub>

5-Oxabicyclo[2.1.0]pentane  
1, 238



1-Thia-spiro[2.3]hexane  
1, 394



# 3,5

CNO-C <sub>4</sub> N 6-Oxa-1-azabicyclo[3.1.0]hexane 1, 565–566, 604–605		C <sub>2</sub> NC <sub>3</sub> NS 2-Thia-1-aza-bicyclo[3.1.0]hex-3-ene 1, 128 <i>t</i> , 143 <i>f</i> , 143 <i>f</i> ; 8, 555–556	
CN <sub>2</sub> -C <sub>2</sub> N <sub>3</sub> 1,3,5-Triazabicyclo[3.1.0]hexane 1, 548, 549		C <sub>2</sub> O-C <sub>4</sub> O 3,6-Dioxabicyclo[3.1.0]hexane 1, 275	
CN <sub>2</sub> -C <sub>3</sub> N <sub>2</sub> 1,5-Diazabicyclo[3.1.0]hexane 9, 661		C <sub>2</sub> O-C <sub>5</sub> 6-Oxabicyclo[3.1.0]hexane 1, 235–298	
CP <sub>2</sub> -C <sub>2</sub> P <sub>2</sub> Si 1,5-Diphospha-2-sila-bicyclo[3.1.0]- hex-3-ene 1, 701 <i>f</i>		C <sub>2</sub> OC <sub>4</sub> N 6-Oxa-3-aza-bicyclo[3.1.0]hexane 1, 276	
C <sub>2</sub> N-C <sub>3</sub> NO 4-Oxa-1-aza-bicyclo[3.1.0]hexane 1, 126–127, 127		C <sub>2</sub> S-C <sub>4</sub> O 3-Oxa-6-thia-bicyclo[3.1.0]hexane 1, 392	
C <sub>2</sub> N-C <sub>3</sub> N <sub>2</sub> 1,3-Diaza-bicyclo[3.1.0]hex-3-ene 1, 107		C <sub>2</sub> S-C <sub>4</sub> S 3,6-Dithia-bicyclo[3.1.0]hexane 1, 422	
C <sub>2</sub> N-C <sub>4</sub> N 1-Azabicyclo[3.1.0]hexane 1, 25; 1, 105–172		1λ <sup>4</sup> -Thia-bicyclo[3.1.0]hexane 12, 482	
1-Aza-bicyclo[3.1.0]hexane 1, 105–172		C <sub>2</sub> S-C <sub>5</sub> 1-Thia-spiro[2.4]heptane 1, 394	
3-Aza-spiro[2.4]heptane 12, 1049 <i>f</i>		6-Thiabicyclo[3.1.0]hexane 1, 391–431	
C <sub>2</sub> N-C <sub>4</sub> O 3-Oxa-6-azabicyclo[3.1.0]hexane 1, 110		C <sub>3</sub> -C <sub>3</sub> NO 4-Oxa-5-aza-spiro[2.4]heptane 4, 399, 400, 401, 402	
C <sub>2</sub> N-C <sub>5</sub> 6-Azabicyclo[3.1.0]hexane 1, 105–172		C <sub>3</sub> -C <sub>3</sub> NS 2-Thia-4-aza-bicyclo[3.1.0]hex-3-ene 8, 579–580	
6-Aza-bicyclo[3.1.0]hex-2-ene 1, 17		C <sub>3</sub> -C <sub>4</sub> N 3-Azabicyclo[3.1.0]hexane 7, 2240	

C<sub>3</sub>-C<sub>4</sub>O5-Oxa-spiro[2.4]hept-6-ene  
3, 523C<sub>3</sub>-C<sub>4</sub>P3-Phosphabicyclo[3.1.0]hexane  
7, 1019, 1023–1024, 1024, 1025, 10312-Oxa-bicyclo[3.1.0]hex-3-ene  
3, 412–413C<sub>3</sub>-C<sub>4</sub>S3-Thia-bicyclo[3.1.0]hexane  
3, 763

# 3,6

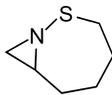
<p><math>C_2Ge-C_6</math> 7-Germa-bicyclo[4.1.0]hepta-1,3,5-triene 1, 495</p>		<p>7-Aza-bicyclo[4.1.0]hept-3-ene 1, 1-104, 88, 89</p>	
<p><math>C_2N-C_3NOS</math> 3-Oxa-2-thia-1-aza-bicyclo[4.1.0]heptane 1, 129f, 143-144</p>		<p><math>C_2O-C_4NO</math> 3,7-Dioxa-4-aza-bicyclo[4.1.0]heptane 8, 347-348</p>	
<p><math>C_2N-C_4NS</math> 2-Thia-1-aza-bicyclo[4.1.0]heptane 1, 128t, 143f, 143f</p>		<p><math>C_2O-C_6</math> 7-Oxabicyclo[4.1.0]heptane 1, 180</p>	
<p><math>C_2N-C_4N_2</math> 3,6-Diaza-spiro[2.5]octane 12, 1050</p>		<p>7-Oxa-bicyclo[4.1.0]hepta-1,3,5-triene 1, 290</p>	
<p><math>C_2N-C_5N</math> 1-Azabicyclo[4.1.0]heptane 1, 25; 1, 105-172</p>		<p><math>C_2S-C_5S</math> 1λ<sup>4</sup>-Thia-bicyclo[4.1.0]heptane 12, 482</p>	
<p>3-Aza-spiro[2.5]octane 12, 1049f</p>		<p><math>C_2S-C_6</math> 7-Thiabicyclo[4.1.0]heptane 1, 391-431, 403</p>	
<p><math>C_2N-C_5O</math> 3-Oxa-7-azabicyclo[4.1.0]heptane 1, 15f</p>		<p><math>C_2Si-C_6</math> 7-Sila-bicyclo[4.1.0]heptane 1, 491</p>	
<p><math>C_2N-C_6</math> 7-Azabicyclo[4.1.0]heptane 1, 1-104; 1, 105-172</p>		<p><math>C_3-C_5P</math> 2-Phospha-bicyclo[4.1.0]hepta-1,3,5-triene 7, 1006</p>	

# 3,7

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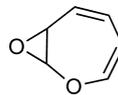
C<sub>2</sub>N-C<sub>5</sub>NS

2-Thia-1-aza-bicyclo[5.1.0]octane  
1, 128*t*, 129*t*



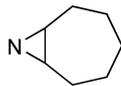
C<sub>2</sub>O-C<sub>6</sub>O

2,8-Dioxa-bicyclo[5.1.0]octa-3,5-diene  
1, 659



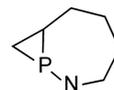
C<sub>2</sub>N-C<sub>7</sub>

8-Azabicyclo[5.1.0]octane  
1, 113



C<sub>2</sub>P-C<sub>5</sub>NP

2-Aza-1-phospha-bicyclo[5.1.0]octane  
12, 545*f*

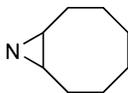


# 3,8

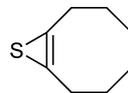
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C<sub>2</sub>N-C<sub>8</sub>

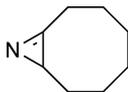
9-Azabicyclo[6.1.0]nonane  
1; **5**, 58*f*, 61*f*; **1**, 111, 113, 113, 140



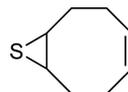
9-Thia-bicyclo[6.1.0]non-1(8)-ene  
1, 392



9-Aza-bicyclo[6.1.0]non-1(9)-ene  
1, 151–152

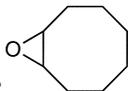


9-Thia-bicyclo[6.1.0]non-4-ene  
1, 392



C<sub>2</sub>O-C<sub>8</sub>

9-Oxabicyclo[6.1.0]nonane  
1, 271, 280*f*, 280, 281; **2**, 379, 380, 382



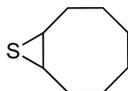
C<sub>3</sub>-C<sub>7</sub>O

4-Oxa-bicyclo[6.1.0]nonane  
14, 68*f*



C<sub>2</sub>S-C<sub>8</sub>

9-Thiabicyclo[6.1.0]nonane  
1, 402, 409, 416; **1**, 671



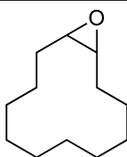
# 3,12

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C<sub>2</sub>O-C<sub>12</sub>

13-Oxa-bicyclo[10.1.0]tridecane

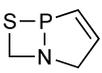
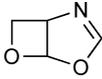
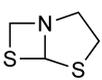
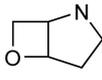
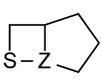
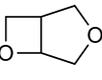
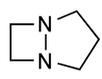
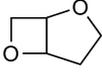
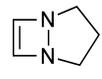
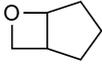
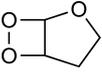
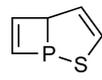
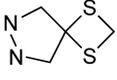
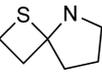
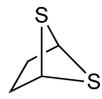
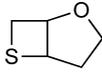
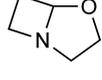
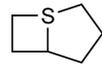
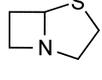
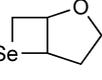
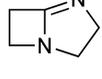
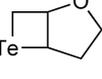
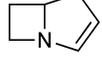
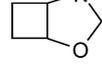
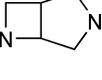
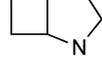
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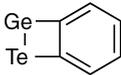
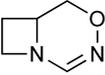
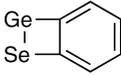
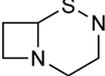
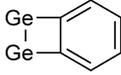
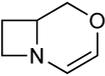
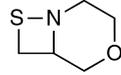
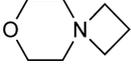
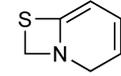
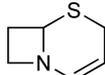
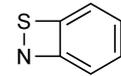
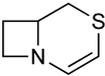
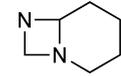
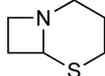
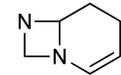
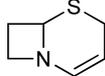
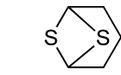
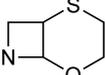
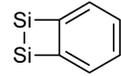
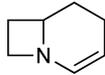
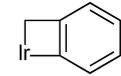
# 4,4

<p>C<sub>2</sub>GeP-C<sub>2</sub>GeP 2,5-Diphospha-3,6-digerma-bicyclo [2.2.0]hex-1(4)-ene 2, 911</p>		<p>C<sub>3</sub>N-C<sub>3</sub>S 2-Thia-6-aza-bicyclo[2.2.0]hexane 2, 430, 444</p>	
<p>C<sub>2</sub>NO-C<sub>3</sub>N 3-Oxa-1-aza-bicyclo[2.2.0]hex-5-ene 2, 695–696</p>		<p>C<sub>3</sub>N-C<sub>4</sub> 2-Azabicyclo[2.2.0]hexane 2, 91</p>	
<p>C<sub>2</sub>N<sub>2</sub>-C<sub>3</sub>N 1,2-Diaza-bicyclo[2.2.0]hexa-2,5-diene 2, 99</p>		<p>2-Aza-bicyclo[2.2.0]hex-5-ene 2, 239–319</p>	
<p>C<sub>2</sub>P<sub>2</sub>-C<sub>3</sub>P 1,3-Diphospha-bicyclo[2.2.0]hexa-2,5-diene 2, 493</p>		<p>C<sub>3</sub>P-C<sub>3</sub>P 1-Phospha-bicyclo[2.2.0]hexa-2,5-diene 7, 1009</p>	
<p>C<sub>2</sub>S<sub>2</sub>-C<sub>2</sub>S<sub>2</sub> 1λ<sup>4</sup>,4λ<sup>4</sup>-Dithia-bicyclo[2.2.0]hexane 12, 504</p>		<p>C<sub>3</sub>Se-C<sub>3</sub>Se 2,6-Disclena-spiro[3.3]heptane 2, 463–477</p>	
<p>C<sub>2</sub>S<sub>2</sub>-C<sub>3</sub>S 2,4-Dithia-bicyclo[1.1.1]pentane 2, 836</p>		<p>C<sub>3</sub>Si-C<sub>3</sub>Ti 5-Sila-2-titanabicyclo [2.2.0]hexa-1(6),3-diene 2, 575</p>	
<p>C<sub>3</sub>N-C<sub>3</sub>N 1-Azabicyclo[2.2.0]hexane 2, 239–319</p>		<p>C<sub>3</sub>Ti-C<sub>3</sub>Ti 2,5-Dititanabicyclo[2.2.0]hexa-1(6),3-diene 2, 575</p>	

# 4,5

CNPS-C <sub>3</sub> NP 6-Thia-1-aza-5-phospha-bicyclo [3.2.0]hept-3-ene 2, 952–953		C <sub>3</sub> O-C <sub>3</sub> NO 4,6-Dioxa-2-aza-bicyclo[3.2.0]hept-2-ene 2, 374	
C <sub>2</sub> NS-C <sub>3</sub> NS 4,6-Dithia-1-aza-bicyclo[3.2.0]heptane 2, 716		C <sub>3</sub> O-C <sub>4</sub> N 6-Oxa-2-aza-bicyclo[3.2.0]heptane 2, 374, 382–383	
C <sub>2</sub> NS-C <sub>4</sub> N 7-Thia-1-aza-bicyclo[3.2.0]heptane 2, 741, 743–745		C <sub>3</sub> O-C <sub>4</sub> O 3,6-Dioxa-bicyclo[3.2.0]heptane 2, 376–377	
C <sub>2</sub> N <sub>2</sub> -C <sub>3</sub> N <sub>2</sub> 1,5-Diaza-bicyclo[3.2.0]heptane 2, 658		4,7-Dioxabicyclo[3.2.0]heptane 2, 378	
1,5-Diaza-bicyclo[3.2.0]hept-6-ene 2, 658		C <sub>3</sub> O-C <sub>5</sub> 6-Oxabicyclo[3.2.0]heptane 2, 365–387	
C <sub>2</sub> O <sub>2</sub> -C <sub>4</sub> O 2,6,7-Trioxa-bicyclo[3.2.0]heptane 2, 782–783, 786, 787		C <sub>3</sub> P-C <sub>3</sub> PS 2-Thia-1-phospha-bicyclo [3.2.0]hepta-3,6-diene 2, 493, 502	
C <sub>2</sub> S <sub>2</sub> -C <sub>3</sub> N <sub>2</sub> 1,3-Dithia-6,7-diaza-spiro[3.4]octane 2, 841		C <sub>3</sub> S-C <sub>4</sub> N 1-Thia-5-aza-spiro[3.4]octane 2, 430	
C <sub>2</sub> S <sub>2</sub> -C <sub>4</sub> S 5,6-Dithia-bicyclo[2.1.1]hexane 2, 822		C <sub>3</sub> S-C <sub>4</sub> O 2-Oxa-6-thia-bicyclo[3.2.0]heptane 2, 431, 453	
C <sub>3</sub> N-C <sub>3</sub> NO 4-Oxa-1-azabicyclo[3.2.0]heptane 2, 239–319		C <sub>3</sub> S-C <sub>4</sub> S 1λ <sup>4</sup> -Thia-bicyclo[3.2.0]heptane 12, 482	
C <sub>3</sub> N-C <sub>3</sub> NS 4-Thia-1-azabicyclo[3.2.0]heptane 2, 130; 8, 666–667; 4, 670f		C <sub>3</sub> Se-C <sub>4</sub> O 2-Oxa-6-selena-bicyclo[3.2.0]heptane 2, 465f, 474	
C <sub>3</sub> N-C <sub>3</sub> N <sub>2</sub> 1,4-Diaza-bicyclo[3.2.0]hept-4-ene 2, 261		C <sub>3</sub> Te-C <sub>4</sub> O 2-Oxa-6-tellura-bicyclo[3.2.0]heptane 2, 474	
C <sub>3</sub> N-C <sub>4</sub> N 1-Aza-bicyclo[3.2.0]hept-2-ene 2, 239–319		C <sub>4</sub> -C <sub>3</sub> NO 2-Oxa-4-azabicyclo[3.2.0]heptane 4, 509	
3,6-Diazabicyclo[3.2.0]heptane 2, 256		C <sub>4</sub> -C <sub>3</sub> NSe 2-Selena-4-aza-bicyclo[3.2.0]heptane 4, 791–821	

# 4,6

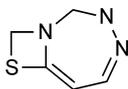
<p><math>C_2GeTe-C_6</math> 7-Tellura-8-germa-bicyclo [4.2.0]octa-1,3,5-triene 2, 868</p>		<p><math>C_3N-C_2N_2O</math> 4-Oxa-1,3-diaza-bicyclo[4.2.0]oct-2-ene 2, 156–157; 9, 323</p>	
<p><math>C_2Ge_2-C_6</math> 7-Selena-8-germa-bicyclo [4.2.0]octa-1,3,5-triene 2, 868</p>		<p><math>C_3N-C_3N_2S</math> 5-Thia-1,4-diaza-bicyclo[4.2.0]octane 9, 349</p>	
<p>7,8-Digerma-bicyclo [4.2.0]octa-1,3,5-triene 2, 914, 921</p>		<p><math>C_3N-C_4NO</math> 4-Oxa-1-aza-bicyclo[4.2.0]oct-2-ene 2, 144</p>	
<p><math>C_2NS-C_4NO</math> 4-Oxa-8-thia-1-aza-bicyclo[4.2.0]octane 2, 754<sup>f</sup></p>		<p>7-Oxa-4-aza-spiro[3.5]nonane 12, 1050</p>	
<p><math>C_2NS-C_5N</math> 7-Thia-1-aza-bicyclo[4.2.0]octa-3,5-diene 2, 740, 741</p>		<p><math>C_3N-C_4NS</math> 2,3-Dihydro-imidazo[1,2-d][1,2,4]- thiadiazole 5, 483</p>	
<p><math>C_2NS-C_6</math> 7-Thia-8-aza-bicyclo [4.2.0]octa-1,3,5-triene 2, 733–734, 755</p>		<p>4-Thia-1-aza-bicyclo[4.2.0]oct-2-ene 2, 144</p>	
<p><math>C_2N_2-C_5N</math> 1,7-Diaza-bicyclo[4.2.0]octane 2, 665</p>		<p>5-Thia-1-azabicyclo[4.2.0]octane 5, 235; 8, 580, 582–583; 8, 642</p>	
<p>1,7-Diaza-bicyclo[4.2.0]oct-2-ene 2, 664<sup>f</sup></p>		<p>5-Thia-1-aza-bicyclo [4.2.0]oct-2-ene(cephalosporin) 2, 111–171; 5, 498; 8, 642</p>	
<p><math>C_2S_2-C_5S</math> 6,7-Dithiabicyclo[3.1.1]heptane 2, 822, 824, 824, 836, 843</p>		<p><math>C_3N-C_4OS</math> 5-Oxa-2-thia-7-aza-bicyclo[4.2.0]octane 8, 875</p>	
<p><math>C_2Si_2-C_6</math> 7,8-Disila-bicyclo[4.2.0]octa-1,3,5-triene 2, 914, 914</p>		<p><math>C_3N-C_5N</math> 1-Aza-bicyclo[4.2.0]oct-2-ene 2, 145; 2, 664<sup>f</sup></p>	
<p><math>C_3Ir-C_6</math> 1,2-Dihydrobenzo[b]iridabete 2, 555–621</p>		<p>2,7-Diaza-spiro[3.5]nona-5,8-diene 7, 131<sup>f</sup></p>	

C <sub>3</sub> N-C <sub>6</sub> 7-Azabicyclo[4.2.0]octane 2, 258		C <sub>3</sub> S-C <sub>5</sub> N 8-Thia-2-aza-bicyclo [4.2.0]octa-1(6),2,4-triene 2, 447	
7-Aza-bicyclo[4.2.0]oct-3-ene 2, 281		C <sub>3</sub> S-C <sub>5</sub> O 2-Oxa-7-thia-bicyclo[4.2.0]octane 2, 431, 445-446	
C <sub>3</sub> O-C <sub>4</sub> N <sub>2</sub> 8-Oxa-2,4-diaza-bicyclo[4.2.0]octane 8, 178		C <sub>3</sub> S-C <sub>6</sub> 7-Thia-bicyclo[4.2.0]octane 2, 433	
C <sub>3</sub> O-C <sub>5</sub> O 2,7-Dioxa-bicyclo[4.2.0]octane 2, 378		7-Thia-bicyclo[4.2.0]octa-1(6),2,4-triene 2, 437-438, 438-439, 455	
C <sub>3</sub> O-C <sub>6</sub> 7-Oxabicyclo[4.2.0]octane 2, 365-387		C <sub>3</sub> Se-C <sub>6</sub> 7-Selena-bicyclo[4.2.0]octa-1,3,5-triene 2, 464f, 473-474	
1-Oxaspiro[3.5]nonane 2, 369, 370, 377-378		C <sub>3</sub> Si-C <sub>6</sub> 7-Sila-bicyclo[4.2.0]octa-1(6),2,4-triene 2, 515, 540-541	
C <sub>3</sub> P-C <sub>6</sub> 7-Phospha-bicyclo[4.2.0]octa-1(6), 2,4,7-tetraene 2, 486-487		C <sub>4</sub> -C <sub>4</sub> N <sub>2</sub> 2,4-Diaza-bicyclo[4.2.0]octa-1(6), 2,4-triene 8, 221, 221	
C <sub>3</sub> Ru-C <sub>6</sub> 1,2-Dihydrobenzo[b]rutenabete 2, 555-621		C <sub>4</sub> -C <sub>5</sub> P 3-Phospha-bicyclo[4.2.0]octa-1,3,5-triene 7, 1006	
C <sub>3</sub> S-C <sub>4</sub> N <sub>2</sub> 1-Thia-5,9-diaza-spiro[3.5]nonane 2, 451		C <sub>4</sub> -C <sub>5</sub> S 2-Thia-bicyclo[4.2.0]octane 7, 735	
7-Thia-2,4-diaza-bicyclo[4.2.0]octa-1(6), 2,4-triene 2, 449, 449-450, 450-451, 457		Si <sub>4</sub> -C <sub>2</sub> S <sub>2</sub> Si <sub>2</sub> 2,5-Dithia-1,6,7,8-tetrasilabicyclo [4.2.0]octane 6, 667	

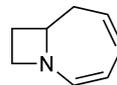
# 4,7

C<sub>2</sub>NS-C<sub>4</sub>N<sub>3</sub>

8-Thia-1,3,4-triaza-bicyclo  
[5.2.0]nona-4,6-diene  
2, 721–722, 761

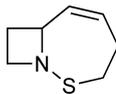


1-Aza-bicyclo[5.2.0]nona-2,4-diene  
2, 305



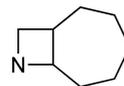
C<sub>3</sub>N-C<sub>5</sub>NS

2-Thia-1-aza-bicyclo[5.2.0]non-5-ene  
2, 243; 14, 136, 138



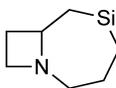
C<sub>3</sub>N-C<sub>7</sub>

8-Aza-bicyclo[5.2.0]nonane  
2, 281



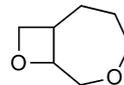
C<sub>3</sub>N-C<sub>5</sub>NSi

1-Aza-5-sila-bicyclo[5.2.0]nonane  
2, 264



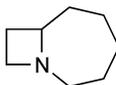
C<sub>3</sub>O-C<sub>6</sub>O

3,9-Dioxa-bicyclo[5.2.0]nonane  
13, 67



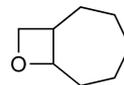
C<sub>3</sub>N-C<sub>6</sub>N

1-Azabicyclo[5.2.0]nonane  
1, 562



C<sub>3</sub>O-C<sub>7</sub>

8-Oxa-bicyclo[5.2.0]nonane  
2, 379



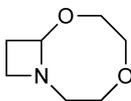
# 4,8

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C<sub>3</sub>N-C<sub>5</sub>NO<sub>2</sub>

4,7-Dioxa-1-aza-bicyclo[6.2.0]decane

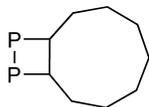
2, 243



# 4,9

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C<sub>2</sub>P<sub>2</sub>-C<sub>9</sub>  
10,11-Diphospha-bicyclo  
[7.2.0]undecane  
2, 879



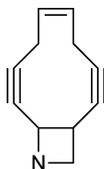
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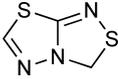
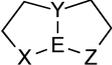
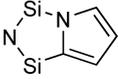
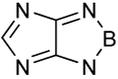
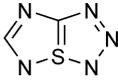
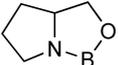
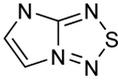
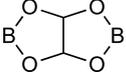
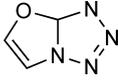
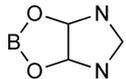
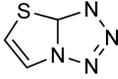
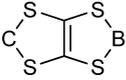
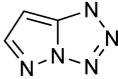
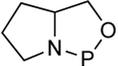
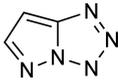
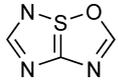
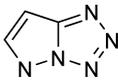
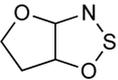
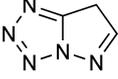
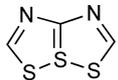
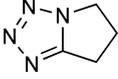
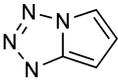
C<sub>3</sub>N-C<sub>10</sub>

11-Aza-bicyclo[8.2.0]dodec-5-ene-2,  
8-diyne

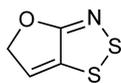
2, 253, 268, 269, 270, 275



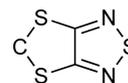
# 5,5

CN <sub>2</sub> S-CN <sub>2</sub> S [1,3,4]Thiadiazolo[2,3-c] [1,2,4]thiadiazole 11, 340		C <sub>2</sub> (E)(X)(Y)-C <sub>2</sub> (E)(Y)(Z) 1,2',3',6'-Tetraheterapentalene 12, 563	
CN <sub>2</sub> Si <sub>2</sub> -C <sub>4</sub> N 2,3-Dihydro-1H-2,3a-diaza-1, 3-disila-pentalene 11, 307–323		C <sub>2</sub> BN <sub>2</sub> -C <sub>3</sub> N <sub>2</sub> 1,2-Dihydro-1,3,4,6-tetraaza- 2-bora-pentalene 10, 241	
CN <sub>3</sub> S-C <sub>2</sub> N <sub>2</sub> S Thiapentaazapentalene 6, 479f		C <sub>2</sub> BON-C <sub>4</sub> N Tetrahydro-pyrrolo[1,2-c] [1,3,2]oxazaborole 11, 119	
CN <sub>3</sub> S-C <sub>3</sub> N <sub>2</sub> 4H-Imidazo[1,2-c][1,2,3,5]thiatriazole 6, 492f		C <sub>2</sub> BO <sub>2</sub> -C <sub>2</sub> BO <sub>2</sub> Dihydro-1,3,4,6-tetraoxa-2, 5-dibora-pentalene 10, 238	
CN <sub>4</sub> -C <sub>3</sub> NO 1,6a-Dihydro-6-oxa-1,2,3,3a-tetraaza- pentalene 11, 351–366		C <sub>2</sub> BO <sub>2</sub> -C <sub>3</sub> N <sub>2</sub> Tetrahydro-[1,3,2]dioxaborolo [4,5-d]imidazole 10, 245	
CN <sub>4</sub> -C <sub>3</sub> NS 3,3a-Dihydro-thiazolo[3,2-d]tetrazole 11, 351–366		C <sub>2</sub> BS <sub>2</sub> -C <sub>3</sub> S <sub>2</sub> 1,3,4,6-Tetrathia-2-bora-pentalene 10, 239	
CN <sub>4</sub> -C <sub>3</sub> N <sub>2</sub> 1H-Pyrazolo[1,5-d]tetrazole 11, 351–366		C <sub>2</sub> NOP-C <sub>4</sub> N Tetrahydro-pyrrolo[1,2-c] [1,3,2]oxaphosphole 11, 119	
3H-Pyrazolo[1,5-d]tetrazole 11, 351–366		C <sub>2</sub> NOS-C <sub>2</sub> N <sub>2</sub> S 5H-4λ <sup>+</sup> -[1,2,4->Thiadiazolo[1,5-b] [1,2,4]oxathiazole 6, 466f	
5H-Pyrazolo[1,5-d]tetrazole 11, 351–366		C <sub>2</sub> NOS-C <sub>4</sub> O Tetrahydro-1,4-dioxa-2-thia- 3-aza-pentalene 10, 150	
7H-Pyrazolo[1,5-d]tetrazole 11, 351–366		C <sub>2</sub> NS <sub>2</sub> -C <sub>2</sub> NS <sub>2</sub> 4,4-[1,2,4]Dithiazolo[1,5-b] [1,2,4]dithiazole 6, 73–74, 74; 6, 465f; 6, 466f; 6, 467f	
CN <sub>4</sub> -C <sub>4</sub> N 6,7-Dihydro-5H-pyrrolotetrazole 11, 307–323			
1H-Pyrrolotetrazole 11, 307–323; 6, 274			

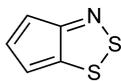
C<sub>2</sub>NS<sub>2</sub>-C<sub>4</sub>O  
5H-4-Oxa-1,2-dithia-3-aza-pentalene  
10, 140



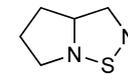
C<sub>2</sub>N<sub>2</sub>S-C<sub>3</sub>S<sub>2</sub>  
2,4,6-Trithia-1,3-diaza-pentalene  
10, 239



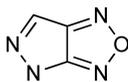
C<sub>2</sub>NS<sub>2</sub>-C<sub>5</sub>  
Cyclopenta[1,2,3]dithiazole  
6, 29



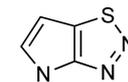
C<sub>2</sub>N<sub>2</sub>S-C<sub>4</sub>N  
Hexahydro-1-thia-2,6a-diaza-pentalene  
11, 118f



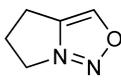
C<sub>2</sub>N<sub>2</sub>O-C<sub>3</sub>N<sub>2</sub>  
4H-Pyrazolo[3,4-c][1,2,5]oxadiazole  
10, 189–261



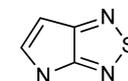
4H-1-Thia-2,3,4-triaza-pentalene  
10, 144, 144



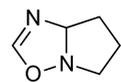
C<sub>2</sub>N<sub>2</sub>O-C<sub>4</sub>N  
5,6-Dihydro-4H-pyrrolo[1,2-c]  
[1,2,3]oxadiazole  
11, 119



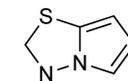
4H-2-Thia-1,3,4-triaza-pentalene  
10, 151–152



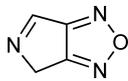
5,6,7,7a-Tetrahydro-pyrrolo[1,2-b]  
[1,2,4]oxadiazole  
11, 121



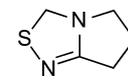
2,3-Dihydro-pyrrolo[2,1-b]  
[1,3,4]thiadiazole  
11, 123–124



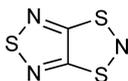
4H-Pyrrolo[3,4-c][1,2,5]oxadiazole  
10, 141



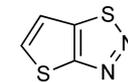
6,7-Dihydro-5H-pyrrolo[2,1-c]  
[1,2,4]thiadiazole  
11, 125



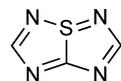
C<sub>2</sub>N<sub>2</sub>S-CNS<sub>2</sub>  
[1,2,5]Thiadiazolo[3,4-d]  
[1,3,2]dithiazole  
6, 37–59



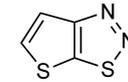
C<sub>2</sub>N<sub>2</sub>S-C<sub>4</sub>S  
1,4-Dithia-2,3-diaza-pentalene  
10, 146f, 147, 155



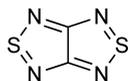
C<sub>2</sub>N<sub>2</sub>S-C<sub>2</sub>N<sub>2</sub>S  
4λ<sup>4</sup>-[1,2,4->Thiadiazolo[5,1-ℓ]  
[1,2,4]thiadiazole  
6, 466f



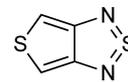
Thieno[3,2-d][1,2,3]thiadiazole  
10, 147, 147–148



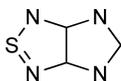
5λ<sup>4</sup>,2λ<sup>4</sup>-[1,2,5]Thiadiazolo[3,4-c]  
[1,2,5]thiadiazole  
10, 242



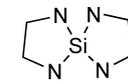
Tetrahydro-1,3-dioxa-2-thia-  
5-aza-pentalene  
10, 148, 148



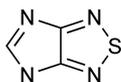
C<sub>2</sub>N<sub>2</sub>S-C<sub>3</sub>N<sub>2</sub>  
1,3a,4,5,6,6a-Hexahydro-2λ<sup>4</sup>-thia-  
1,3,4,6-tetraaza-pentalene  
10, 243



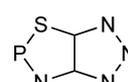
C<sub>2</sub>N<sub>2</sub>Si-C<sub>2</sub>N<sub>2</sub>Si  
1,4,6,9-Tetraaza-5-sila-spiro[4.4]nonane  
6, 666



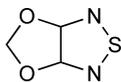
4H-2-Thia-1,3,4,6-tetraaza-pentalene  
10, 239



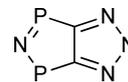
C<sub>2</sub>N<sub>3</sub>-C<sub>2</sub>NPS  
Hexahydro-1-thia-3,4,5,6-tetraaza-  
2-phospha-pentalene  
10, 246

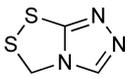
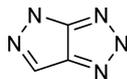
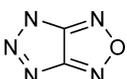
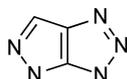
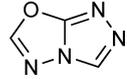
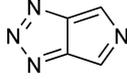
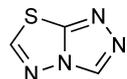
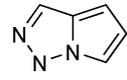
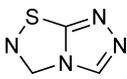
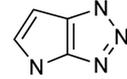
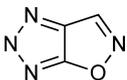
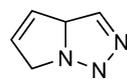
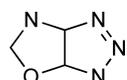
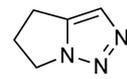
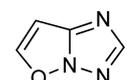
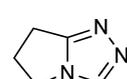
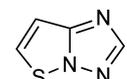
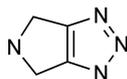
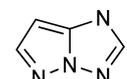
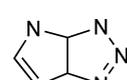
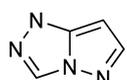
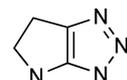
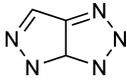
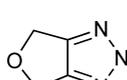


C<sub>2</sub>N<sub>2</sub>S-C<sub>3</sub>O  
Tetrahydro-4,6-dioxa-2-thia-  
1,3-diaza-pentalene  
10, 245



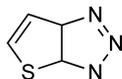
C<sub>2</sub>N<sub>3</sub>-C<sub>2</sub>NP<sub>2</sub>  
2,4-Dihydro-1,2,3,5-tetraaza-4,  
6-diphospha-pentalene  
10, 238



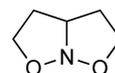
C <sub>2</sub> N <sub>3</sub> -C <sub>2</sub> NS <sub>2</sub> [1,2,4]Triazolo[3,4-c][1,2,4]dithiazole 11, 342		2,4-Dihydro-pyrazolo[3,4-d] [1,2,3]triazole 10, 189–261, 245	
C <sub>2</sub> N <sub>3</sub> -C <sub>2</sub> N <sub>2</sub> O 6H-[1,2,3]Triazolo[4,5-c] [1,2,5]oxadiazole 5, 346, 352		3,4-Dihydro-pyrazolo[3,4-d] [1,2,3]triazole 10, 240	
[1,2,4]Triazolo[3,4-b][1,3,4] 11, 351–366		C <sub>2</sub> N <sub>3</sub> -C <sub>4</sub> N Pyrrolo[3,4-d]-1,2,3-triazole 10, 142f	
C <sub>2</sub> N <sub>3</sub> -C <sub>2</sub> N <sub>2</sub> S [1,2,4]Triazolo[3,4-b][1,3,4]thiadiazole 11, 325–350		1H-Pyrrolo[1,2-c][1,2,3] triazole 11, 107–131	
2,3-Dihydro-[1,2,4]triazolo[4,3-d] [1,2,4]thiadiazole 11, 336–337, 337		1,4-Dihydro-pyrrolo[2,3-d][1,2,3]triazole 10, 145f, 153	
3a,5,6,6a-Tetrahydro-3H-oxazolo[4,5-d] [1,2,3]triazole 10, 247		3a,6-Dihydro-1H-pyrrolo[1,2-c] [1,2,3]triazole 11, 121	
C <sub>2</sub> N <sub>3</sub> -C <sub>3</sub> NO 2H-Isloxazolo[4,5-d][1,2,3]triazole 10, 189–261		5,6-Dihydro-4H-pyrrolo[1,2-c] [1,2,3]triazole 11, 118f	
4-Oxa-1,3,3a-triaza-pentalene 11, 351–366		6,7-Dihydro-5H-pyrrolo[2,1-c] [1,2,4]triazole	
C <sub>2</sub> N <sub>3</sub> -C <sub>3</sub> NS 4-Thia-1,3,3a-triaza-pentalene 11, 351–366		1,4,5,6-Tetrahydro-pyrrolo[3,4-d] [1,2,3]triazole 10, 154	
C <sub>2</sub> N <sub>3</sub> -C <sub>3</sub> N <sub>2</sub> 1H-Pyrazolo[1,5-b][1,2,4]triazole 11, 247		3,3a,4,6a-Tetrahydro-pyrrolo[2,3-d] [1,2,3]triazole 4, 968–969	
1H-Pyrazolo[5,1-c][1,2,4]triazole 11, 248		3,4,5,6-Tetrahydro-pyrrolo[2,3-d] [1,2,3]triazole 10, 153, 153	
2,3,3a,4-Tetrahydro-pyrazolo[3,4-d] [1,2,3]triazole 10, 240		C <sub>2</sub> N <sub>3</sub> -C <sub>4</sub> O 2,6-Dihydro-4H-furo[3,4-d] [1,2,3]triazole 10, 140–141, 150, 150–151	

C<sub>2</sub>N<sub>3</sub>-C<sub>4</sub>S

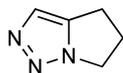
3a,6a-Dihydro-3H-thieno[2,3-d]  
[1,2,3]triazole  
10, 154–155



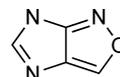
Tetrahydro-isoxazolo[2,3-b]isoxazole  
11, 166

C<sub>2</sub>N<sub>3</sub>-C<sub>5</sub>

5,6-Dihydro-4H-pyrrolo[1,2-c]  
[1,2,3]triazole  
1, 8f, 11, 118f



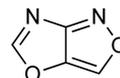
6H-Imidazo[4,5-c]isoxazole  
10, 177, 178f

C<sub>2</sub>O<sub>2</sub>P-C<sub>2</sub>O<sub>2</sub>P

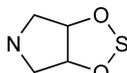
2,6,7-Trioxa-1-phospha-bicyclo  
[2.2.1]heptane  
12, 554



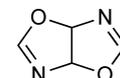
2,4-Dioxa-1,6-diaza-pentalene  
10, 178f

C<sub>2</sub>O<sub>2</sub>S-C<sub>4</sub>N

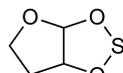
Tetrahydro-1,3-dioxa-2-thia-  
5-aza-pentalene  
10, 145



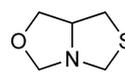
3a,6a-Dihydro-oxazolo[5,4-d]oxazole  
10, 175

C<sub>2</sub>O<sub>2</sub>S-C<sub>4</sub>O

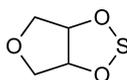
Tetrahydro-furo[2,3-d]  
[1,3,2]dioxathiole  
6, 170f; 6, 173f, 10, 142, 144

C<sub>3</sub>NO-C<sub>3</sub>NS

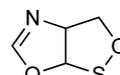
Dihydro-thiazolo[3,4-c]oxazole  
11, 166



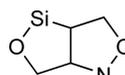
Tetrahydro-furo[3,4-d]  
[1,3,2]dioxathiole  
10, 150

C<sub>3</sub>NO-C<sub>3</sub>OS

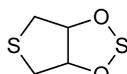
3a,6a-Dihydro-3H-2,6-dioxa-  
1-thia-4-aza-pentalene  
10, 178–179

C<sub>3</sub>NO-C<sub>3</sub>OSi

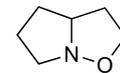
Tetrahydro-2,5-dioxa-1-aza-  
4-sila-pentalene  
10, 179

C<sub>2</sub>O<sub>2</sub>S-C<sub>4</sub>S

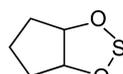
Tetrahydro-thieno[3,4-d]  
[1,3,2]dioxathiole  
6, 147, 10, 149f, 149

C<sub>3</sub>NO-C<sub>4</sub>N

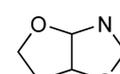
Hexahydro-pyrrolo[1,2-b]isoxazole  
11, 67

C<sub>2</sub>O<sub>2</sub>S-C<sub>5</sub>

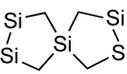
Tetrahydro-cyclopenta[1,3,2]dioxathiole  
6, 161f; 6, 173f



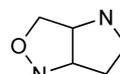
Hexahydro-pyrrolo[3,4-c]isoxazole  
4, 420

C<sub>2</sub>Si<sub>3</sub>-C<sub>2</sub>Si<sub>3</sub>

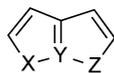
2,3,5,7,8-Pentasila-spiro[4.4]nonane  
6, 662



Hexahydro-2-oxa-1,4-diaza-pentalene  
4, 418, 421, 3720

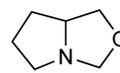
C<sub>3</sub>(X)(Y)-C<sub>3</sub>(Y)(Z)

1,2',3'-Triheterapentalene  
12, 515



X and Z = S, Se, O or N  
Y = S, Se or Te

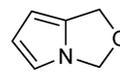
Tetrahydro-pyrrolo[1,2-c]oxazole  
11, 88, 92

C<sub>3</sub>BN-C<sub>5</sub>

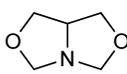
2-Aza-3-bora-bicyclo[2.2.1]hept-5-ene  
4, 1192



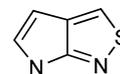
1H-Pyrrolo[1,2-c]oxazole  
11, 86

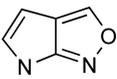
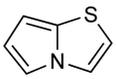
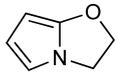
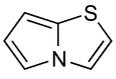
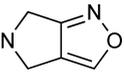
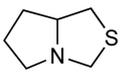
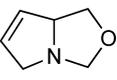
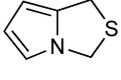
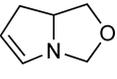
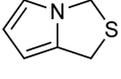
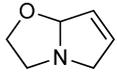
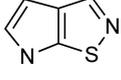
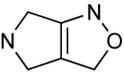
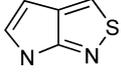
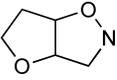
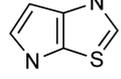
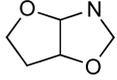
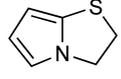
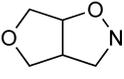
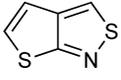
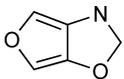
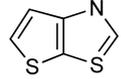
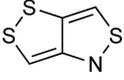
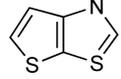
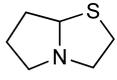
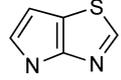
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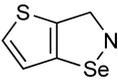
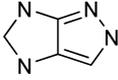
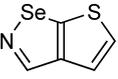
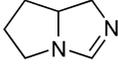
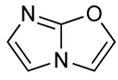
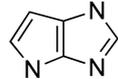
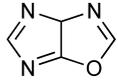
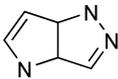
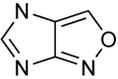
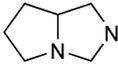
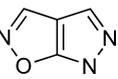
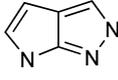
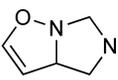
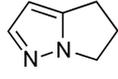
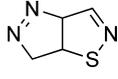
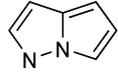
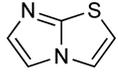
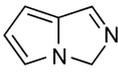
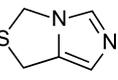
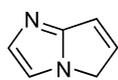
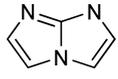
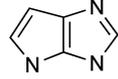
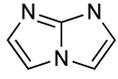
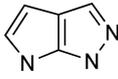
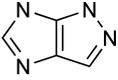
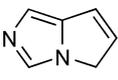
Dihydro-oxazolo[3,4-c]oxazole  
11, 166

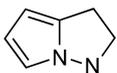
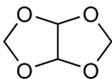
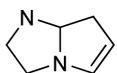
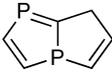
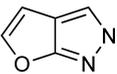
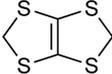
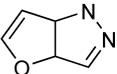
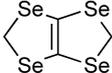
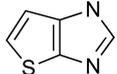
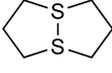
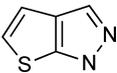
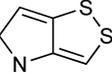
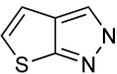
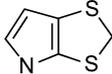
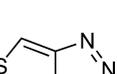
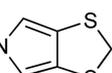
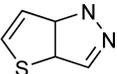
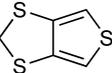
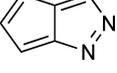
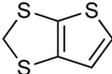
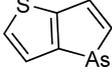
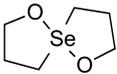
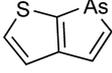
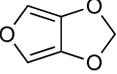
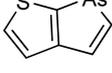


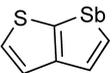
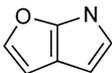
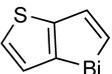
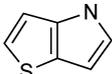
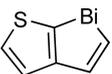
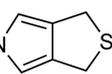
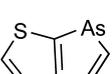
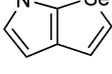
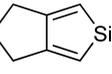
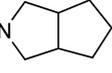
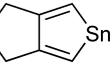
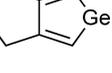
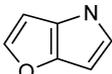
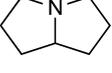
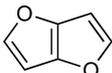
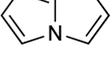
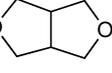
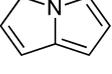
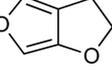
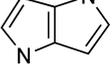
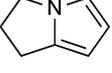
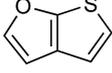
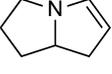
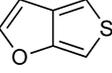
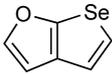
6H-2-Thia-1,6-diaza-pentalene  
10, 81f



6H-2-Oxa-1,6-diaza-pentalene 10, 81 <i>t</i>		Pyrrolo[2,1-b]thiazole 11, 94	
2,3-Dihydro-pyrrolo[2,1-b]oxazole 11, 74		Pyrrolo[2,1-b]thiazole 8, 632-634	
5,6-Dihydro-4H-pyrrolo[3,4-c]isoxazole 4, 388		Tetrahydro-pyrrolo[1,2-c]thiazole 11, 97	
5,7a-Dihydro-1H-pyrrolo[1,2-c]oxazole 11, 86		1H-Pyrrolo[1,2-c]thiazole 11, 96	
7,7a-Dihydro-1H-pyrrolo[1,2-c]oxazole 11, 86		1 <i>H</i> ,3 <i>H</i> -Pyrrolo[1,2- <i>c</i> ]thiazole 6, 462	
2,3,5,7a-Tetrahydro-pyrrolo [2,1-b]oxazole 1, 81		6H-Pyrrolo[3,2-d]isothiazole 10, 79 <i>t</i>	
3,4,5,6-Tetrahydro-1H-pyrrolo [3,4-c]isoxazole 4, 388		6H-2-Thia-1,6-diaza-pentalene 10, 81 <i>t</i>	
C <sub>3</sub> NO-C <sub>4</sub> O Hexahydro-furo[2,3-d]isoxazole 4, 394 <i>f</i>		1,4-Dihydro-3λ <sup>4</sup> -pyrrolo[3,2-d]thiazole 10, 74	
Hexahydro-furo[2,3-d]oxazole 6, 170 <i>t</i>		C <sub>3</sub> NS-C <sub>4</sub> O 2,3-Dihydro-furo[3,4-d]thiazole 10, 78 <i>t</i>	
Hexahydro-furo[3,4-d]isoxazole 4, 443 <i>f</i> , 397		C <sub>3</sub> NS-C <sub>4</sub> S Thieno[2,3-c]isothiazole 10, 81 <i>t</i>	
2,3-Dihydro-furo[3,4-d]oxazole 10, 78 <i>t</i>		Thieno[2,3-d]thiazole 10, 74	
C <sub>3</sub> NS-C <sub>3</sub> S <sub>2</sub> 4H-1,2,5-Trithia-4-aza-pentalene 10, 176		1H-3λ <sup>4</sup> -Thieno[3,2-d]thiazole 10, 74	
C <sub>3</sub> NS-C <sub>4</sub> N Hexahydro-pyrrolo[2,1-b]thiazole 11, 95		4H-Pyrrolo[2,3-d]thiazole 10, 74	

C <sub>3</sub> NSe-C <sub>4</sub> S 2,3-Dihydro-thieno[2,3-d]iselenazole 4, 760 <i>t</i>		2,4,5,6-Tetrahydro-imidazo [4,5-c]pyrazole 10, 177	
Thieno[3,2-d]iselenazole 4, 780		5,6,7,7a-Tetrahydro-1H-pyrrolo [1,2-c]imidazole 11, 57	
C <sub>3</sub> N <sub>2</sub> -C <sub>3</sub> NO Imidazo[2,1-b]oxazole 11, 151–152		1,4-Dihydro-pyrrolo[2,3-d]imidazole 10, 76 <i>t</i>	
3aH-Imidazo[4,5-d]oxazole 10, 175		1,3a,4,6a-Tetrahydro-pyrrolo [3,2-c]pyrazole 10, 83 <i>t</i>	
4H-Imidazo[4,5-c]isoxazole 4, 425 <i>f</i>		C <sub>3</sub> N <sub>2</sub> -C <sub>4</sub> N Hexahydro-pyrrolo[1,2-c]imidazole 11, 59	
6H-Pyrazolo[4,3-d]isoxazole 4, 58		2,6-Dihydro-pyrrolo[2,3-c]pyrazole 10, 81 <i>t</i>	
3a,4,5,6-Tetrahydro-imidazo [1,5-b]isoxazole 4, 237		5,6-Dihydro-4H-pyrrolo[1,2-b]pyrazole 11, 48	
C <sub>3</sub> N <sub>2</sub> -C <sub>3</sub> NS 6,6a-Dihydro-3aH-1-thia-2,4, 5-triaza-pentalene 4, 575–576, 576		1H-Pyrrolo[1,2-b]pyrazole 11, 47	
Imidazo[2,1-b]thiazole 11, 133–197		3H-Pyrrolo[1,2-c]imidazole 11, 56	
1H-Imidazo[1,5-c]thiazole 11, 133–197		5H-Pyrrolo[1,2-a]imidazole 11, 52	
C <sub>3</sub> N <sub>2</sub> -C <sub>3</sub> N <sub>2</sub> 1H-Imidazo[1,2-a]imidazole 11, 133–197		3,4-Dihydro-pyrrolo[2,3-d]imidazole 10, 78 <i>t</i>	
1H-Imidazo[1,2-a]imidazole 11, 133–197		1,6-Dihydro-pyrrolo[2,3-c]pyrazole 10, 79 <i>t</i>	
1,6-Dihydro-imidazo[4,5-c]pyrazole 10, 176–177		5H-Pyrrolo[1,2-c]imidazole 11, 66	

2,3-Dihydro-1H-pyrrolo[1,2-b]pyrazole 11, 47		Tetrahydro-furo[2,3-d][1,3]dioxole 6, 172 <i>f</i> ; 6, 170 <i>t</i> ; 6, 178 <i>t</i>	
2,3,5,7a-Tetrahydro-1H-pyrrolo [1,2-a]imidazole 11, 52		C <sub>3</sub> P <sub>2</sub> -C <sub>4</sub> P 6H-1,3a-Diphospha-pentalene 12, 531	
C <sub>3</sub> N <sub>2</sub> -C <sub>4</sub> O 2H-Furo[2,3-c]pyrazole 10, 82 <i>t</i>		C <sub>3</sub> S <sub>2</sub> -C <sub>3</sub> S <sub>2</sub> [1,3]Dithiolo[4,5-d][1,3]dithiole 4, 989	
3a,6a-Dihydro-1H-furo[3,2-c]pyrazole 10, 83 <i>t</i>		C <sub>3</sub> Se <sub>2</sub> -C <sub>3</sub> Se <sub>2</sub> [1,3]Diselenolo[4,4-d][1,3]diselenole 10, 175	
C <sub>3</sub> N <sub>2</sub> -C <sub>4</sub> S 1H-Thieno[2,3-d]imidazole 10, 75 <i>t</i>		Octahydro-8λ <sup>4</sup> ,4λ <sup>4</sup> -[1,2]dithiolo [1,2-a][1,2]dithiole 12, 504	
1H-Thieno[2,3-c]pyrazole 10, 80 <i>t</i>		C <sub>3</sub> S <sub>2</sub> -C <sub>4</sub> N 4,5-Dihydro-[1,2]dithiolo[4,3-b]pyrrole 2, 844	
2H-Thieno[2,3-c]pyrazole 10, 81 <i>t</i>		4H-[1,3]Dithiolo[4,5-b]pyrrole 8, 417	
3H-Thieno[3,4-c]pyrazole 3, 763–764		5H-[1,3]Dithiolo[4,5-c]pyrrole 4, 955–1090	
3a,6a-Dihydro-1H-thieno[3,2-c]pyrazole 10, 83 <i>t</i>		C <sub>3</sub> S <sub>2</sub> -C <sub>4</sub> S Thieno[3,4-d]-1,3-dithiole 4, 955–1090	
C <sub>3</sub> N <sub>2</sub> -C <sub>5</sub> Cyclopentapyrazole 5, 224–225		Thieno[2,3-d][1,3]dithiole 3, 858	
C <sub>3</sub> OP-C <sub>4</sub> P 2-Oxa-1-phospha-bicyclo[2.2.1] hept-5-ene 3, 1067–1068, 1116		C <sub>4</sub> As-C <sub>4</sub> S 4H-Arsolo[3,2-b]thiophene 3, 1149–1179	
C <sub>3</sub> OSe-C <sub>3</sub> OSe 1,6-Dioxa-5λ <sup>4</sup> -selena-spiro[4.4]nonane 4, 1095		6H-1-Thia-6-arsa-pentalene 3, 1149–1179	
C <sub>3</sub> O <sub>2</sub> -C <sub>4</sub> O Furo[3,4- <i>d'</i> ]-1,3-dioxole 6, 168 <i>f</i> ; 6, 161 <i>t</i> ; 6, 173 <i>t</i> ; 6, 178 <i>t</i>		C <sub>4</sub> Sb-C <sub>4</sub> S 4H-Stibolo[3,2-b]thiophene 3, 1149–1179	

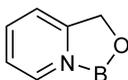
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C <sub>4</sub> Bi-C <sub>4</sub> S 4H-Bismolo[3,2- <i>b</i> ]thiophene 3, 1149–1179		C <sub>4</sub> N-C <sub>4</sub> S 4H-Thieno[3,2- <i>b</i> ]pyrrole 10; 13; 13; 14, 14	
6H-Bismolo[2,3- <i>b</i> ]thiophene 3, 1149–1179		3,5-Dihydro-1H-thieno[3,4- <i>c</i> ]pyrrole 10, 52	
C <sub>4</sub> Ge-C <sub>4</sub> N 1,2,3,4,5,6-Hexahydro-2-aza- 5-Germa-pentalene 3, 292		C <sub>4</sub> N-C <sub>4</sub> Se 6H-Selenolo[2,3- <i>b</i> ]pyrrole 10, 32	
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C <sub>4</sub> Sn-C <sub>5</sub> 2,4,5,6-Tetrahydrocyclopenta[ <i>c</i> ]stannole 3, 1149–1179		2-Aza-bicyclo[2.2.1]hept-5-ene 1, 148–149	
C <sub>4</sub> Ge-C <sub>5</sub> 2,4,5,6-Tetrahydrocyclopenta[ <i>c</i> ]germole 3, 1149–1179		C <sub>4</sub> O-C <sub>4</sub> N 4H-Furo[3,2- <i>b</i> ]pyrrole 10; 13; 14; 14, 26–27, 37	
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3H-Pyrrolizine 11, 1–40		2,3-Dihydro-furo[3,4- <i>b</i> ]furan 3, 508	
1,4-Dihydro-pyrrolo[3,2- <i>b</i> ]pyrrole 10; 11, 37		7-Oxa-bicyclo[2.2.1]hept-2-ene 3, 467, 468	
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2,3,7,7a-Tetrahydro-1H-pyrrolizine 11, 1–40		Thieno[3,4- <i>b</i> ]furan 3, 850 <i>f</i>	
		C <sub>4</sub> O-C <sub>4</sub> Se Selenolo[2,3- <i>b</i> ]furan 10, 20	

Tetrahydro-selenolo[3,4-c]furan 1, 436		C <sub>4</sub> P-C <sub>5</sub> 2,4,5,6-Tetrahydro-cyclopenta[c] phosphole 3, 1084	
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C <sub>4</sub> O-C <sub>4</sub> Te 1H,3H-Tellurolo[3,4-c]furan 3, 1024		Thieno[2,3-b]thiophene 10, 20	
C <sub>4</sub> O-C <sub>5</sub> 3,3a,4,5-Tetrahydro-1H-cyclopenta[c]- furan 3, 536–537		1H,3H-Thieno[3,4-c]thiophene 10, 20	
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C <sub>4</sub> P-C <sub>4</sub> P Hexahydro-phospholo[1,2-a]phosphole 12, 537		7-Thia-bicyclo[2.2.1]hept-2-ene 3, 777–778, 779, 784–785	
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1-Phospha-bicyclo[2.2.1]hepta-2,5-diene 3, 1067–1068, 1069; 12, 553		C <sub>4</sub> Ge-C <sub>5</sub> 2,4,5,6-Tetrahydro-2-germa-pentalene 3, 1149–1179	
1-Phospha-bicyclo[2.2.1]hept-2-ene 3, 1070, 1071, 1116		C <sub>4</sub> Si-C <sub>4</sub> Si 1,6-Dihydro-1,6-disila-pentalene 3, 1211–1212	
7-Phospha-bicyclo[2.2.1]hepta-2,5-diene 1, 476; 2, 896; 3, 1093–1094, 1116		C <sub>4</sub> Si-C <sub>5</sub> 2,4,5,6-Tetrahydrocyclopenta[c]silole 3, 1149–1179	
7-Phospha-bicyclo[2.2.1]hept-2-ene 3, 1112, 1113, 1116		C <sub>4</sub> Sn-C <sub>5</sub> 2,4,5,6-Tetrahydrocyclopenta[c]stannole 3, 1149–1179	

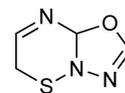
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CNO <sub>2</sub> Si-C <sub>4</sub> NO 1,3,6-Trioxa-3a-aza-2-sila-indene 11, 819–846		Tetrazolo[1,5-c]pyrimidine 11, 819–846	
CN <sub>3</sub> P-C <sub>4</sub> N <sub>2</sub> 1,2,3a,5-Tetraaza-3-phospha-indene 11, 819–846		CN <sub>4</sub> -C <sub>5</sub> N Tetrazolo[1,5-a]pyridine 7, 76; 6, 257–423	
1,3,3a,4-Tetraaza-2-phospha-indene 11, 819–846		5,6,7,8-Tetrahydro-tetrazolo [1,5-a]pyridine 6, 343f	
CN <sub>3</sub> S-C <sub>5</sub> N 2 <i>H</i> -[1,2,3,5]Thiatriazolo [5,4- <i>a</i> ]pyridine 6, 493		C <sub>2</sub> (E)(M <sub>2</sub> )-C <sub>6</sub> 3,4-Benzo-1-hetero-2, 5-metalla-cyclopentenes 6, 691–737	 M = Al, In, Ga, Ge, Sn, Pb E = N, P, O, S, Se, Te
CN <sub>4</sub> -C <sub>3</sub> N <sub>3</sub> Tetrazolo[1,5-b][1,2,4]triazine 11, 909–918		C <sub>2</sub> (E <sub>2</sub> )(M)-C <sub>6</sub> 4,5-Benzo-1,3-dihetera- 2-metalla-cyclopentenes 6, 691–737	 M = Al, In, Ga, Ge, Sn, Pb E = N, P, O, S, Se, Te
Tetrazolo[5,1-f][1,3,5]triazine 11, 909–918			
CN <sub>4</sub> -C <sub>4</sub> NO 5 <i>H</i> -Tetrazolo[5,1-b][1,3]oxazine 11, 819–846			
8 <i>H</i> -Tetrazolo[5,1-c][1,4]oxazine 11, 819–846		C <sub>2</sub> AsNP-C <sub>6</sub> 1 <i>H</i> -1,3,2-Benzaazaphospharsole 6, 604f	
CN <sub>4</sub> -C <sub>4</sub> NS 7 <i>H</i> -Tetrazolo[5,1-b][1,3]thiazine 11, 819–846		C <sub>2</sub> AsNS-C <sub>6</sub> 1,3,2-Benzazathiarsole 6, 604f	
CN <sub>4</sub> -C <sub>4</sub> N <sub>2</sub> Tetrazolo[1,5-a]pyrazine 11, 819–846		1,3,2-Benzodithiarsole 6, 604f	
Tetrazolo[1,5-b]pyridazine 11, 819–846		C <sub>2</sub> AsN <sub>2</sub> -C <sub>5</sub> N 1 <i>H</i> -1,2,4-Diazaarsolo[1,5- <i>a</i> ]pyridines 6, 604f	
Tetrazolo[1,5-a]pyrimidine 11, 819–846		C <sub>2</sub> AsN <sub>2</sub> -C <sub>6</sub> 1,3,2-Benzodiazaarsolide 6, 604f	

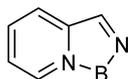
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[3,4-a]pyridine  
11, 605



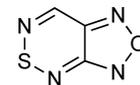
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3a,7-Triaza-indene  
11, 847-893



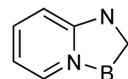
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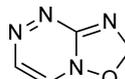
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10, 703-712



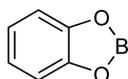
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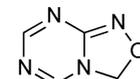
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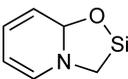
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1,3,2-Benzodioxaborole  
6, 620, 621



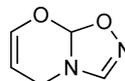
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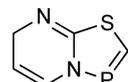
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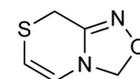
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11, 671-763



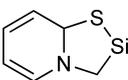
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3-phospha-indene  
11, 671-763



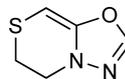
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11, 671-763



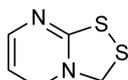
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11, 606



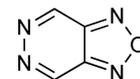
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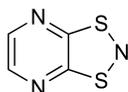
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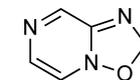
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pyridazine  
5, 343, 348; 6, 545f, 10, 684, 684



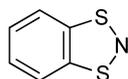
[1,2,3]Dithiazolo[4,5-b]pyrazine  
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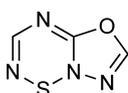
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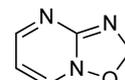
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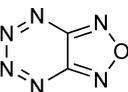
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1-Oxa-4-thia-3,3a,5,7-tetraaza-indene  
11, 909-918



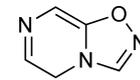
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pyrimidine  
11, 671-763

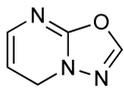
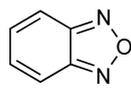
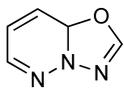
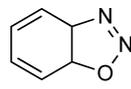
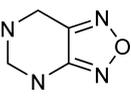
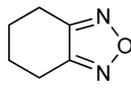
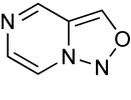
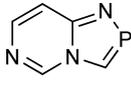
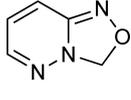
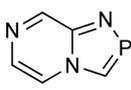
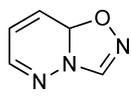
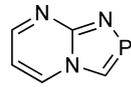
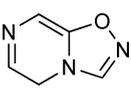
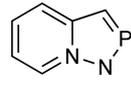
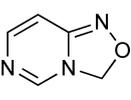
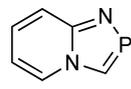
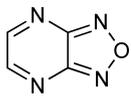
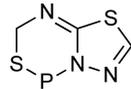
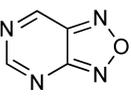
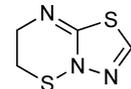
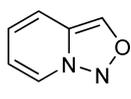
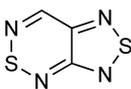
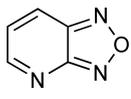
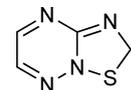
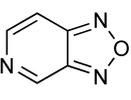


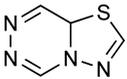
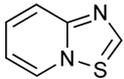
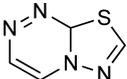
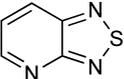
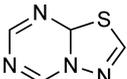
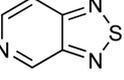
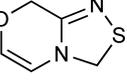
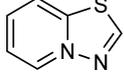
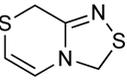
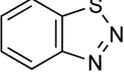
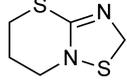
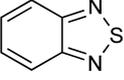
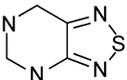
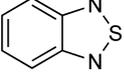
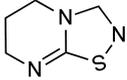
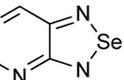
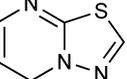
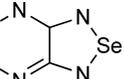
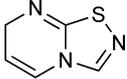
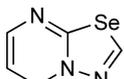
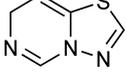
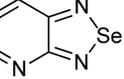
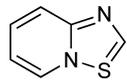
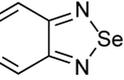
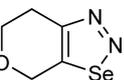
C<sub>2</sub>N<sub>2</sub>O-C<sub>2</sub>N<sub>4</sub>  
2-Oxa-1,3,4,5,6,7-hexaaza-indene  
10, 703-712



4H-1-Oxa-2,3a,6-triaza-indene  
11, 671-763

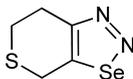


5H-[1,3,4]Oxadiazolo[3,2-a]pyrimidine 11, 671–763		C <sub>2</sub> N <sub>2</sub> O-C <sub>6</sub> Benzofurazan 5, 315–395; 8, 313–314	
7aH-1-Oxa-3,3a,4-triaza-indene 11, 671–763		1,2,3-Benzoxadiazole 5, 225, 5, 232, 5, 233	
4,5,6,7-Tetrahydro-[1,2,5]oxadiazolo [3,4-d]pyrimidine 5, 332, 373, 10, 690f, 691f		4,5,6,7-Tetrahydro-benzo [1,2,5]oxadiazole 5, 354–355	
[1,2,3]Oxadiazolo[3,4-a]pyrazine 11, 671–763		C <sub>2</sub> N <sub>2</sub> P-C <sub>4</sub> N <sub>2</sub> 1,3a,5-Triaza-2-phospha-indene 11, 671–763	
[1,2,4]Oxadiazolo[4,3-b]pyridazine 11, 671–763		1,3a,6-Triaza-2-phospha-indene 11, 671–763	
7aH-1-Oxa-2,3a,4-triaza-indene 11, 671–763		[1,4,2]Diazaphospholo[4,5-a]- pyrimidine 11, 671–763	
4H-1-Oxa-2,3a,6-triaza-indene 11, 671–763		C <sub>2</sub> N <sub>2</sub> P-C <sub>5</sub> N 1H-1,7a-Diaza-2-phospha-indene 11, 589–627, 604	
[1,2,4]Oxadiazolo[4,3-c]pyrimidine 11, 671–763		[1,4,2]Diazaphospholo[4,5-a]pyridine 11, 599	
[1,2,5]Oxadiazolo[3,4-b] pyrazine 10, 684		C <sub>2</sub> N <sub>2</sub> S-C <sub>2</sub> N <sub>2</sub> PS 6H-1,5-Dithia-3,3a, 7-triaza-4-phospha-indene 11, 909–918	
[1,2,5]Oxadiazolo[3,4-d] pyrimidine 5, 326, 333–334, 364f, 10, 690		C <sub>2</sub> N <sub>2</sub> S-C <sub>3</sub> N <sub>2</sub> S 5,6-Dihydro-1,4-dithia-3,3a, 7-triaza-indene 11, 847–893	
C <sub>2</sub> N <sub>2</sub> O-C <sub>5</sub> N 1H-[1,2,3]Oxadiazolo[3,4-a]pyridine 5, 222–223		3H-[1,2,5]Thiadiazolo[3,4-c] [1,2,6]thiadiazine 10, 703–712	
[1,2,5]Oxadiazolo[3,4-b] pyridine 5, 362, 10, 511–524		C <sub>2</sub> N <sub>2</sub> S-C <sub>3</sub> N <sub>3</sub> 2H-3-Thia-1,3a,4,7-tetraaza-indene 11, 847–893	
[1,2,5]Oxadiazolo[3,4-c] pyridine 10, 511–524			

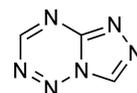
7aH-1-Thia-3,3a,5,6-tetraaza-indene 11, 847–893		[1,2,4]Thiadiazolo[2,3-a]pyridine 11, 589–627	
8aH-[1,3,4]Thiadiazolo[2,3-c] [1,2,4]triazine 11, 847–893		[1,2,5]Thiadiazolo[3,4-b] pyridine 10, 511–524	
8aH-[1,3,4]Thiadiazolo[3,2-a] [1,3,5]triazine 11, 847–893		[1,2,5]Thiadiazolo[3,4-c] pyridine 10, 511–524	
C <sub>2</sub> N <sub>2</sub> S-C <sub>4</sub> NO 7H-6-Oxa-2-thia-1,3a-diaza-indene 11, 671–763		[1,3,4]Thiadiazolo[3,2-a]pyridine 11, 589–627	
C <sub>2</sub> N <sub>2</sub> S-C <sub>4</sub> NS 7H-2,6-Dithia-1,3a-diaza-indene 11, 671–763		C <sub>2</sub> N <sub>2</sub> S-C <sub>6</sub> 1,2,3-Benzothiadiazole 5, 467–486	
6,7-Dihydro-2H,5H-[1,2,4] thiadiazolo[3,2-b][1,3]thiazine 11, 671–763		2,1,3-Benzothiadiazole 5, 515–565; 6, 568f; 6, 568f	
C <sub>2</sub> N <sub>2</sub> S-C <sub>4</sub> N <sub>2</sub> 4,5,6,7-Tetrahydro-[1,2,5] thiadiazolo[3,4-d]pyrimidine 5, 555, 10, 692		1,3-Dihydro-benzo[1,2,5]thiadiazole 5, 550–800	
2,3,6,7-Tetrahydro-5H-[1,2,4] thiadiazolo[4,5-a]pyrimidine 5, 496		C <sub>2</sub> N <sub>2</sub> Se-C <sub>3</sub> N <sub>2</sub> S 3H-5-Thia-2-selena- 1,3,4,6-tetraaza-indene 10, 703–712	
5H-[1,3,4]Thiadiazolo[3,2-a]pyrimidine 11, 671–763		C <sub>2</sub> N <sub>2</sub> Se-C <sub>3</sub> N <sub>3</sub> 1,3,3a,4-Tetrahydro-2-selena-1,3,4, 5,7-pentaaza-indene 10, 693, 693	
7H-[1,2,4]Thiadiazolo[4,5-a]pyrimidine 11, 671–763		C <sub>2</sub> N <sub>2</sub> Se-C <sub>4</sub> N <sub>2</sub> 5H-[1,3,4]Selenadiazolo[3,2-a]- pyrimidine 11, 671–763	
6H-1-Thia-3,3a,5-triaza-indene 11, 671–763		C <sub>2</sub> N <sub>2</sub> Se-C <sub>5</sub> N [1,2,5]Selenadiazolo[3,4-b] pyridine 6, 568–569, 10, 511–524	
C <sub>2</sub> N <sub>2</sub> S-C <sub>5</sub> N 3λ <sup>4</sup> -[1,2,4]Thiadiazolo[2,3-a] pyridine 11, 607		[1,2,5]Selenadiazolo[3,4-c] pyridine 6, 568–569, 10, 511–524	
		C <sub>2</sub> N <sub>2</sub> Se-C <sub>5</sub> O 6,7-Dihydro-4H-5-oxa-3-selena- 1,2-diaza-indene 6, 562f	

C<sub>2</sub>N<sub>2</sub>Se-C<sub>5</sub>S

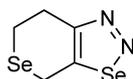
6,7-Dihydro-4H-5-thia-3-selena-  
1,2-diaza-indene  
6, 562*f*



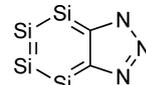
1,2,4-Triazolo[4,3-c] [1,2,3,5]tetrazine

C<sub>2</sub>N<sub>2</sub>Se-C<sub>5</sub>Se

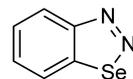
6,7-Dihydro-4H-5-selena-3-selena-  
1,2-diaza-indene  
6, 562*f*

C<sub>2</sub>N<sub>3</sub>-C<sub>2</sub>Si<sub>4</sub>

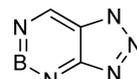
1H-[1,2,3,4]Tetrasilino[5,6-d]  
[1,2,3]triazole  
10, 703–712

C<sub>2</sub>N<sub>2</sub>Se-C<sub>6</sub>

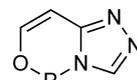
1,2,3-Benzoselenadiazole  
6, 549*f*; 6, 552*f*; 6, 557–558;  
6, 562*f*; 6, 566*f*

C<sub>2</sub>N<sub>3</sub>-C<sub>3</sub>BN<sub>2</sub>

1H-[1,2,3]Triazolo[4,5-d]  
[1,3,2]diazaborinine  
10, 703–712

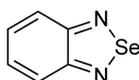
C<sub>2</sub>N<sub>3</sub>-C<sub>3</sub>NOP

5-Oxa-1,2,3a-triaza-4-phospha-indene  
11, 847–893

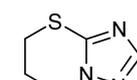


2,1,3-Benzoselenadiazole

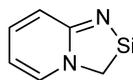
6, 543–544; 6, 544; 6, 545*f*; 6,  
552*f*; 6, 552; 6, 558*f*; 6, 560*f*;  
6, 568*f*; 6, 568–569

C<sub>2</sub>N<sub>3</sub>-C<sub>3</sub>NS<sub>2</sub>

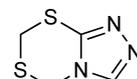
5,6-Dihydro-4,7-dithia-  
1,3,3a-triaza-indene  
11, 847–893

C<sub>2</sub>N<sub>2</sub>Si-C<sub>5</sub>N

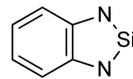
2,3-Dihydro-[1,4,2]diazasilolo  
[4,5-a]pyridine  
11, 606



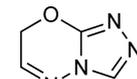
5,7-Dithia-1,2,3a-triaza-indene  
11, 847–893

C<sub>2</sub>N<sub>2</sub>Si-C<sub>6</sub>

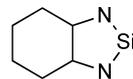
2,3-Dihydro-1H-benzo[1,3,2]  
diazasilole  
6, 655–690

C<sub>2</sub>N<sub>3</sub>-C<sub>3</sub>N<sub>2</sub>O

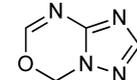
6H-7-Oxa-1,2,3a,4-tetraaza-indene  
11, 847–893



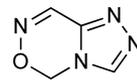
Octahydro-benzo[1,3,2]diazasilole  
6, 664



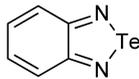
5-Oxa-1,3,3a,7-tetraaza-indene  
11, 847–893



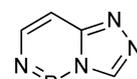
5-Oxa-1,2,3a,6-tetraaza-indene  
11, 847–893

C<sub>2</sub>N<sub>2</sub>Te-C<sub>6</sub>

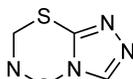
2,1,3-Benzotelluradiazole  
6, 569*f*

C<sub>2</sub>N<sub>3</sub>-C<sub>3</sub>N<sub>2</sub>P

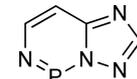
1,2,3a,5-Tetraaza-4-phospha-indene  
11, 847–893

C<sub>2</sub>N<sub>3</sub>-C<sub>2</sub>N<sub>2</sub>S<sub>2</sub>

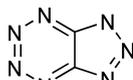
5,6-Dihydro-4,7-dithia-1,2,3a,  
5-tetraaza-indene  
11, 909–918



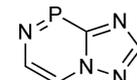
1,3,3a,5-Tetraaza-4-phospha-indene  
11, 847–893

C<sub>2</sub>N<sub>3</sub>-C<sub>2</sub>N<sub>4</sub>

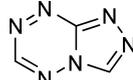
1,2,3-Triazolo[4,5-c]-1,2,3,4-  
tetrazine  
10, 703–712



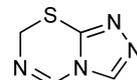
1,3,3a,6-Tetraaza-7-phospha-indene  
11, 847–893

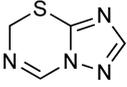
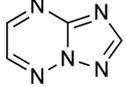
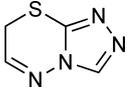
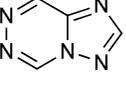
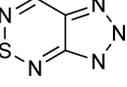
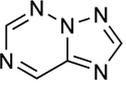
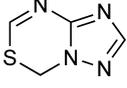
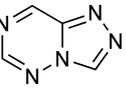
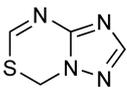
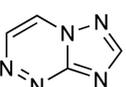
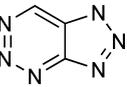
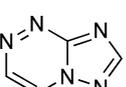
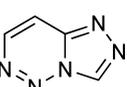
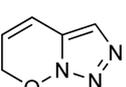
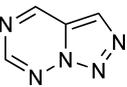
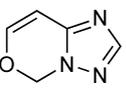
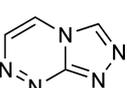
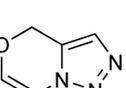
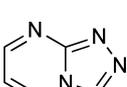
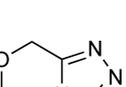
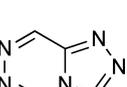
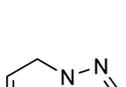
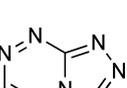
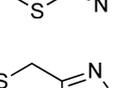
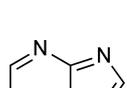
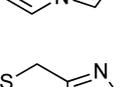


1,2,4-Triazolo[4,3-b] [1,2,4,5]tetrazine  
11, 909–918

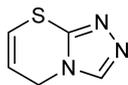
C<sub>2</sub>N<sub>3</sub>-C<sub>3</sub>N<sub>2</sub>S

6H-7-Thia-1,2,3a,5-tetraaza-indene  
11, 847–893

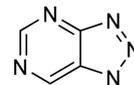


6H-7-Thia-1,3,3a,5-tetraaza-indene 11, 847-893		C <sub>2</sub> N <sub>3</sub> -C <sub>3</sub> N <sub>3</sub> [1,2,4]Triazolo[1,5-b] [1,2,4]triazine 11, 847-893	
7H-[1,2,4]Triazolo[3,4-b] [1,3,4]thiadiazine 11, 847-893		[1,2,4]Triazolo[1,5-d] [1,2,4]triazine 11, 847-893	
2,3-Dihydro-[1,2,3]triazolo[4,5-c] [1,2,6]thiadiazine 10, 703-712		[1,2,4]Triazolo[3,4-f][1,2,4] triazine 11, 847-893	
5-Thia-1,3,3a,7-tetraaza-indene 11, 847-893		[1,2,4]Triazolo[3,4-f][1,2,4]triazine 11, 847-893	
5-Thia-1,3,3a,7-tetraaza-indene 9, 504		[1,2,4]Triazolo[5,1-c][1,2,4]triazine 11, 847-893	
C <sub>2</sub> N <sub>3</sub> -C <sub>3</sub> N <sub>3</sub> 1H-[1,2,3]Triazolo[4,5-d][1,2,3]triazine 10, 703-712		[1,2,4]Triazolo[5,1-c][1,2,4]triazine 11, 847-893	
1,2,3a,4,5-Pentaaza-indene 11, 847-893		C <sub>2</sub> N <sub>3</sub> -C <sub>4</sub> NO 6H-7-Oxa-1,2,7a-triaza-indene 11, 671-763	
1,2,5,7,7a-Pentaaza-indene 11, 847-893		5-Oxa-1,3,3a-triaza-indene 11, 671-763	
1,2,4-Triazolo[3,4-c][1,2,4] triazine 11, 847-893		4H-[1,2,3]Triazolo[5,1-c][1,4]oxazine 11, 671-763	
1,2,4-Triazolo[4,3-b][1,2,4] triazine 11, 847-893		8H-[1,2,4]Triazolo[3,4-c][1,4]oxazine 11, 671-763	
1,2,4-Triazolo[4,3-d][1,2,4] triazine 11, 847-893		C <sub>2</sub> N <sub>3</sub> -C <sub>4</sub> NS 5H-[1,2,4]Triazolo[5,1-b] [1,3]thiazine 11, 671-763	
1,2,4-Triazolo[4,3-a][1,3,5] triazine 11, 847-893		8H-[1,2,4]Triazolo[3,4-c][1,4]thiazine 11, 671-763	
[1,2,4]Triazolo[1,5-a] [1,3,5]triazine 11, 847-893		7H-6-Thia-1,3,3a-triaza-indene 11, 671-763	

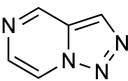
5H-[1,2,4]Triazolo[3,4-b][1,3]thiazine  
11, 671–763



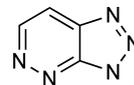
1H-1,2,3-Triazolo[4,5-d] pyrimidine  
10, 683f



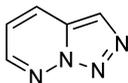
C<sub>2</sub>N<sub>3</sub>-C<sub>4</sub>N<sub>2</sub>  
[1,2,3]Triazolo[1,5-a]pyrazine  
11, 671–763



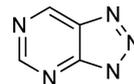
3H-[1,2,3]Triazolo[4,5-c]pyridazine  
10, 689



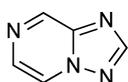
[1,2,3]Triazolo[1,5-b]pyridazine  
6, 337f



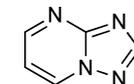
3H-[1,2,3]Triazolo[4,5-d]pyrimidine  
10, 689f, 689



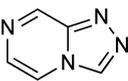
[1,2,4]Triazolo[1,5-a]pyrazine  
11, 671–763



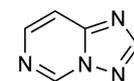
[1,2,4]Triazolo[1,5-a] pyrimidine  
11, 671–763



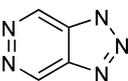
1,2,4-Triazolo[4,3-a]pyrazine  
11, 671–763



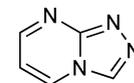
[1,2,4]Triazolo[1,5-c] pyrimidine  
11, 671–763



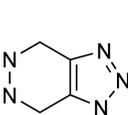
1H-1,2,3-Triazolo[4,5-d] pyridazine  
10, 681, 681



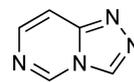
1,2,4-Triazolo[4,3-a] pyrimidine  
11, 671–763



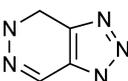
4,5,6,7-Tetrahydro-1H-[1,2,3]  
triazolo[4,5-d]pyridazine  
10, 682f



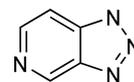
1,2,4-Triazolo[4,3-c] pyrimidine  
11, 671–763



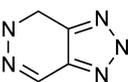
4,5-Dihydro-1H-[1,2,3]triazolo  
[4,5-d]pyridazine  
10, 683f



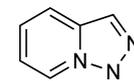
C<sub>2</sub>N<sub>3</sub>-C<sub>5</sub>N  
1H-[1,2,3]Triazolo[4,5-c] pyridine  
10, 511–524



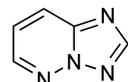
4,5-Dihydro-2H-[1,2,3]triazolo  
[4,5-d]pyridazine  
8, 45



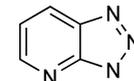
1H-[1,2,3]Triazolo[1,5-a]pyridine  
11, 589–627; 6, 551f



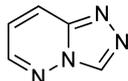
[1,2,4]Triazolo[1,5-b] pyridazine  
11, 671–763



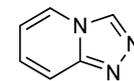
3H-[1,2,3]Triazolo[4,5-b]pyridine  
10, 511–524



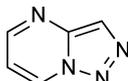
1,2,4-Triazolo[4,3-b]pyridazine  
11, 671–763



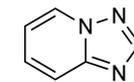
1,2,4-Triazolo[4,3-a]pyridine  
11, 589–627



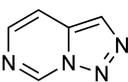
[1,2,3]Triazolo[1,5-a] pyrimidine  
11, 671–763



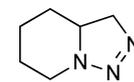
[1,2,4]Triazolo[1,5-a]pyridine  
11, 589–627



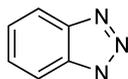
[1,2,3]Triazolo[1,5-c]pyrimidine  
11, 671–763



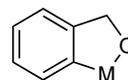
3,3a,4,5,6,7-Hexahydro-[1,2,3]  
triazolo[1,5-a]pyridine  
11, 600, 589–627



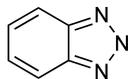
C<sub>2</sub>N<sub>3</sub>-C<sub>6</sub>  
1H-Benzotriazole  
5, 1–158



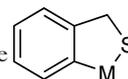
C<sub>3</sub>(M)O-C<sub>6</sub>  
1,3-Dihydrobenzo[c][1,2]  
oxametallabole  
4, 1119–1153



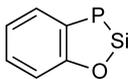
2H-Benzotriazole  
5, 1–158



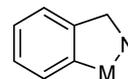
C<sub>3</sub>(M)S-C<sub>6</sub>  
1,3-Dihydrobenzo[c][1,2]thiametallabole  
4, 1119–1153



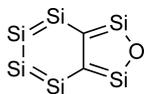
C<sub>2</sub>OPSi-C<sub>6</sub>  
1-Oxa-3-phospha-2-sila-indan  
6, 661



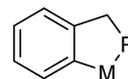
C<sub>3</sub>(M)N-C<sub>6</sub>  
2,3-Dihydro-1H-benzo[c][1,2]  
azametallabole  
4, 1119–1153



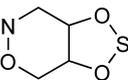
C<sub>2</sub>OSi<sub>2</sub>-C<sub>2</sub>Si<sub>4</sub>  
2-Oxa-1,3,4,5,6,7-hexasila-indene  
10, 703–712



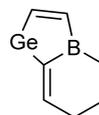
C<sub>3</sub>(M)P-C<sub>6</sub>  
2,3-Dihydro-1H-benzo[c][1,2]  
phosphametallabole  
4, 1119–1153



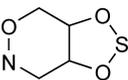
C<sub>2</sub>O<sub>2</sub>S-C<sub>4</sub>NO  
Tetrahydro-1,3,5-trioxa-2-thia-  
6-aza-indene  
6, 155*t*



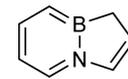
C<sub>3</sub>BGe-C<sub>5</sub>B  
1,4,5,6-Tetrahydro-1-germa-3a-bora-  
indene  
12, 573–633



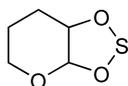
3a*H*-[1,3,2]Dioxathio  
[4,5-d][1,2]oxazine  
6, 155*t*



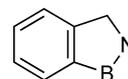
C<sub>3</sub>BN-C<sub>4</sub>BN  
1H-3a-Aza-7a-bora-indene  
4, 1204, 1204



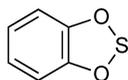
C<sub>2</sub>O<sub>2</sub>S-C<sub>5</sub>O  
Tetrahydro-[1,3,2]dioxathio  
[4,5-b]pyran  
6, 154; 6, 170*t*; 6, 173*t*



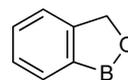
C<sub>3</sub>BN-C<sub>6</sub>  
2,3-Dihydro-1H-benzo[c][1,2]-  
azaborole  
4, 1189–1224



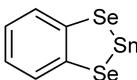
C<sub>2</sub>O<sub>2</sub>S-C<sub>6</sub>  
1,3,2-Benzodioxaphosphole  
6, 161*t*



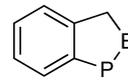
C<sub>3</sub>BO-C<sub>6</sub>  
1,3-Dihydro-benzo[c][1,2]oxaborole  
4, 1189–1224



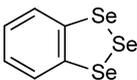
C<sub>2</sub>Se<sub>2</sub>Sn-C<sub>6</sub>  
1,3-Diselena-2-stanna-indan  
6, 575*f*



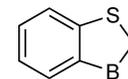
C<sub>3</sub>BP-C<sub>6</sub>  
1-Phospha-2-bora-indan  
4, 1202



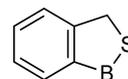
C<sub>2</sub>Se<sub>3</sub>-C<sub>6</sub>  
Benzotrisesenole  
6, 527*t*; 6, 557; 6, 575*f*



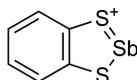
C<sub>3</sub>BS-C<sub>6</sub>  
1-Thia-3-bora-indan  
4, 1189–1224



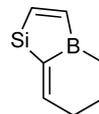
2-Thia-1-bora-indan  
4, 1189–1224



C<sub>2</sub>S<sub>2</sub>Sb-C<sub>6</sub>  
1,3,2-Benzodithiastibolium cation  
6, 604*f*

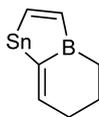


C<sub>3</sub>BSi-C<sub>3</sub>B  
1,4,5,6-Tetrahydro-1-sila-3a-bora-indene  
12, 573–633

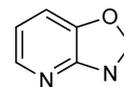


C<sub>3</sub>BSn-C<sub>5</sub>B

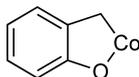
1,4,5,6-Tetrahydro-1-stanna-  
3a-bora-indene  
12, 573–633



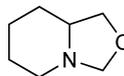
2,3-Dihydro-oxazolo[4,5-b]pyridine  
10, 474

C<sub>3</sub>CoO-C<sub>6</sub>

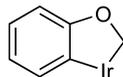
4,5-Benzo-1-oxa-2-cobalta-  
cyclopentene  
4, 1244–1245, 1249



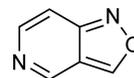
Hexahydro-oxazolo[3,4-a]pyridine  
11, 409–499

C<sub>3</sub>IrO-C<sub>6</sub>

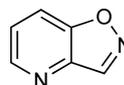
2,3-Dihydrobenzo[d][1,3]oxairidabole  
4, 1271–1304



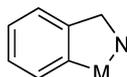
Isoxazolo[4,3-c]pyridine  
7, 135



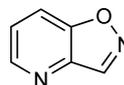
Isoxazolo[4,5-b]pyridine  
7, 278

C<sub>3</sub>N(X)-C<sub>6</sub>

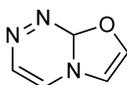
2,3-Dihydro-1H-benzo[c][1,2]  
azametallabole  
4, 1119–1153



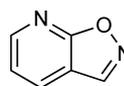
Isoxazolo[4,5-b]pyridine  
10, 476

C<sub>3</sub>NO-C<sub>3</sub>N<sub>3</sub>

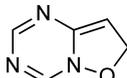
7aH-1-Oxa-3a,6,7-triaza-indene  
11, 765–817



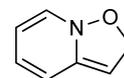
Isoxazolo[5,4-b]pyridine  
10, 475



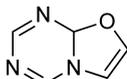
7H-Isoxazolo[2,3-a][1,3,5]triazine  
11, 765–817



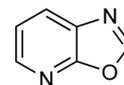
2H-Isoxazolo[2,3-a]pyridine  
11, 409–499



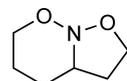
8aH-Oxazolo[3,2-a][1,3,5]triazine  
11, 765–817



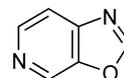
Oxazolo[5,4-b]pyridine  
10, 599–659

C<sub>3</sub>NO-C<sub>4</sub>NO

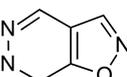
Hexahydro-isoxazolo[2,3-b][1,2]oxazine  
4, 403



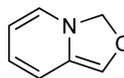
Oxazolo[5,4-c]pyridine  
4, 523

C<sub>3</sub>NO-C<sub>4</sub>N<sub>2</sub>

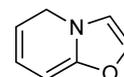
6,7-Dihydro-isoxazolo[4,5-d]pyridazine  
4, 432–433



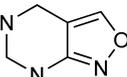
3H-Oxazolo[3,4-a]pyridine  
11, 409–499



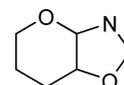
5H-Oxazolo[3,2-a]pyridine  
11, 409–499



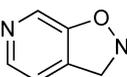
4,5,6,7-Tetrahydro-isoxazolo  
[3,4-d]pyrimidine  
4, 381–382



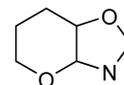
C<sub>3</sub>NO-C<sub>5</sub>O  
Hexahydro-pyrano[2,3-d]oxazole  
6, 170*r*

C<sub>3</sub>NO-C<sub>5</sub>N

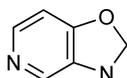
2,3-Dihydro-isoxazolo[5,4-c]pyridine  
10, 475



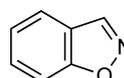
Hexahydro-2H-pyrano[2,3-d]oxazole  
6, 170*r*



2,3-Dihydro-oxazolo[4,5-b]pyridine  
4, 523



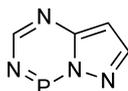
C<sub>3</sub>NO-C<sub>6</sub>  
1,2-Benzisoxazole  
4, 365–485; 5, 215*r*



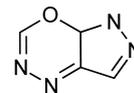
2,1-Benzisoxazole 4, 365–485		2-Thia-3a,5,6-triaza-indene 11, 765–817	
Benzoxazole 4, 487–543; 7, 79f		2H-1-Thia-4,5,7a-triaza-indene 11, 765–817	
Octahydro-benzooxazole 1, 37		7aH-1-Thia-3a,4,6-triaza-indene 11, 765–817	
C <sub>3</sub> NP-C <sub>5</sub> N [1,3]Azaphospholo[1,5-a]pyridine 4, 1174, 1175, 1176, 1180		Thiazolo[4,3-c][1,2,4]triazine 11, 765–817	
C <sub>3</sub> NP-C <sub>6</sub> 1H-Benzo[1,3]azaphosphole 4, 1171–1172		8aH-Thiazolo[2,3-c][1,2,4]triazine 11, 765–817	
3H-Benzo[1,3]azaphosphole 4, 1172		8aH-Thiazolo[3,2-a][1,3,5]triazine 11, 765–817	
1H-Benzo[d][1,2]azaphosphole 4, 1155–1167		8aH-Thiazolo[3,2-b][1,2,4]triazine 11, 765–817	
2H-Benzo[c][1,2]azaphosphole 4, 1155–1167		8aH-Thiazolo[3,2-d][1,2,4]triazine 11, 765–817	
C <sub>3</sub> NS-C <sub>2</sub> BN <sub>2</sub> O 1,3-Thiazolo[5,4-c][1,3,4,2] oxadiazaborolium 10, 703–712		1,4,4a,7a-Tetrahydro-thiazolo[4,5-e] [1,2,4]triazine 10, 692f	
C <sub>3</sub> NS-C <sub>2</sub> N <sub>4</sub> 2H-Thiazolo[3,2-b][1,2,4,5]tetrazine 11, 895–908		C <sub>3</sub> NS-C <sub>4</sub> N <sub>2</sub> 1-Thia-2,6,7-triaza-indene 4, 607, 10, 599–659	
C <sub>3</sub> NS-C <sub>3</sub> N <sub>2</sub> S 5,7a-Dihydro-1,4-dithia-3a,7-diaza- indene 11, 765–817		C <sub>3</sub> NS-C <sub>5</sub> N 2,3-Dihydro-isothiazolo[4,5-b]- pyridine 10, 478	
Thiazolo[2,3-c][1,2,4]thiadiazine 11, 765–817		2,3-Dihydro-isothiazolo[5,4-b]- pyridine 10, 477	
C <sub>3</sub> NS-C <sub>3</sub> N <sub>3</sub> 1,4,4a,5,6,7a-Hexahydro-thiazolo- [4,5-e][1,2,4]triazine 10, 693f		Hexahydro-thiazolo[3,4-a]pyridine 11, 409–499	

1λ <sup>4</sup> -Isothiazolo[2,3-a]pyridine 11, 409–499		7aH-1-Selena-3a,5,6-triaza-indene 11, 765–817	
Thiazolo[3,4-a]pyridine 11, 409–499		8aH-Selenazolo[3,2-b][1,2,4]triazine 11, 765–817	
Thiazolo[4,5-b]pyridine 10, 476		C <sub>3</sub> NSe-C <sub>4</sub> N <sub>2</sub> 4,5,6,7-Tetrahydro-isoselenazolo [4,3-d]pyrimidine 4, 780	
5H-Thiazolo[3,2-a]pyridine 11, 409–499		C <sub>3</sub> NSe-C <sub>5</sub> N 2-Selena-1,7-diaza-indan 4, 781f	
8aH-Thiazolo[3,2-a]pyridine 11, 409–499		Selenazolo[5,4-b]pyridine 4, 791–821	
C <sub>3</sub> NS-C <sub>6</sub> Benzothiazole 5, 215f; 6, 161f; 6, 459f; 6, 460f; 8, 632–634, 663; 9, 252; 4, 635–754		C <sub>3</sub> NSe-C <sub>6</sub> 1,2-Benzisoselenazole 4, 635–754	
1,2-Benzisothiazole 4, 545–633		Benzoselenazole 4, 791–821	
2,1-Benzisothiazole 4, 545–633		Benzoselenazole 4, 1119–1153	
1,3-Dihydro-benzo[c]isothiazole 4, 545–633		2,3-Dihydro-benzo[d]isosenazole 4, 635–754, 4, 1091–1117, 1096	
2,3-Dihydro-benzo[d]isothiazole 4, 545–633		C <sub>3</sub> NTe-C <sub>6</sub> Benzo[d]isotellurazole 4, 1095	
2,3-Dihydro-benzothiazole 4, 545–633		Benzotellurazole 4, 1119–1153	
Octahydro-benzothiazole 6, 83		4,5,6,7-Tetrahydro-benzo[d] isotellurazole 4, 1099, 1112	
C <sub>3</sub> NSe-C <sub>3</sub> N <sub>3</sub> 7aH-1-Selena-3a,6,7-triaza-indene 11, 765–817		C <sub>3</sub> NiO-C <sub>6</sub> 3,4-Benzo-1-oxa-2-nickela- cyclopentene 4, 1245	

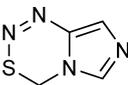
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11, 895-908



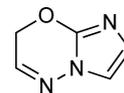
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10, 685f



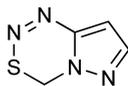
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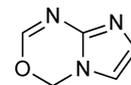
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oxadiazine  
11, 765-817



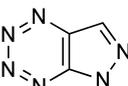
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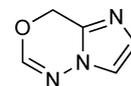
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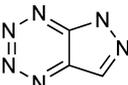
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9, 717



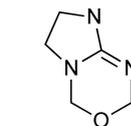
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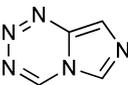
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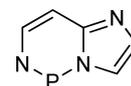
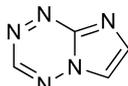
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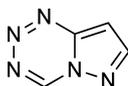
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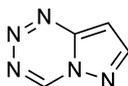
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phospha-indene  
11, 765-817



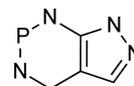
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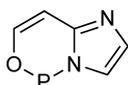
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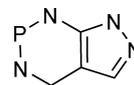
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[3,4-d][1,3,2]diazaphosphinine  
10, 685f, 685f



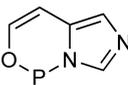
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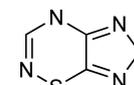
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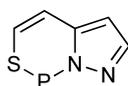
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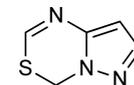
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9, 313



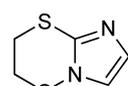
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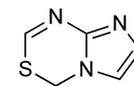
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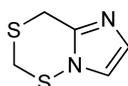
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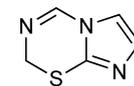
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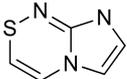
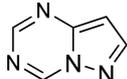
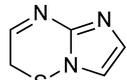
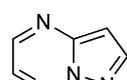
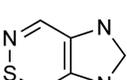
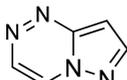
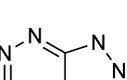
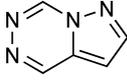
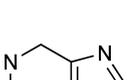
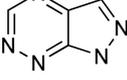
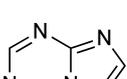
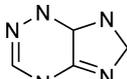
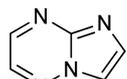
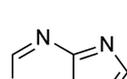
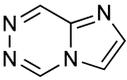
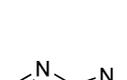
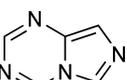
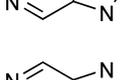
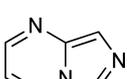
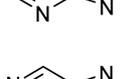
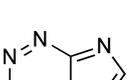
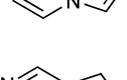
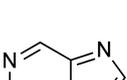
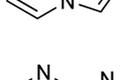
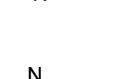
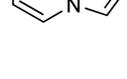


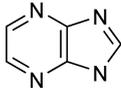
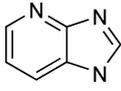
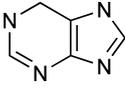
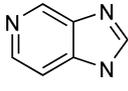
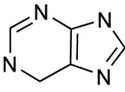
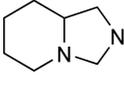
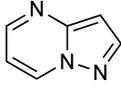
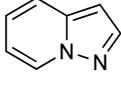
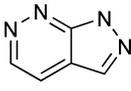
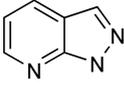
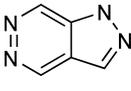
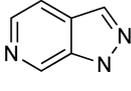
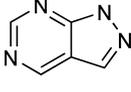
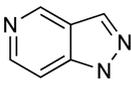
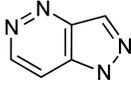
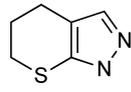
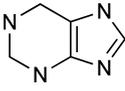
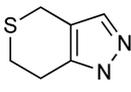
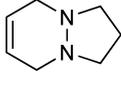
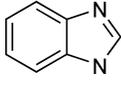
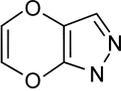
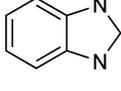
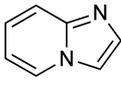
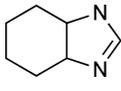
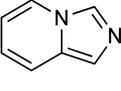
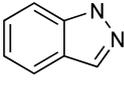
7H-4,6-Dithia-1,3a-diaza-  
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11, 765-817

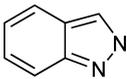
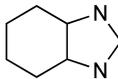
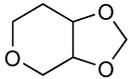
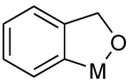
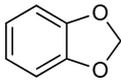
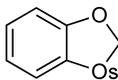
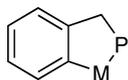
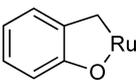
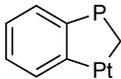
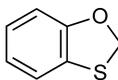
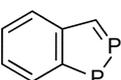
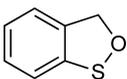
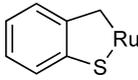
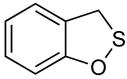
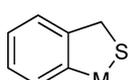
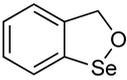
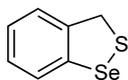
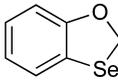
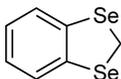
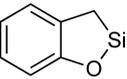
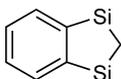
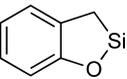
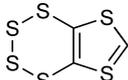
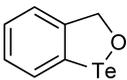


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11, 765-817

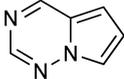
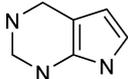
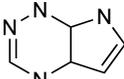
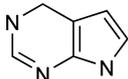
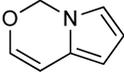
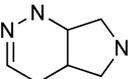
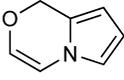
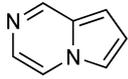
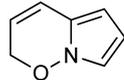
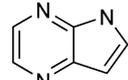
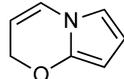
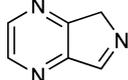
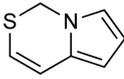
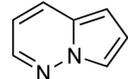
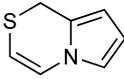
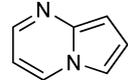
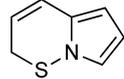
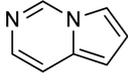
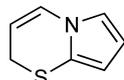
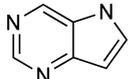
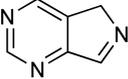
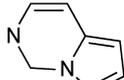
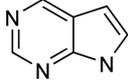
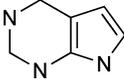
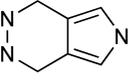


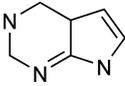
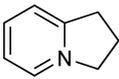
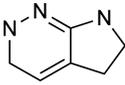
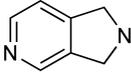
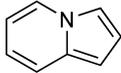
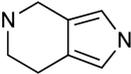
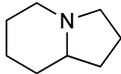
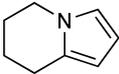
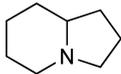
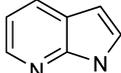
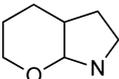
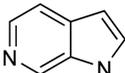
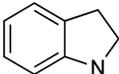
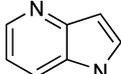
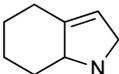
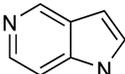
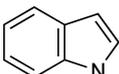
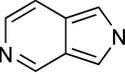
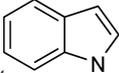
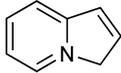
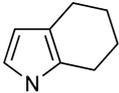
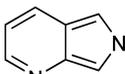
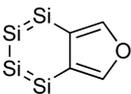
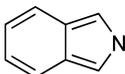
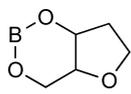
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5H-4-Thia-1,3a,7-triaza-indene 11, 765–817		Pyrazolo[1,5-b][1,2,4]triazine 11, 765–817	
1,5,6,7-Tetrahydro-imidazo[4,5-c] [1,2,6]thiadiazine 10, 691f		Pyrazolo[5,1-c][1,2,4]triazine 11, 765–817	
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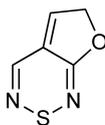
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C <sub>3</sub> OOs-C <sub>6</sub> 4,5-Benzo-1-oxa-3-osma-cyclopentene 4, 1284		C <sub>3</sub> P(X)-C <sub>6</sub> 2,3-Dihydro-1H-benzo[c][1,2]phosphametallobole 4, 1119-1153	
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C <sub>3</sub> S <sub>2</sub> -C <sub>4</sub> S <sub>2</sub> 5,6-Dihydro-[1,3]dithiolo[4,5-b] [1,4]dithiine 4, 955-1090		C <sub>4</sub> Sb-C <sub>6</sub> 1H-Benzo[b]stibole 3, 1149-1179	
1,3-Dithiolo[4,5-b][1,4]dithiin 4, 955-1090		2H-Benzo[c]stibole 3, 1149-1179	
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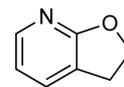
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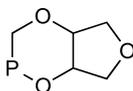
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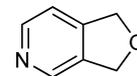
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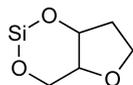
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10, 504



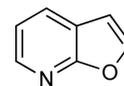
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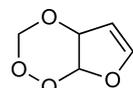
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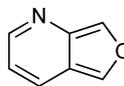
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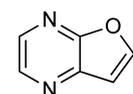
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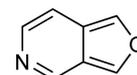
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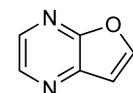
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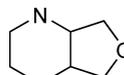
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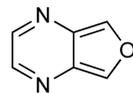
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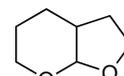
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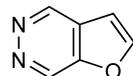
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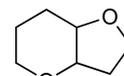
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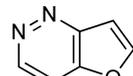
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Hexahydro-furo[3,2-b]pyran  
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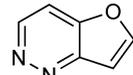
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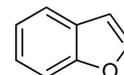
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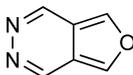
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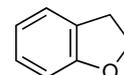
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3, 571-623; 6, 548f; 6, 562f



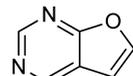
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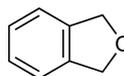
2,3-Dihydro-benzofuran  
3, 468; 3, 497-569; 3, 571-623



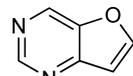
Furo[2,3-d]pyrimidine  
10, 384



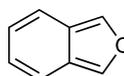
1,3-Dihydro-isobenzofuran  
3, 389-406; 3, 473; 3, 497-569



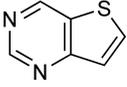
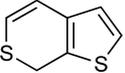
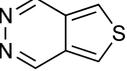
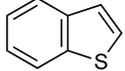
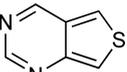
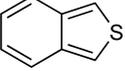
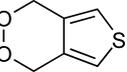
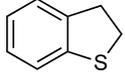
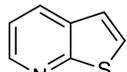
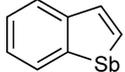
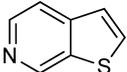
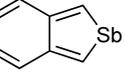
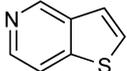
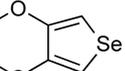
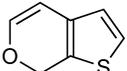
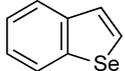
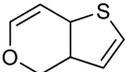
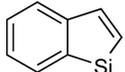
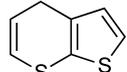
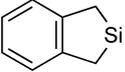
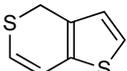
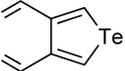
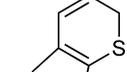
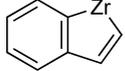
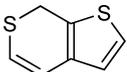
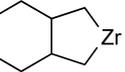
Furo[3,2-d]pyrimidine  
10, 391

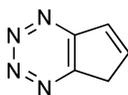
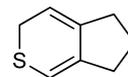
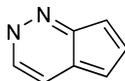


Isobenzofuran  
3, 389-406; 3, 454; 3, 497-569,  
551; 3, 571-623

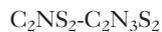


4,5,6,7-Tetrahydro-benzofuran 3, 413; 3, 508, 511, 514f; 3, 571-623		4H-1,7-Dithia-4,6-diaza-indene 10, 501f	
4,5,6,7-Tetrahydro-isobenzofuran 3, 414f; 3, 514f; 3, 571-623		7H-1,4-Dithia-6,7-diaza-indene 10, 155	
C <sub>4</sub> P-C <sub>3</sub> P 1H-1,4-Diphospha-indene 3, 1091		7H-1,4-Dithia-6,7-diaza-indene 5, 482	
1-Phospha-bicyclo[3.2.1]octane 12, 552f		7H-2,4-Dithia-5,7-diaza-indene 9, 313, 326	
C <sub>4</sub> P-C <sub>6</sub> 4,5,6,7-Tetrahydro-2H-isophosphindole 3, 1029-1147		C <sub>4</sub> S-C <sub>3</sub> N <sub>3</sub> Thieno[2,3-c][1,2,4]triazine 10, 505	
C <sub>4</sub> Pd-C <sub>6</sub> 1H-1-Palladia-indene 3, 1287		C <sub>4</sub> S-C <sub>4</sub> NO 1,4-Dihydro-2H-thieno[3,2-d][1,3]- oxazine 8, 404	
C <sub>4</sub> Pt-C <sub>6</sub> 1H-1-Platina-indene 3, 1287		C <sub>4</sub> S-C <sub>4</sub> NS 2H-Thieno[2,3-c][1,2]thiazine 8, 515-516	
C <sub>4</sub> S-C <sub>3</sub> N <sub>2</sub> P 4,5-Dihydro-1-thia-5,7-diaza-4-phospha- -indene 10, 503		C <sub>4</sub> S-C <sub>4</sub> N <sub>2</sub> Thieno[3,4-b]pyrazine 10, 417	
C <sub>4</sub> S-C <sub>3</sub> N <sub>2</sub> S 3,4-Dihydro-2H-thieno[2,3-c][1,2,4]- thiadiazine 10, 501f		Thieno[2,3-b]pyrazine 10, 415	
5,6-Dihydro-4H-1,7-dithia-4,6-diaza- indene 10, 501f		C <sub>4</sub> S-C <sub>3</sub> N <sub>2</sub> S 1,4-Dihydro-thieno[3,4-d]pyridazine 3, 753, 753-754	
6,7-Dihydro-5H-2,4-dithia-5,7-diaza- indene 10, 500f		5,7-Dihydro-thieno[3,4-d]pyrimidine 8, 221	
4H-1,7-Dithia-4,6-diaza-indene 9, 321, 325-326, 330		Thieno[2,3-c]pyridazine 10, 393	
		Thieno[2,3-c]pyridazine 10, 395	
		Thieno[2,3-d]pyrimidine 10, 396	

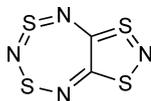
Thieno[3,2-d]pyrimidine 10, 408		7H-Thieno[2,3-c]thiopyran 4, 1028f	
Thieno[3,4-d]pyridazine 10, 395		C <sub>4</sub> S-C <sub>6</sub> 1-Benzothiophene 3, 625-739; 3, 741-841; 3, 931-974; 3, 843-930	
Thieno[3,4-d]pyrimidine 10, 406		2-Benzothiophene 3, 625-739; 3, 741-841; 3, 843-930	
C <sub>4</sub> S-C <sub>4</sub> O <sub>2</sub> 1H,4H-Thieno[3,4-d][1,2]dioxine 3, 756-757, 757		2,3-Dihydro-thieno[3,4-b][1,4]dioxine 3, 802, 810	
C <sub>4</sub> S-C <sub>5</sub> N Thieno[2,3-b]pyridine 10, 290, 299, 313, 10, 713-757		C <sub>4</sub> Sb-C <sub>6</sub> 1H-Benzo[b]stibole 3, 1149-1179	
Thieno[2,3-c]pyridine 10, 290, 299, 313, 10, 713-757		2H-Benzo[c]stibole 3, 1149-1179	
Thieno[3,2-c]pyridine 10, 290, 299, 31310, 713-757		C <sub>4</sub> Se-C <sub>4</sub> O <sub>2</sub> 5,6-Dihydro-4,7-dioxa-2-selena-indene 3, 993	
C <sub>4</sub> S-C <sub>5</sub> O 7H-Thieno[2,3-c]pyran 10, 295, 303, 319, 10, 713-757		C <sub>4</sub> Se-C <sub>6</sub> 1-Benzoselenophene 6, 542; 6, 549f	
3a,7a-Dihydro-4H-thieno[3,2-c]pyran 10, 295, 303, 319, 10, 713-757		C <sub>4</sub> Si-C <sub>6</sub> 1H-1-Benzosilole 3, 1200	
C <sub>4</sub> S-C <sub>5</sub> S 4H-Thieno[2,3-b]thiin 10, 295, 304, 10, 713-757		2,3-Dihydro-1H-benzo[c]silole 3, 1202	
4H-Thieno[3,2-c]thiin 10, 295, 304, 10, 713-757		C <sub>4</sub> Te-C <sub>4</sub> N <sub>2</sub> Tellurolo[3,4-d]pyridazine 3, 1015f	
6H-Thieno[2,3-b]thiopyran 10, 295, 304, 10, 713-757		C <sub>4</sub> Zr-C <sub>6</sub> 1-Zirconaindene 3, 1243-1304	
7H-Thieno[2,3-c]thiin 10, 295, 304, 10, 713-757		8-Zirconabicyclo[4.3.0]nonane 3, 1243-1304	

C<sub>5</sub>-C<sub>2</sub>N<sub>4</sub>1H-4,5,6,7-Tetraaza-indene  
9, 717C<sub>5</sub>-C<sub>5</sub>S3,5,6,7-Tetrahydro-cyclopenta[c]-  
thiopyran  
7, 897C<sub>5</sub>-C<sub>4</sub>N<sub>2</sub>2H-Cyclopenta[c]pyridazine  
5, 224

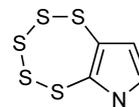
# 5,7



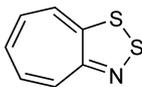
1,3,2-Dithiazolo[4,5-c][1,3,2,4,7]-  
dithiaziazepine-3,5  
6, 43, 54



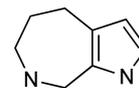
1H-4,5,6,7,8-Pentathia-1-aza-azulene  
3, 166–167



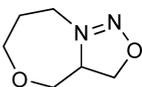
Cyclohepta[1,2,3]dithiazole  
6, 29



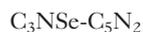
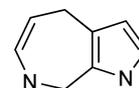
1,4,5,6,7,8-Hexahydro-pyrrolo-  
[2,3-c]azepine  
1, 601



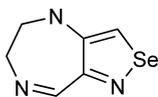
3a,4,7,8-Tetrahydro-3H,6H-2,5-  
dioxo-1,8a-diaza-azulene  
5, 214; 5, 222



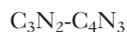
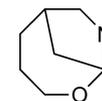
1,4,7,8-Tetrahydro-pyrrolo-  
[2,3-c]azepine  
1, 601



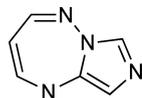
5,6-Dihydro-4H-isoselenazolo[4,3-c]-  
[1,4]diazepine  
4, 780–781



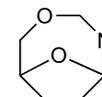
2-Oxa-8-aza-bicyclo[4.2.1]nonane  
14, 191



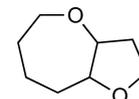
1H-Imidazo[1,5-b][1,2,4] triazepine  
13, 419f



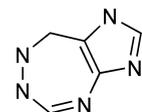
4,9-Dioxo-2-aza-bicyclo[4.2.1]nonane  
14, 191



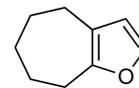
Octahydro-furo[3,2-b]oxepine  
13, 57, 58



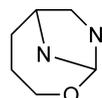
1,6,7,8-Tetrahydro-imidazo[4,5-c]-  
[1,2,4]triazepine  
13, 419, 420f



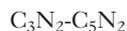
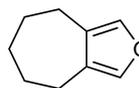
5,6,7,8-Tetrahydro-4H-cyclohepta[b]-  
furan  
3, 504



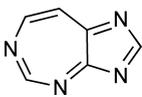
2-Oxa-8,9-diaza-bicyclo[4.2.1]nonane  
14, 191



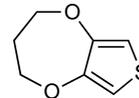
5,6,7,8-Tetrahydro-4H-cyclohepta[c]-  
furan  
3, 500–501



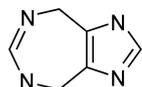
Imidazo[4,5-d][1,3]diazepine  
13, 161–182



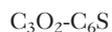
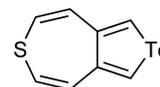
3,4-Dihydro-2H-thieno[3,4-b][1,4]-  
dioxepine  
13, 372



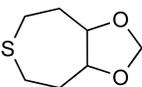
1,4,5,8-Tetrahydro-1,3,5,7-tetraaza-  
azulene  
13, 169



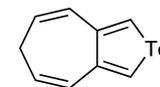
Tellurolo[3,4-d]thiopicene  
3, 1015f



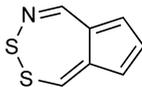
Hexahydro-thiepine[4,5-d][1,3]dioxole  
4, 853–854



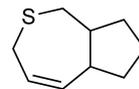
6H-Cyclohepta[c]tellurophene  
3, 1015f



C<sub>5</sub>-C<sub>4</sub>NS<sub>2</sub>  
5,6-Dithia-7-aza-azulene  
**13**, 396



C<sub>5</sub>-C<sub>6</sub>S  
3,5a,6,7; 8,8a-Hexahydro-1H-cyclo-  
penta[c]thiepine  
**13**, 131



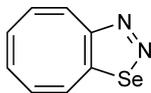
# 5,8

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$C_2N_2Se-C_8$

Cycloocta-1,2,3-selenadiazole

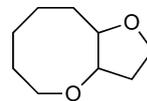
6, 550*f*; 6, 551*f*



$C_4O-C_7O$

Octahydro-furo[3,2-b]oxocine

14, 67*f*

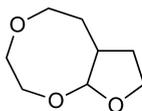


$C_4O-C_5O_2$

Octahydro-1,6,9-trioxa-

cyclopentacyclooctene

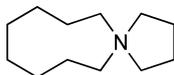
3, 529



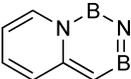
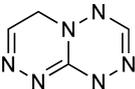
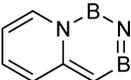
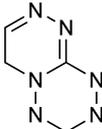
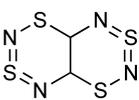
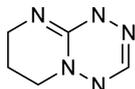
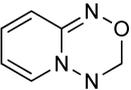
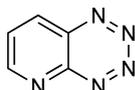
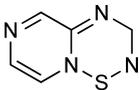
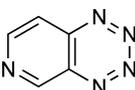
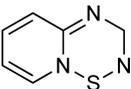
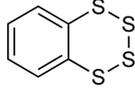
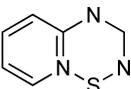
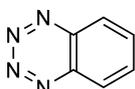
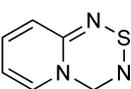
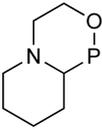
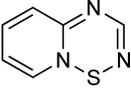
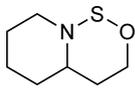
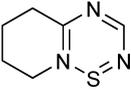
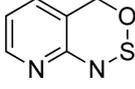
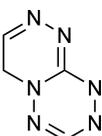
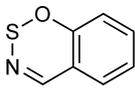
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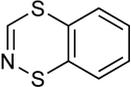
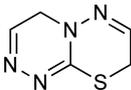
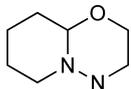
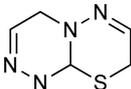
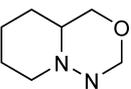
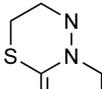
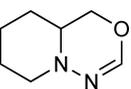
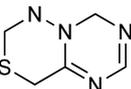
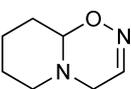
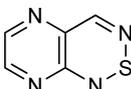
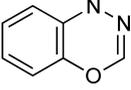
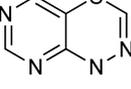
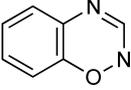
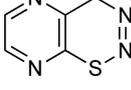
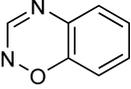
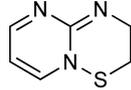
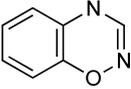
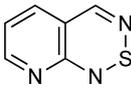
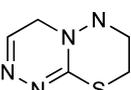
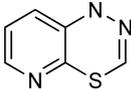
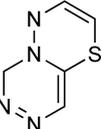
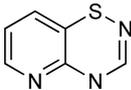
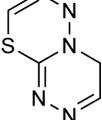
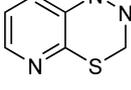
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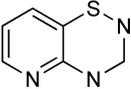
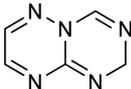
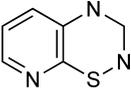
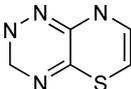
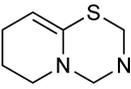
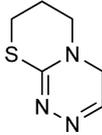
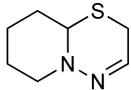
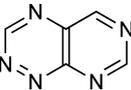
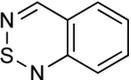
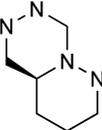
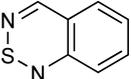
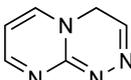
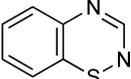
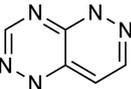
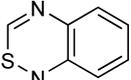
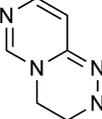
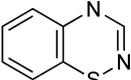
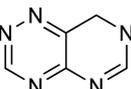
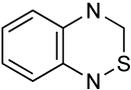
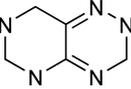
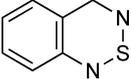
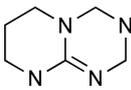
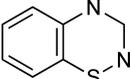
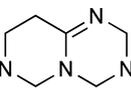
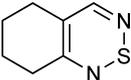
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5-Aza-spiro[4.8]tridecane  
12, 1058*f*

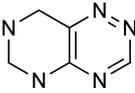
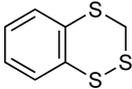
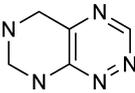
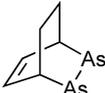
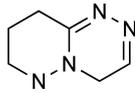
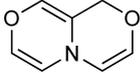
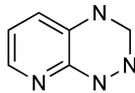
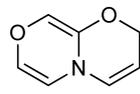
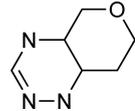
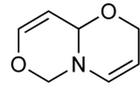
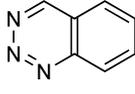
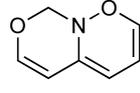
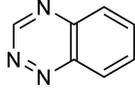
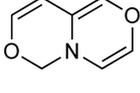
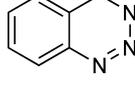
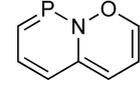
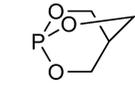
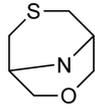
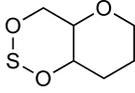
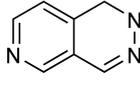
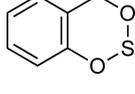
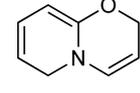
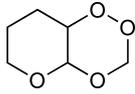
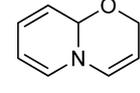
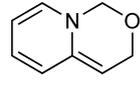


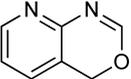
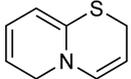
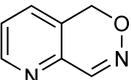
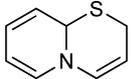
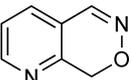
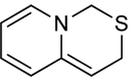
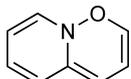
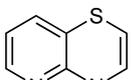
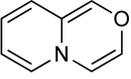
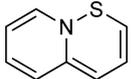
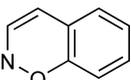
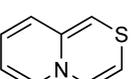
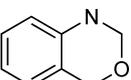
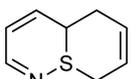
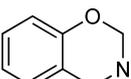
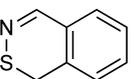
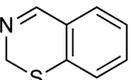
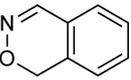
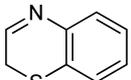
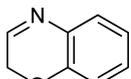
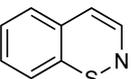
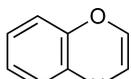
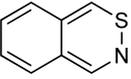
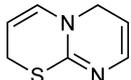
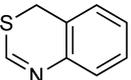
# 6,6

$C_2B_2N_2-C_5N$ 1H-2,8a-Diaza-1,3-dibora-naphthalene 12, 321–325		1,5-Dihydro-4H-1,2,4,4a,7,8-hexaaza-naphthalene 9, 663; 12, 357–363	
1H-2,8a-Diaza-1,3-dibora-naphthalene 12, 321–325		1,3,4,5-Tetrahydro-2H-1,2,4,4a,7,8-hexaaza-naphthalene 12, 357–363	
$C_2N_2S_2-C_2N_2S_2$ 1,5-Dihydro-1,3,5,7-tetrathia-2,4,6,8-tetraaza-naphthalene 9, 749		$C_2N_4-C_4N_2$ 1,6,7,8-Tetrahydro-4H-pyrimido-[1,2-b][1,2,4,5]tetrazine 12, 341–346	
$C_2N_3O-C_5N$ 3,4-Dihydro-pyrido[2,1-c][1,2,4,5]-oxatriazine 12, 321–325		$C_2N_4-C_5N$ Pyrido[2,3-c][1,2,3,4]tetrazine 10, 1126f	
$C_2N_3S-C_4N_2$ 2,3-Dihydro-pyrazino[1,2-b][1,2,4,6]-thiatriazine 12, 341–346		Pyrido[3,4-e][1,2,3,4]tetrazine 9, 717	
$C_2N_3S-C_5N$ 2,3-Dihydro-pyrido[1,2-b][1,2,4,6]-thiatriazine 12, 321–325		$C_2N_4-C_6$ Benzotetrahiine 9, 741–742	
3,4-Dihydro-2H-pyrido[1,2-b][1,2,4,6]-thiatriazine 12, 321–325		Benzotetrazine 9, 715–735	
3,4-Dihydro-pyrido[2,1-c][1,2,4,6]-thiatriazine 12, 321–325		$C_3NOP-C_5N$ Octahydro-2-oxa-4a-aza-1-phosphanaphthalene 12, 250	
Pyrido[1,2-b][1,2,4,6]thiatriazine 12, 321–325		$C_3NOS-C_5N$ Hexahydro-pyrido[1,2-c][1,2,3]-oxathiazine 12, 247f	
5,6,7,8-Tetrahydro-1λ <sup>4</sup> -pyrido[1,2-b]-[1,2,4,6]thiatriazine 12, 341–346		1,4-Dihydro-3-oxa-2-thia-1,8-diazanaphthalene 10, 902	
$C_2N_4-C_3N_3$ 1,5-Dihydro-2H-1,2,4,4a,7,8-hexaaza-naphthalene 12, 357–363		$C_3NOS-C_6$ Benzo[e][1,2,3]oxathiazine 1, 587–588	

C <sub>3</sub> NS <sub>2</sub> -C <sub>6</sub> 1,4,2-Benzodithiazine 9, 523–567		4H,8H-[1,2,4]Triazino[3,4-b][1,3,4]- thiadiazine 12, 347–355	
C <sub>3</sub> N <sub>2</sub> O-C <sub>5</sub> N Hexahydro-1-oxa-4,4a-diaza- naphthalene 12, 243		1,9a-Dihydro-4H,8H-[1,2,4]triazino- [3,4-b][1,3,4]thiadiazine 12, 347–355	
Octahydro-3-oxa-1,8a-diaza- naphthalene 12, 243		7,8-Dihydro-4H,6H-[1,2,4]triazino- [3,4-b][1,3,4]thiadiazine 12, 347–355	
4,4a,5,6,7,8-Hexahydro-3-oxa-1,8a- diaza-naphthalene 12, 242		4,5,6,8-Tetrahydro-7-thia-1,3,4a,5- tetraaza-naphthalene 12, 347–355	
7,8,9,9a-Tetrahydro-4H,6H-pyrido- [1,2-c][1,2,5]oxadiazine 12, 244f		C <sub>3</sub> N <sub>2</sub> S-C <sub>4</sub> N <sub>2</sub> 1H-Pyrazino[2,3-c][1,2,6]thiadiazine 9, 357, 359, 375, 375, 10, 1120	
C <sub>3</sub> N <sub>2</sub> O-C <sub>6</sub> 1H-Benzo[1,3,4]oxadiazine 9, 422–423		1H-Pyrimido[4,5-c][1,3,4]thiadiazine 10, 1125	
2H-Benzo[1,2,4]oxadiazine 9, 301–343		4H-1-Thia-2,3,5,8-tetraaza-naphthalene 9, 307–308	
2H-1,2,4-Benzoxadiazine 9, 301–343		2,3-Dihydro-4-thia-1,4a,8-triaza- naphthalene 12, 341–346	
4H-Benzo[1,2,4]oxadiazine 9, 301–343		C <sub>3</sub> N <sub>2</sub> S-C <sub>5</sub> N 1H-Pyrido[2,3-c][1,2,6]thiadiazine 9, 364	
C <sub>3</sub> N <sub>2</sub> S-C <sub>3</sub> N <sub>2</sub> 7,8-Dihydro-4H,6H-[1,2,4]triazino- [3,4-b][1,3,4]thiadiazine 12, 347–355		1H-Pyrido[3,2-c][1,3,4]thiadiazine 10, 895–896	
C <sub>3</sub> N <sub>2</sub> S-C <sub>3</sub> N <sub>3</sub> 4H,5H-1-Thia-4,4a,6,7-tetraaza- naphthalene 12, 347–355		4H-Pyrido[2,3-c][1,2,4]thiadiazine 10, 893–894, 895–896	
4H,6H-[1,2,4]Triazino[3,4-b][1,3,4]- thiadiazine 12, 347–355		2,3-Dihydro-1H-pyrido[3,2-c]- [1,3,4]thiadiazine 10, 895	

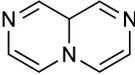
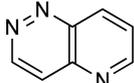
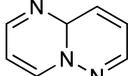
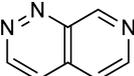
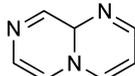
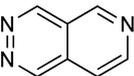
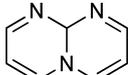
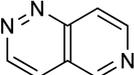
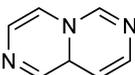
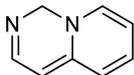
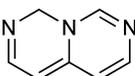
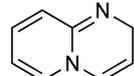
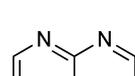
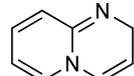
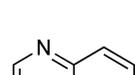
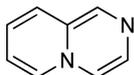
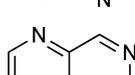
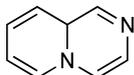
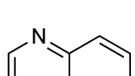
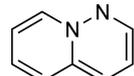
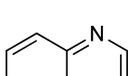
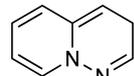
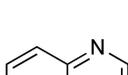
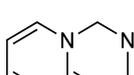
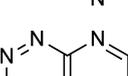
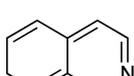
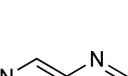
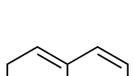
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4H-Benzo[1,2,4]thiadiazine 9, 301–343		7,8-Dihydro-pyrimido[4,5-c]- [1,2,4]triazine 1119	
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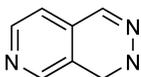
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8H-Pyrido[3,2-d][1,2]oxazine 10, 794		3H-Pyrido[1,2-c][1,3]thiazine 12, 77-217	
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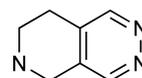
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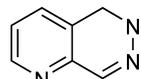
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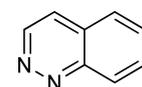
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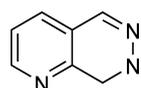
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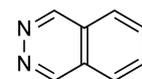
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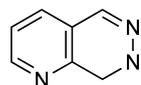
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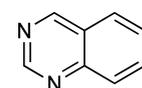
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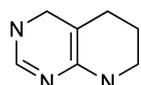
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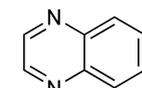
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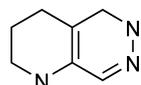
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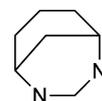
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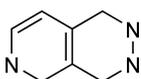
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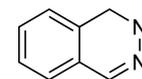
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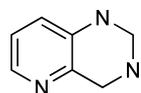
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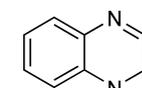
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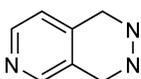
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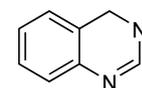
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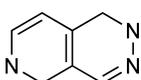
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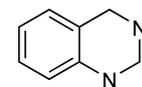
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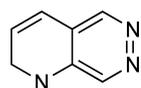
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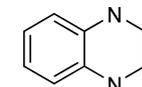
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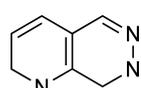
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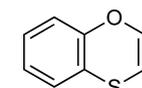
1,2,3,4-Tetrahydro-quinoxaline  
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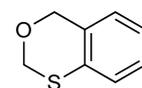
1,2,7,8-Tetrahydro-pyrido-  
[2,3-d]pyridazine  
10, 791-792



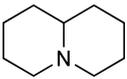
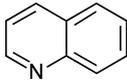
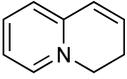
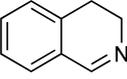
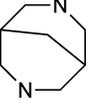
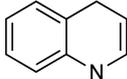
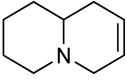
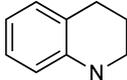
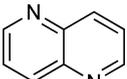
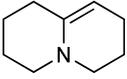
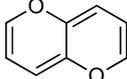
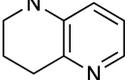
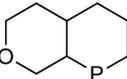
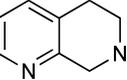
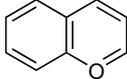
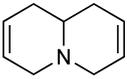
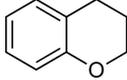
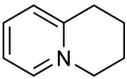
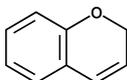
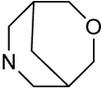
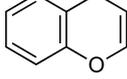
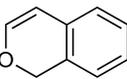
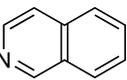
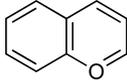
C<sub>4</sub>OS-C<sub>6</sub>  
Benzo[1,4]oxathiine  
8, 857-905



4H-3,1-Benzoxathiin  
2, 801



4H-Benzo[d][1,3]oxathiine 2, 455		C <sub>4</sub> Si <sub>2</sub> -C <sub>4</sub> Si <sub>2</sub> Decahydro-[1,2]disilino[1,2-a]- [1,2]disiline 9, 930, 930, 931	
4H-Benzo[d][1,3]oxathiine 8, 739-856		C <sub>4</sub> S <sub>2</sub> -C <sub>6</sub> 4H-1,3-Benzodithiin 8, 739-856	
1,4-Dihydro-benzo[d][1,2]oxathiine 8, 677-738		1,4-Benzodithiin 8, 857-905	
C <sub>4</sub> OSe-C <sub>6</sub> 4H-3-Oxa-1-selena-naphthalene 9, 805		1,4-Dihydro-benzo[d][1,2]dioxine 8, 677-738	
C <sub>4</sub> OSi-C <sub>6</sub> 3,4-Dihydro-1H-benzo[d][1,2]oxasiline 9, 927		C <sub>4</sub> Si <sub>2</sub> -C <sub>6</sub> 1,2,3,4-Tetrahydro-benzo[1,3]disiline 9, 927	
C <sub>4</sub> O <sub>2</sub> -C <sub>5</sub> O 4,4a,6,8a-Tetrahydro-pyrano- [3,2-d][1,3]dioxine 6, 180		1,2,3,4-Tetrahydro-benzo[1,4]disiline 9, 927	
C <sub>4</sub> O <sub>2</sub> -C <sub>6</sub> 1,4-Benzodioxin 8, 857-905		1,2,3,4-Tetrahydro-benzo[c]- [1,2]disiline 9, 928	
4H-1,3-Benzodioxin 8, 739-856		C <sub>5</sub> As-C <sub>5</sub> As 1-Arsa-bicyclo[2.2.2]octa-2,5,7-triene 7, 1043	
1,4-Dihydro-benzo[d][1,2]dioxine 8, 677-738		C <sub>5</sub> As-C <sub>6</sub> Arsinoline 7, 1043	
2,4-Dioxa-bicyclo[3.3.1]nonane 14, 234		1,4-Dihydro-arsinoline 7, 1045f	
C <sub>4</sub> PSi-C <sub>4</sub> PSi 1-Phospha-4-sila-bicyclo[2.2.2]octane 9, 931		C <sub>5</sub> B-C <sub>5</sub> B 1-Bora-bicyclo[2.2.2]octa-2,5,7-triene 7, 1041; 7, 1056	
C <sub>4</sub> P <sub>2</sub> -C <sub>4</sub> P <sub>2</sub> 1,3,5-Triphospha-bicyclo[2.2.2]- octa-2,5-diene 9, 839		Octahydro-borinino[1,2-a]borinine 12, 573-633	
C <sub>4</sub> Se <sub>2</sub> -C <sub>4</sub> Se <sub>2</sub> Decahydro-4aλ <sup>4</sup> ,8aλ <sup>4</sup> -diselena- naphthalene 9, 796-797		C <sub>5</sub> Ge-C <sub>6</sub> 9-Germa-anthracene 7, 1053-1054	

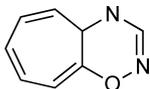
C <sub>5</sub> N-C <sub>5</sub> N 6H-Pyrido[1,2-a]quinoline 12, 26, 0275		Quinoline 7, 41-99; 7, 101-169; 7, 171-216; 7, 217-308; 7, 217-308	
3,4-Dihydro-quinolizine 12, 45f		3,4-Dihydro-isoquinoline 1, 607; 7, 217-308	
3,7-Diaza-bicyclo[3.3.1]nonane 14, 306		1,4-Dihydro-quinoline 7, 43-46, 77	
1,3,4,6,9,9a-Hexahydro-2H-quinolizine 12, 25, 41f		1,2,3,4-Tetrahydro-quinoline 7, 80; 7, 222, 225, 230	
1,5-Naphthyridine 7, 135; 4, 191		C <sub>5</sub> O-C <sub>5</sub> O 2,6-Dioxa-bicyclo[3.3.1]nonane 14, 417	
1,2,3,4,4a,5,6,7-Octahydro-naphthalene 12, 39f		Pyrano[3,2-b]pyran 6, 155f	
1,2,3,4-Tetrahydro-[1,5]naphthyridine 4, 220f		C <sub>5</sub> O-C <sub>5</sub> P Octahydro-7-oxa-1-phospha- naphthalene 7, 1021-1022, 1022-1023	
5,6,7,8-Tetrahydro-[1,7]naphthyridine 7, 217-308		C <sub>5</sub> O-C <sub>6</sub> Benzo[2.3]pyrylium 7, 337-418; 7, 419-699; 7, 701-726	
1,6,9,9a-Tetrahydro-4H-quinolizine 12, 53		Chroman 7, 337-418; 7, 419-699; 7, 701-726	
1,2,3,4-Tetrahydro-quinolizine 12, 35f		2H-Chromene 5, 215f; 7, 337-418; 7, 419-699; 7, 701-726	
C <sub>5</sub> N-C <sub>5</sub> O 3-Oxa-7-aza-bicyclo[3.3.1]nonane 14, 386, 398		4H-Chromene 7, 337-418; 7, 419-699; 7, 701-726	
C <sub>5</sub> N-C <sub>5</sub> S 3-Thia-7-aza-bicyclo[3.3.1]nonane 14, 409		1H-Isochromene 7, 337-418; 7, 419-699; 7, 701-726	
C <sub>5</sub> N-C <sub>6</sub> Isoquinoline 7; 8; 7, 41-99; 7, 101-169; 7, 171-216; 7, 217-308; 7, 309-336		7, 337-418; 7, 419-699; 7, 701-726	

C <sub>5</sub> P-C <sub>5</sub> P 1-Phosphabicyclo[2.2.2]octane 7, 1003–1003		2λ <sup>4</sup> -Isothiochromene 7, 727–954	
9-Phospha-bicyclo[3.3.1]nonane 7, 1017, 1018, 1021		C <sub>5</sub> Se-C <sub>6</sub> 2H-1-Benzoselenin 7, 955–1001	
C <sub>5</sub> S-C <sub>5</sub> S 2H-Thiino[1,2-a]thiin-5-ium		4H-Selenochromene 7, 955–1001	
Decahydro-4aλ <sup>4</sup> -thia-naphthalene 12, 485		Isoselenochroman 7, 955–1001	
C <sub>5</sub> S-C <sub>6</sub> 1H-2-Benzothiin 7, 727–954		Selenochroman 7, 955–1001	
2H-1-Benzothiin 7, 727–954		1λ <sup>4</sup> -Selenochromene 7, 955–1001	
1H-Isothiochromene 7, 727–954		C <sub>5</sub> Si-C <sub>6</sub> 1-Silanaphthalene 7, 1057–1058	
3H-Isothiochromene 7, 727–954		1,4-Dihydro-benzo[b]siline 7, 1061f	
2H-Thiochromene 7, 727–954		C <sub>5</sub> Sn-C <sub>6</sub> 2-Stanna-naphthalene 7, 1053–1054; 7, 1061–1062	
4H-Thiochromene 7, 727–954		C <sub>5</sub> Te-C <sub>6</sub> 2H-1-Benzotellurin 7, 955–1001	
Thiochroman 7, 727–954		4H-Selenochromene 7, 955–1001	
Isothiochroman 7, 727–954		1λ <sup>4</sup> -Tellurochromene 7, 955–1001	

# 6,7

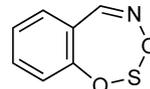
$C_3N_2O-C_7$

4,4a-Dihydro-1-oxa-2,4-diaza-  
benzocycloheptene  
9, 309



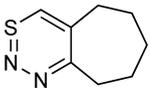
$C_6-C_3NO_2S$

5,7-Dioxa-6-thia-8-aza-  
benzocycloheptene  
13, 540



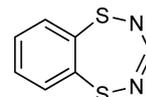
$C_3N_2S-C_7$

6,7,8,9-Tetrahydro-5H-3λ<sup>4</sup>-thia-  
1,2-diaza-benzocycloheptene  
9, 292–293, 295



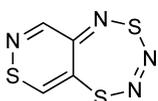
$C_6-C_3N_2S_2$

6H-5,9-Dithia-6,8-diaza-  
benzocycloheptene  
13, 545, 547



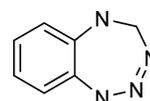
$C_4NS-C_2N_3S_2$

2,6,9-Trithia-3,5,7,8-tetraaza-  
benzocycloheptene  
6, 30



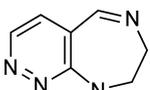
$C_6-C_3N_4$

8,9-Dihydro-5H-5,6,7,9-tetraaza-  
benzocycloheptene  
13, 549

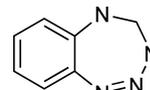


$C_4N_2-C_5NO$

7,8-Dihydro-9-oxa-1,2,6-triaza-  
benzocycloheptene  
13, 273f

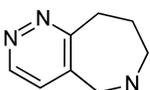


8,9-Dihydro-7H-5,6,7,9-tetraaza-  
benzocycloheptene  
13, 549–550



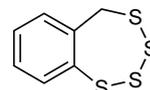
$C_4N_2-C_6N$

6,7,8,9-Tetrahydro-5H-1,2,6-triaza-  
benzocycloheptene  
8, 36

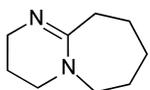


$C_6-C_3S_4$

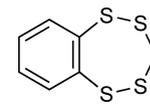
9H-5,6,7,8-Tetrathia-benzocyclo-  
heptene  
9, 613f; 13, 529–569



2,3,4,6,7,8,9,10-Octahydro-pyrimido  
[1,2-a]azepine  
6, 168f

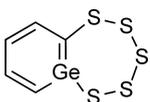


5,6,8,9-Tetrathia-benzocycloheptene  
13, 551



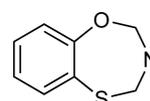
$C_5Ge-CGeS_5$

5,6,7,8,9-Pentathia-4a-germa-  
benzocycloheptene  
7, 1053–1054



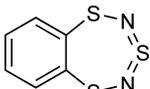
$C_6-C_4NOS$

7,8-Dihydro-6H-5-oxa-9-thia-7-aza-  
benzocycloheptene  
13, 489–527



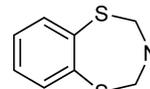
$C_6-C_2N_2S_3$

1,3,5,2,4-Benzotrithiadiazepine-3  
6, 55; 13, 529–569, 551



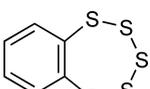
$C_6-C_4NS_2$

7,8-Dihydro-6H-5,9-dithia-7-aza-  
benzocycloheptene  
13, 489–527



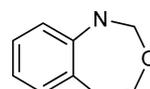
$C_6-C_2S_5$

Benzopentathiepin  
5, 474; 9, 624; 13, 529–569,  
554, 555

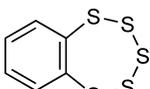


$C_6-C_4N_2O$

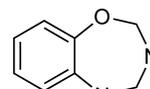
1,2,4,5-Tetrahydro-benzo[1,3,6]  
oxadiazepine  
13, 489–527



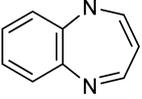
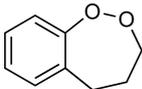
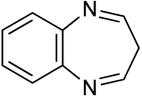
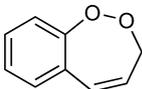
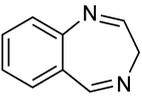
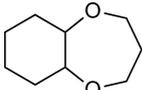
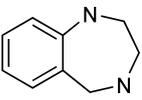
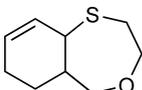
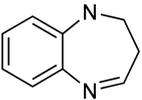
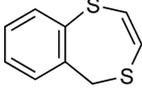
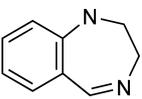
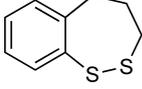
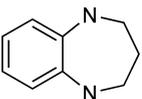
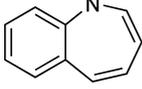
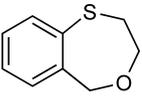
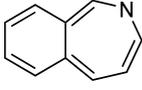
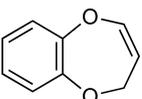
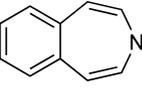
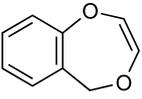
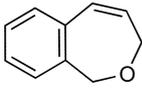
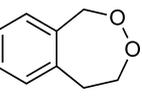
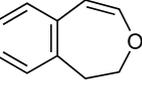
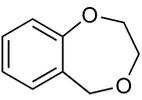
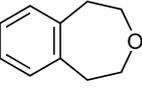
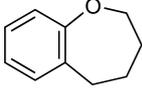
5,6,7,8,9-Pentathia-benzocyclo-  
heptene  
13, 541



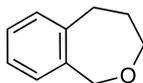
2,3,4,5-Tetrahydro-benzo[1,3,5]  
oxadiazepine  
13, 489–527



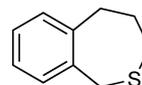
5,7,8,9-Tetrahydro-6-oxa-5,8-diazabenzocycloheptene 13, 422f		C <sub>6</sub> -C <sub>5</sub> NS 1,2-Benzothiazepine 13, 237–243	
C <sub>6</sub> -C <sub>4</sub> N <sub>2</sub> S 1,2,4,5-Tetrahydro-benzo[d][1,2,7]thiadiazepine 13, 391		1,4-Benzothiazepine 13, 279	
1,2,4,5-Tetrahydro-benzo[d][1,3,6]thiadiazepine 13, 489–527		2,3-Dihydro-benzo[b][1,4]thiazepine 5, 294–295; 8, 633f; 13, 279	
2,3,4,5-Tetrahydro-benzo[f][1,2,5]thiadiazepine 13, 478, 469		8,9-Dihydro-5-thia-6-azabenzocycloheptene 13, 241	
2,3,4,5-Tetrahydro-benzo[1,3,5]thiadiazepine 13, 489–527		2,3,4,5-Tetrahydro-benzo[b][1,4]thiazepine 8, 666f; 13, 279	
5,7,8,9-Tetrahydro-6-thia-5,7-diazabenzocycloheptene 13, 392		6,7,8,9-Tetrahydro-5-thia-6-azabenzocycloheptene 13, 238	
C <sub>6</sub> -C <sub>4</sub> N <sub>3</sub> 1H-1,2,4-Benzotriazepine 5, 294–295		5,6,7,9-Tetrahydro-8-thia-5-azabenzocycloheptene 7, 7420; 13, 279	
2,3,4,5-Tetrahydro-1H-benzo[f][1,3,5]triazepine 13, 489–527		7-Thia-5-aza-benzocycloheptene 13, 245–254	
C <sub>6</sub> -C <sub>5</sub> NO 5-Oxa-7-aza-benzocycloheptene 13, 245–254		5-Thia-7-aza-benzocycloheptene 13, 245–254	
6-Oxa-8-aza-benzocycloheptene 13, 245–254		6-Thia-8-aza-benzocycloheptene 13, 245–254	
7-Oxa-5-aza-benzocycloheptene 13, 245–254		C <sub>6</sub> -C <sub>5</sub> N <sub>2</sub> 1H-1,4-Benzodiazepine 13, 183–235	
6,7,8,9-Tetrahydro-5-oxa-9-azabenzocycloheptene 13, 272		1H-1,5-Benzodiazepine 13, 183–235	
		3H-Benzo[b][1,4]diazepine 13, 183–235	

1H-Benzo[b][1,4]diazepine 13, 183–235		8,9-Dihydro-7H-5,6-dioxabenzocycloheptene 13, 308–309, 311	
3H-Benzo[b][1,4]diazepine 5, 294–295		7H-5,6-Dioxa-benzocycloheptene 13, 313	
3H-Benzo[e][1,4]diazepine 13, 183–235		Octahydro-benzo[b][1,4]dioxepine 13, 377	
2,3-Dihydro-1H-benzo[e][1,4]diazepine 13, 183–235		C <sub>6</sub> -C <sub>5</sub> SO 2,4a,6,7,9,9a-Hexahydro-1H-8-oxa-5-thia-benzocycloheptene 13, 372	
2,3-Dihydro-1H-benzo[b][1,4]diazepine 1, 611		C <sub>6</sub> -C <sub>5</sub> S <sub>2</sub> 5H-1,4-Benzodithiepin 13, 367–386	
2,3-Dihydro-1H-benzo[e][1,4]diazepine 13, 183–235		8,9-Dihydro-7H-5,6-dithiabenzocycloheptene 13, 97–141	
2,3,4,5-Tetrahydro-1H-benzo[b][1,4]diazepine 13, 183–235		C <sub>6</sub> -C <sub>6</sub> N 1H-Benzazepine 13, 1–43	
C <sub>6</sub> -C <sub>5</sub> OS 6,7-Dihydro-9H-8-oxa-5-thiabenzocycloheptene 13, 370		2H-2-Benzazepine 13, 1–43	
C <sub>6</sub> -C <sub>5</sub> O <sub>2</sub> 2H-1,5-Benzodioxepine 13, 367–386		3H-3-Benzazepine 13, 1–43	
5H-1,4-Benzodioxepine 13, 367–386, 372		C <sub>6</sub> -C <sub>6</sub> O 1,3-Dihydro-benzo[c]oxepine 13, 45–95	
4,5-Dihydro-1H-benzo[d][1,2]dioxepine 13, 308–309		5,6-Dihydro-7-oxabenzocycloheptene 13, 45–95	
2,3-Dihydro-5H-benzo[e][1,4]dioxepine 13, 371		5,6,8,9-Tetrahydro-7-oxabenzocycloheptene 13, 45–95	
		2,3,4,5-Tetrahydro-benzo[b]oxepine 13, 54f, 55	

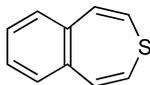
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13, 45-95



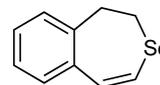
1,3,4,5-Tetrahydro-benzo[c]thiepine  
13, 97-141



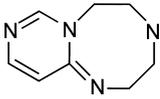
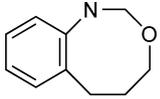
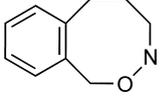
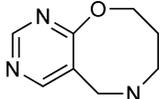
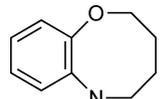
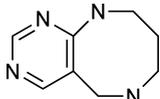
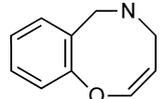
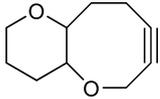
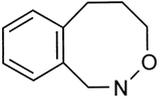
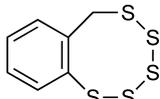
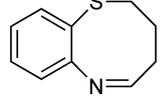
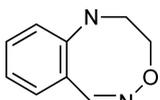
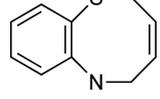
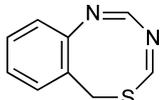
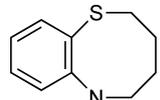
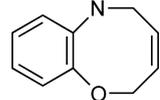
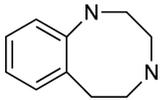
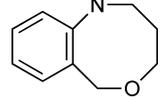
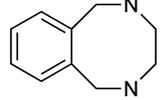
C<sub>6</sub>-C<sub>6</sub>S  
3-Benzothiepine  
13, 97-141



C<sub>6</sub>-C<sub>6</sub>Se  
5,6-Dihydro-7-selena-  
benzocycloheptene  
7, 975f



# 6,8

<p><math>C_4N_2-C_5N_3</math> 7,8,9,10-Tetrahydro-6H-2,5,8,10a-tetraaza-benzocyclooctene 14, 492</p>		<p>1,4,5,6-Tetrahydro-2H-benzo[d]-[1,3]oxazocine 14, 191</p>	
<p><math>C_4N_2-C_6NO</math> 2-Oxa-7,9-diaza-bicyclo[4.2.2]decane 14, 191</p>		<p>3,4,5,6-Tetrahydro-1H-benzo[f][1,2]-oxazocine 14, 121</p>	
<p>6,7,8,9-Tetrahydro-5H-10-oxa-1,3,6-triaza-benzocyclooctene 14, 393f</p>		<p>3,4,5,6-Tetrahydro-2H-benzo[b]-[1,4]oxazocine 14, 274</p>	
<p><math>C_4N_2-C_6N_2</math> 5,6,7,8,9,10-Hexahydro-1,3,6,10-tetraaza-benzocyclooctene 14, 339f</p>		<p>3,4,5,6-Tetrahydro-2H-benzo[b][1,5]-oxazocine 14, 395f, 396f</p>	
<p><math>C_5O-C_7O</math> Pyrano[3,2-b]oxooctyne 14, 72</p>		<p>5,8,9,10-Tetrahydro-6H-7-oxa-6-aza-benzocyclooctene 14, 121</p>	
<p><math>C_6-C_3S_5</math> 10H-5,6,7,8,9-Pentathia-benzocyclooctene 9, 613f</p>		<p><math>C_6-C_6NS</math> 3,4-Dihydro-2H-benzo[b][1,4]-thiazocine 8, 666</p>	
<p><math>C_6-C_5N_2O</math> 6,7-Dihydro-5H-8-oxa-5,9-diaza-benzocyclooctene 14, 494</p>		<p>5,6-Dihydro-2H-benzo[b][1,4]-thiazocine 14, 283</p>	
<p><math>C_6-C_5N_2S</math> 10H-9-Thia-5,7-diaza-benzocyclooctene 14, 495</p>		<p>3,4,5,6-Tetrahydro-2H-benzo[b]-[1,4]thiazocine 14, 283</p>	
<p><math>C_6-C_6NO</math> 5,6-Dihydro-2H-benzo[b][1,4]-oxazocine 14, 278</p>		<p><math>C_6-C_6N_2</math> 1,2,3,4,5,6-Hexahydro-benzo[c]-[1,4]diazocine 14, 260</p>	
<p>1,3,4,6-Tetrahydro-2H-benzo[c]-[1,5]oxazocine 14, 394f, 403, 404f, 398</p>		<p>1,2,3,4,5,6-Hexahydro-benzo[f]-[1,4]diazocine 14, 260</p>	

1,2,5,6,6a,7,8,9,10,10a-Decahydro-benzo[f][1,4]diazocine <b>14</b> , 270 <i>f</i>		3,4,5,6-Tetrahydro-2H-benzo[b]oxocine <b>14</b> , 69 <i>f</i> , 76	
C <sub>6</sub> -C <sub>7</sub> N 1-Benzazocine <b>14</b> , 30		C <sub>6</sub> -C <sub>7</sub> S 3,4,5,6-Tetrahydro-2H-benzo[b]thiocine <b>14</b> , 94	
C <sub>6</sub> -C <sub>7</sub> O 3,6-Dihydro-2H-benzo[b]oxocine <b>14</b> , 49–88		C <sub>6</sub> -C <sub>7</sub> Si 5,8,9,10-Tetrahydro-5-sila-benzocyclooctene <b>14</b> , 986–987	
5,6-Dihydro-2H-benzo[b]oxocine <b>14</b> , 65 <i>f</i>		C <sub>6</sub> -C <sub>7</sub> Sn 5,8,9,10-Tetrahydro-5-stanna-benzocyclooctene <b>14</b> , 986–987	
3,4,5,6-Tetrahydro-1H-benzo[c]oxocine <b>14</b> , 68 <i>f</i>			

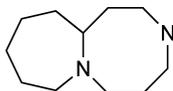
# 7,8

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C<sub>6</sub>N-C<sub>6</sub>N<sub>2</sub>

Dodecahydro-5a,9-diaza-cycloheptacyclooctene

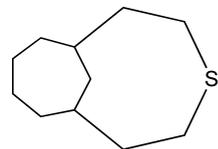
14, 332*f*



C<sub>7</sub>-C<sub>7</sub>S

4-Thia-bicyclo[5.4.1]dodecane

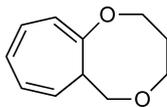
14, 89-98



C<sub>7</sub>-C<sub>6</sub>O<sub>2</sub>

8,9,11,11a-Tetrahydro-7H-6,10-dioxo-cycloheptacyclooctene

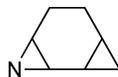
14, 439*f*



# 3,3,6

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C<sub>2</sub>N-C<sub>3</sub>-C<sub>6</sub>  
3-Aza-tricyclo[5.1.0.0<sup>2,4</sup>]octane  
1, 28; 1, 109



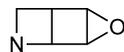
# 3,4,4

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C<sub>2</sub>O-C<sub>3</sub>N-C<sub>4</sub>

3-Oxa-6-aza-tricyclo[3.2.0.0<sup>2,4</sup>]heptane

2, 267-268



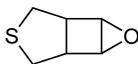
# 3,4,5

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C<sub>2</sub>O-C<sub>4</sub>-C<sub>4</sub>S

3-Oxa-7-thia-tricyclo[3.3.0.0<sup>2,4</sup>]octane

1, 240

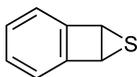


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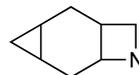
C<sub>2</sub>S-C<sub>4</sub>-C<sub>6</sub>

8-Thia-tricyclo[4.3.0.07,9]nona-1(6),  
2,4-triene  
1, 419



C<sub>3</sub>-C<sub>3</sub>N-C<sub>6</sub>

8-Aza-tricyclo[5.2.0.03,5]nonane  
2, 258, 299



# 3,5,5

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C<sub>2</sub>S-C<sub>5</sub>-C<sub>5</sub>

3-Thia-tricyclo[3.2.1.0<sup>2,4</sup>]oct-6-ene  
1, 392, 415, 417



2,3-thiiranobicyclo[2.2.1]heptane  
6, 455*f*



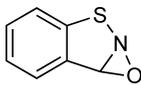
3-Thia-tricyclo[3.2.1.0<sup>2,4</sup>]octa-1,4,6-triene  
6, 455*f*



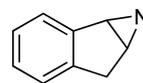
# 3,5,6

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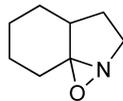
CNO-C<sub>3</sub>NS-C<sub>6</sub>  
1aH-1-Oxa-6-thia-6a-aza-  
cyclopropa[a]indene  
1, 590, 593



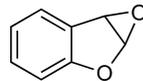
1,1a,6,6a-Tetrahydro-1-aza-  
cyclopropa[a]indene  
1, 112, 113, 113–114



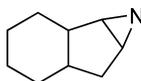
CNO-C<sub>4</sub>N-C<sub>6</sub>  
Hexahydro-1-oxa-1a-aza-  
cyclopropa[c]indene  
1, 562



C<sub>2</sub>O-C<sub>4</sub>O-C<sub>6</sub>  
1a,6a-Dihydro-1,6-dioxa-  
cyclopropa[a]indene  
1, 656



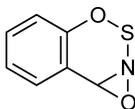
C<sub>2</sub>N-C<sub>5</sub>-C<sub>6</sub>  
Decahydro-1-aza-cyclopropa[a]  
indene  
1, 114–115



# 3,6,6

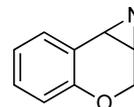
CNO-C<sub>3</sub>NOS-C<sub>6</sub>

7bH-1,3-Dioxo-2-thia-1a-aza-  
cyclopropa[a]naphthalene  
1, 587–588, 588



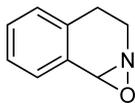
C<sub>2</sub>N-C<sub>5</sub>S-C<sub>6</sub>

1,1a,2,7b-Tetrahydro-3-oxa-1-aza-  
cyclopropa[a]naphthalene  
1, 62f



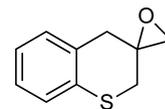
CNO-C<sub>5</sub>N-C<sub>6</sub>

3,7b-Dihydro-2H-1-oxa-1a-aza-  
cyclopropa[a]naphthalene  
1, 580–581



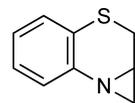
C<sub>2</sub>O-C<sub>5</sub>S-C<sub>6</sub>

Spiro[2H-1-benzothiopyran-  
3(4H),2'-oxirane]  
7, 765



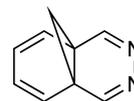
C<sub>2</sub>N-C<sub>4</sub>NS-C<sub>6</sub>

1a,2-Dihydro-1H-3-thia-7b-aza-  
cyclopropa[a]naphthalene  
8, 648–649

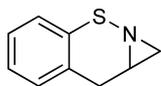


C<sub>3</sub>-C<sub>4</sub>N<sub>2</sub>-C<sub>6</sub>

3,4-Diaza-tricyclo[4.4.1.01,6]  
undeca-2,4,7,9-tetraene  
8, 31f



7,7a-Dihydro-1H-2-thia-1a-aza-  
cyclopropa[b]naphthalene  
1, 61f; 1, 121

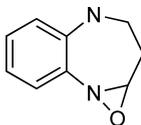


# 3,6,7

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CNO-C<sub>5</sub>N<sub>2</sub>-C<sub>6</sub>

1a,2,3,4-Tetrahydro-1-oxa-4,8b-diaza-  
benzo[a]cyclopropa[c]cycloheptene  
1, 611



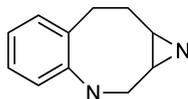
# 3,6,8

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C<sub>2</sub>N-C<sub>6</sub>-C<sub>7</sub>N

1a,2,3,8,9,9a-Hexahydro-1H-1,8-  
diazabenzocyclopropa[e]  
cyclooctene

158f, 158f



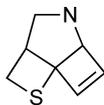
# 4,4,5

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C<sub>3</sub>S-C<sub>4</sub>-C<sub>4</sub>N

2-Thia-6-aza-tricyclo[5.2.0.01,4]non-8-ene

2, 442–443

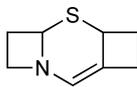


# 4,4,6

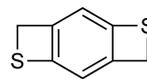
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C<sub>3</sub>N-C<sub>4</sub>-C<sub>4</sub>NS

7-Thia-1-aza-tricyclo  
[6.2.0.03,6]dec-2-ene  
2, 123

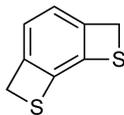


4,9-Dithia-tricyclo[6.2.0.03,6]  
deca-1(8),2,6-triene  
7, 892



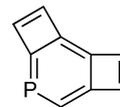
C<sub>3</sub>S-C<sub>3</sub>S-C<sub>6</sub>

3,10-Dithia-tricyclo[6.2.0.02,5]  
deca-1,5,7-triene  
2, 432, 439-441, 448

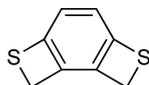


C<sub>4</sub>-C<sub>4</sub>-C<sub>5</sub>P

6-Phospha-tricyclo[6.2.0.02,5]  
deca-1,3,5,7,9-pentaene  
7, 1006

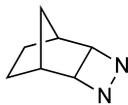


4,9-Dithia-tricyclo[6.2.0.02,5]  
deca-1(8),2(5),6-triene  
2, 439-441

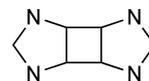


# 4,5,5

C<sub>2</sub>N<sub>2</sub>-C<sub>5</sub>-C<sub>5</sub>  
3,4-Diaza-tricyclo[4.2.1.0<sub>2,5</sub>]nonane  
2, 650, 651



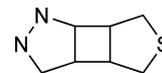
C<sub>4</sub>-C<sub>3</sub>N<sub>2</sub>-C<sub>3</sub>N<sub>2</sub>  
Decahydro-cyclobuta[1,2-d;3,4-d']  
diimidazole  
10, 1161



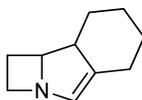
C<sub>2</sub>PSe-C<sub>5</sub>-C<sub>5</sub>  
3-Selena-4-phospha-tricyclo  
[4.2.1.0<sub>2,5</sub>]non-7-ene  
2, 867



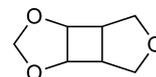
C<sub>4</sub>-C<sub>3</sub>N<sub>2</sub>-C<sub>4</sub>S  
Octahydro-5-thia-1,2-diaza-  
cyclobutadicyclopentene  
10, 1160–1161



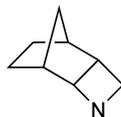
C<sub>3</sub>N-C<sub>4</sub>N-C<sub>6</sub>  
1,2,5,6,7,8,8a,8b-Octahydro-  
azeto[2,1-a]isoindole  
2, 242



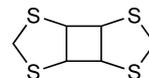
C<sub>4</sub>-C<sub>3</sub>O<sub>2</sub>-C<sub>4</sub>O  
Hexahydro-1,3,5-trioxa-  
cyclobutadicyclopentene  
10, 1161



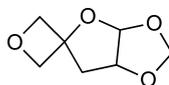
C<sub>3</sub>N-C<sub>5</sub>-C<sub>5</sub>  
3-Aza-tricyclo[4.2.1.0<sub>2,5</sub>]nonane  
2, 120; 2, 259



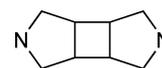
C<sub>4</sub>-C<sub>3</sub>S<sub>2</sub>-C<sub>3</sub>S<sub>2</sub>  
Tetrahydro-1,3,4,6-tetrathia-  
cyclobutadicyclopentene  
10, 1161



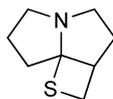
C<sub>3</sub>O-C<sub>3</sub>O<sub>2</sub>-C<sub>4</sub>O  
Spiro[furo[2,3-d]-1,3dioxole-  
5(3aH),3'-oxetane]  
2, 376–377



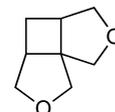
C<sub>4</sub>-C<sub>4</sub>N-C<sub>4</sub>N  
Decahydro-cyclobuta  
[1,2-c;3,4-c']dipyrrole  
10, 1159



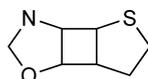
C<sub>3</sub>S-C<sub>4</sub>N-C<sub>4</sub>N  
Hexahydro-1-thia-4a-aza-  
cyclobuta[c]pentalene  
2, 437, 442–443



C<sub>4</sub>-C<sub>4</sub>O-C<sub>4</sub>O  
Tetrahydro-2,6-dioxa-cyclobuta  
[1,2:1,4]dicyclopentene  
10, 1160



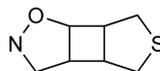
C<sub>4</sub>-C<sub>3</sub>NO-C<sub>4</sub>S  
Octahydro-1-oxa-4-thia-3-aza-  
cyclobutadicyclopentene  
10, 1160



C<sub>4</sub>NS-C<sub>5</sub>-C<sub>5</sub>  
3-Thia-4-aza-tricyclo[4.2.1.0<sub>2,5</sub>]  
non-7-ene  
2, 719, 726, 726–727, 751



Octahydro-1-oxa-5-thia-2-aza-  
cyclobutadicyclopentene  
10, 1161

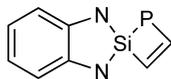


# 4,5,6

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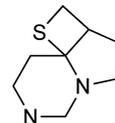
$C_2PSi-C_2N_2Si-C_6$

5,8-Diaza-1-phospha-4-sila-benzo-  
spiro[3.4]octa-2,6-diene  
6, 681*f*



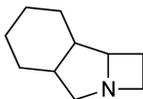
$C_3S-C_4N-C_4N_2$

Octahydro-1-thia-4a,6-diaza-  
cyclobuta[*c*]indene  
2, 445



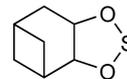
$C_3N-C_4N-C_6$

Decahydro-azeto[2,1-*a*]isoindole  
2, 239–319



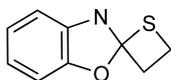
$C_4-C_2O_2S-C_6$

1,3,2-Dioxathiolano-bicyclo  
[3.1.1]heptane  
6, 148



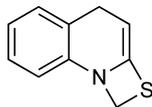
$C_3S-C_3NO-C_6$

5-Oxa-1-thia-8-aza-benzo-spiro  
[3.4]oct-6-ene  
2, 435, 436

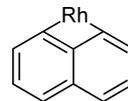


# 4,6,6

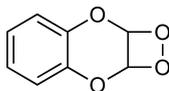
C<sub>2</sub>NS-C<sub>5</sub>N-C<sub>6</sub>  
4H-2-Thia-8b-aza-cyclobuta[a]  
naphthalene  
2, 762, 763, 769–770, 770



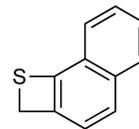
C<sub>3</sub>Rh-C<sub>6</sub>-C<sub>6</sub>  
1,1-Dimethyl-1H-naphtho  
[1,8-bc]rhodinete  
2, 555–621



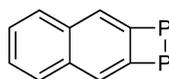
C<sub>2</sub>O<sub>2</sub>-C<sub>4</sub>O<sub>2</sub>-C<sub>6</sub>  
2a,8a-Dihydro-1,2,3,8-tetraoxa-  
cyclobuta[b]naphthalene  
2, 778



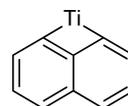
C<sub>3</sub>S-C<sub>6</sub>-C<sub>6</sub>  
2H-1-Thia-cyclobuta[a]naphthalene  
2, 439–441



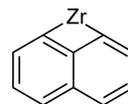
C<sub>2</sub>P<sub>2</sub>-C<sub>6</sub>-C<sub>6</sub>  
1,2-Dihydro-1,2-diphospha-  
cyclobuta[b]naphthalene  
2, 891



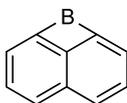
C<sub>3</sub>Ti-C<sub>6</sub>-C<sub>6</sub>  
1,1-Dimethyl-1H-naphtho  
[1,8-bc]titanete  
2, 555–621



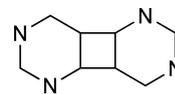
C<sub>3</sub>Zr-C<sub>6</sub>-C<sub>6</sub>  
1,1-Dimethyl-1H-naphtho  
[1,8-bc]zirconete  
2, 555–621



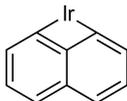
C<sub>3</sub>B-C<sub>6</sub>-C<sub>6</sub>  
1H-naphtho[1,8-bc]borete  
2, 555–621



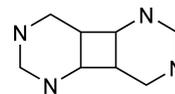
C<sub>4</sub>-C<sub>4</sub>N<sub>2</sub>-C<sub>4</sub>N<sub>2</sub>  
Dodecahydro-1,3,5,7-tetraaza-  
biphenylene  
8, 176f



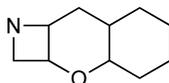
C<sub>3</sub>Ir-C<sub>6</sub>-C<sub>6</sub>  
1,1-Dimethyl-1H-naphtho[1,8-bc]  
iridinete  
2, 555–621



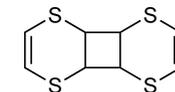
Dodecahydro-1,3,5,7-tetraaza-  
biphenylene  
10, 1246



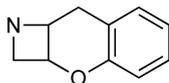
C<sub>3</sub>N-C<sub>5</sub>O-C<sub>6</sub>  
Decahydro-3-oxa-1-aza-  
cyclobuta[b]naphthalene  
2, 262



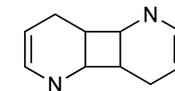
C<sub>4</sub>-C<sub>4</sub>S<sub>2</sub>-C<sub>4</sub>S<sub>2</sub>  
4a,4b,8a,8b-Tetrahydro-1,4,5,8-  
tetrathia-biphenylene  
8, 865



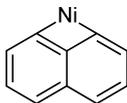
2,2a,8,8a-Tetrahydro-1H-3-oxa-  
1-aza-cyclobuta[b]naphthalene  
2, 134



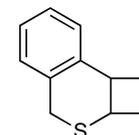
C<sub>4</sub>-C<sub>5</sub>N-C<sub>5</sub>N  
1,4,4a,4b,5,8,8a,8b-Octahydro-  
cyclobuta[1,2-b;3,4-b']dipyridine  
10, 1245



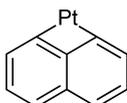
C<sub>3</sub>Ni-C<sub>6</sub>-C<sub>6</sub>  
1,1-Dimethyl-1H-naphtho[1,8-bc]  
nikelnete  
2, 555–621



C<sub>4</sub>-C<sub>5</sub>S-C<sub>6</sub>  
2,2a,4,8b-Tetrahydro-1H-3-thia-  
cyclobuta[a]naphthalene  
7, 761



C<sub>3</sub>Pt-C<sub>6</sub>-C<sub>6</sub>  
1,1-Dimethyl-1H-naphtho  
[1,8-bc]platinete  
2, 555–621

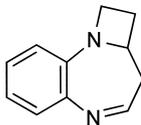


# 4,6,7

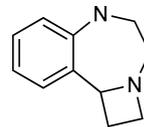
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C<sub>3</sub>N-C<sub>6</sub>-C<sub>5</sub>N<sub>2</sub>

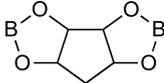
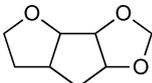
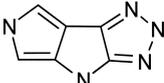
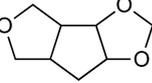
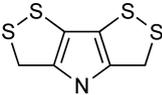
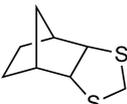
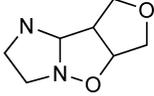
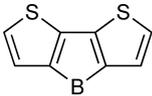
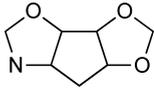
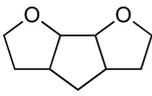
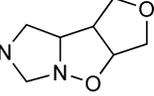
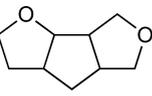
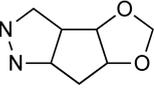
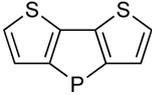
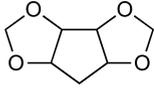
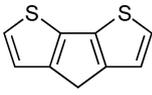
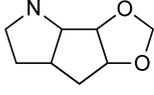
1,2,2a,3-Tetrahydro-5,9b-diaza-  
benzo[a]cyclobuta[c]cycloheptene  
2, 123–124



1,2,3,4,5,9b-Hexahydro-2a,5-diaza-  
benzo[a]cyclobuta[c]cycloheptene  
13, 200

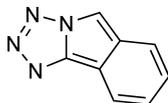


# 5,5,5

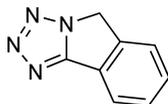
<p><math>C_2BO_2-C_2BO_2-C_5</math> Tetrahydro-1,3,4,6-tetraoxa-2,5-dibora-cyclopenta[a]pentalene 10, 1166</p>		<p><math>C_3O_2-C_4O-C_5</math> Hexahydro-furo[2',3':3,4]cyclopenta[1,2-d][1,3]dioxole 10, 1164</p>	
<p><math>C_2N_2S-C_4N-C_4S</math> 7H-2,5-Dithia-1,3,7-triazacyclopenta[a]pentalene 10, 151–152</p>		<p>Hexahydro-furo[3',4':3,4]cyclopenta[1,2-d][1,3]dioxole 10, 1164–1165</p>	
<p><math>C_2N_3-C_3N_2-C_4N</math> 1,2,3,4,6,6a-Hexahydro-1,2a,6b-triaza-cyclopenta[cd]pentalene 11, 123–124</p>		<p><math>C_3S_2-C_3S_2-C_4N</math> 6,7-Dihydro-1H-2,3,4,5-tetrathia-7-aza-cyclopenta[a]pentalene 4, 1029f</p>	
<p><math>C_3BN-C_3BN-C_3BN</math> 1-Aza-5-bora-tricyclo[3.3.3.0<sup>1,5</sup>]undecane 12, 573–633</p>		<p><math>C_3S_2-C_5-C_5</math> 3,5-Dithia-tricyclo[5.2.1.0<sup>2,6</sup>]decane 4, 1025f</p>	
<p><math>C_3NO-C_3N_2-C_4O</math> Octahydro-2,7-dioxa-4,6a-diazacyclopenta[a]pentalene 11, 169–170</p>		<p><math>C_4B-C_4S-C_4S</math> 7H-3,4-Dithia-7-bora-cyclopenta[a]pentalene 3, 1225–1241</p>	
<p><math>C_3NO-C_3O_2-C_5</math> Hexahydro-1,3,4-trioxa-6-azacyclopenta[a]pentalene 10, 1165, 1165</p>		<p><math>C_4O-C_4O-C_5</math> Octahydro-cyclopenta[2,1-b;3,4-b']difuran 10, 1162</p>	
<p><math>C_3N_2-C_3NO-C_4O</math> Octahydro-2,7-dioxa-5,6a-diazacyclopenta[a]pentalene 11, 169–170</p>		<p>Octahydro-2,4-dioxa-cyclopenta[a]pentalene 10, 1162</p>	
<p><math>C_3N_2-C_3O_2-C_5</math> Octahydro-4,6-dioxa-1,2-diazacyclopenta[a]pentalene 10, 1165</p>		<p><math>C_4P-C_4S-C_4S</math> 4H-Phospholo[3,2-b;4,5-b']dithiophene 3, 1031</p>	
<p><math>C_3O_2-C_3O_2-C_5</math> Tetrahydro-cyclopenta[1,2-d;3,4-d']bis[1,3]dioxole 10, 1165–1166</p>		<p><math>C_4S-C_4S-C_5</math> 4H-Cyclopenta[2,1-b;3,4-b']dithiophene 10, 1162–1163</p>	
<p><math>C_3O_2-C_4N-C_5</math> Octahydro-1,3-dioxa-4-azacyclopenta[a]pentalene 10, 1163, 1163</p>			

# 5,5,6

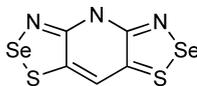
CN<sub>4</sub>-C<sub>4</sub>N-C<sub>6</sub>  
1H-Tetrazolo[5,1-a]isoindole  
11, 307–323



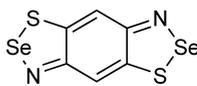
5H-Tetrazolo[5,1-a]isoindole  
11, 307–323



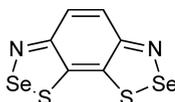
[1,2,3]Thiaselenazolo  
[4,5-b:5',4'-c]pyridine  
6, 530f



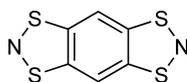
C<sub>2</sub>NSSe- C<sub>2</sub>NSSe-C<sub>6</sub>  
Benzo[1,2-d:4,5-d']  
bis(1,2,3-thiaselenazole)  
6, 574f; 6, 574f



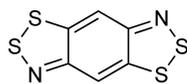
Benzo[2.1-c:3.4-c']  
bis(1,2,3-thiaselenazole)  
6, 530; 6, 574f



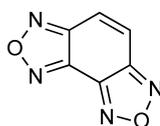
C<sub>2</sub>N<sub>2</sub>S-C<sub>2</sub>NS<sub>2</sub>-C<sub>6</sub>  
Benzo[1,2-d:4,5-d']  
bis[1,3,2]dithiazole  
6, 44



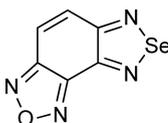
1,2,5,6-Tetrathia-3,7-diaza-  
s-indacene  
6, 19



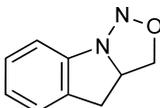
C<sub>2</sub>N<sub>2</sub>O-C<sub>2</sub>N<sub>2</sub>O-C<sub>6</sub>  
Benzo[1,2-c:3,4-c']bis[1,2,5]  
oxadiazole  
5, 360f, 360f



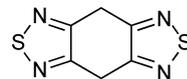
C<sub>2</sub>N<sub>2</sub>O-C<sub>2</sub>N<sub>2</sub>Se-C<sub>6</sub>  
2-Oxa-7-selena-1,3,6,8-  
tetraaza-as-indacene  
6, 560f



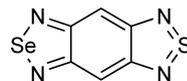
C<sub>2</sub>N<sub>2</sub>O-C<sub>4</sub>N-C<sub>6</sub>  
4-Benzylsydno[3,4-a]indole  
5, 214



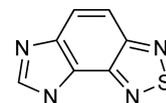
C<sub>2</sub>N<sub>2</sub>S-C<sub>2</sub>N<sub>2</sub>S-C<sub>6</sub>  
4H,8H-Benzo[1,2-c:4,5-c']  
bis[1,2,5]thiadiazole  
5, 536–537



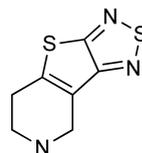
C<sub>2</sub>N<sub>2</sub>S-C<sub>2</sub>N<sub>2</sub>Se-C<sub>6</sub>  
[1,2,5]selenadiazolo[4,5-c]-2,1,3-  
benzothiazole  
6, 568f



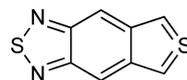
C<sub>2</sub>N<sub>2</sub>S-C<sub>3</sub>N<sub>2</sub>-C<sub>6</sub>  
8H-Imidazo[4',5':3,4]benzo[1,2-c]  
[1,2,5]thiadiazole  
10, 1187



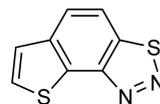
C<sub>2</sub>N<sub>2</sub>S-C<sub>4</sub>S-C<sub>5</sub>N  
4,5,6,7-Tetrahydro-2,8-dithia-  
1,3,5-triaza-cyclopenta[a]indene  
10, 146



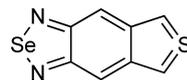
C<sub>2</sub>N<sub>2</sub>S-C<sub>4</sub>S-C<sub>6</sub>  
Thieno[3,4-f]-2,1,3-  
benzothiadiazole-2  
10, 1187–1188



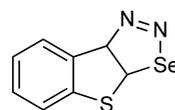
C<sub>2</sub>N<sub>2</sub>S-C<sub>4</sub>S-C<sub>6</sub>  
3,8-Dithia-1,2-diaza-as-indacene  
10, 1187



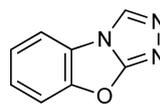
C<sub>2</sub>N<sub>2</sub>Se-C<sub>4</sub>S-C<sub>6</sub>  
Seleno[3,4-f]-2,1,3-  
benzothiadiazole-2  
10, 1187–1188



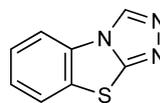
8-Thia-1-selena-2,3-diaza-  
cyclopenta[a]indene  
6, 562f



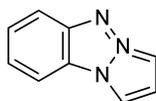
C<sub>2</sub>N<sub>3</sub>-C<sub>3</sub>NO-C<sub>6</sub>  
Benzo[4,5]oxazolo[2,3-c]  
[1,2,4]triazole  
11, 250–251



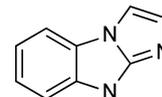
C<sub>2</sub>N<sub>3</sub>-C<sub>3</sub>NS-C<sub>6</sub>  
Benzo[4,5]thiazolo[2,3-c]  
[1,2,4]triazole  
11, 250–251



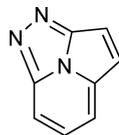
C<sub>2</sub>N<sub>3</sub>-C<sub>3</sub>N<sub>2</sub>-C<sub>6</sub>  
5H-Pyrazolo[1,2-a]  
benzotriazol-4-ium  
4, 972



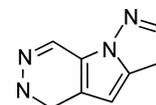
9H-Imidazo[1,2-a]benzimidazole  
11, 133–197



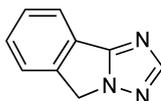
C<sub>2</sub>N<sub>3</sub>-C<sub>4</sub>N-C<sub>5</sub>N  
1,2,7b-Triaza-cyclopenta[cd]  
indene  
12, 829



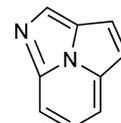
C<sub>3</sub>N<sub>2</sub>-C<sub>4</sub>N-C<sub>4</sub>N<sub>2</sub>  
6,7-Dihydro-1H-3,3a,5,6-tetraaza-  
cyclopenta[a]indene  
12, 805–806



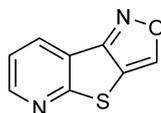
C<sub>2</sub>N<sub>3</sub>-C<sub>4</sub>N-C<sub>6</sub>  
5H-[1,2,4]Triazolo[5,1-a]  
isoindole  
11, 117



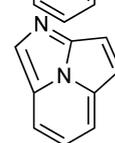
C<sub>3</sub>N<sub>2</sub>-C<sub>4</sub>N-C<sub>5</sub>N  
1,7b-Diaza-cyclopenta[cd]indene  
12, 829



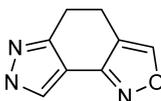
C<sub>3</sub>NO-C<sub>4</sub>S-C<sub>5</sub>N  
2-Oxa-8-thia-3,7-diaza-  
cyclopenta[a]indene  
12, 783f



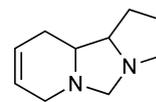
2,7b-Diaza-cyclopenta[cd]indene  
12, 829



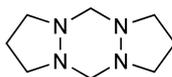
C<sub>3</sub>N<sub>2</sub>-C<sub>3</sub>NO-C<sub>6</sub>  
5,7-Dihydro-4H-pyrazolo  
[4',3':3,4]benzo[2,1-c]isoxazole  
10, 1185



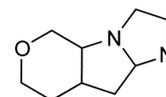
2,3,3a,3b,4,7-Hexahydro-1H-7a,8a-  
diaza-cyclopenta[a]indene  
12, 822–823



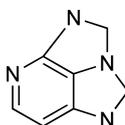
C<sub>3</sub>N<sub>2</sub>-C<sub>3</sub>N<sub>2</sub>-C<sub>2</sub>N<sub>4</sub>  
Tetrahydro-dipyrazolo  
[1,2-a;1',2'-d][1,2,4,5]tetrazine  
9, 661, 662



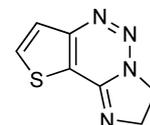
C<sub>3</sub>N<sub>2</sub>-C<sub>4</sub>N-C<sub>5</sub>O  
Decahydro-5-oxa-1,3a-diaza-  
cyclopenta[a]indene  
12, 804



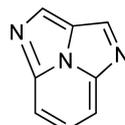
C<sub>3</sub>N<sub>2</sub>-C<sub>3</sub>N<sub>2</sub>-C<sub>5</sub>N  
1,2,3,4-Tetrahydro-1,2a,4,5-  
tetraaza-cyclopenta[cd]indene  
12, 828–829



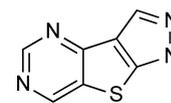
C<sub>3</sub>N<sub>2</sub>-C<sub>4</sub>S-C<sub>3</sub>N<sub>3</sub>  
2,3-Dihydro-8-thia-1,3a,4,5-  
tetraaza-as-indacene  
10, 502–503



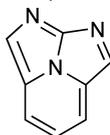
1,4,7b-Triaza-cyclopenta[cd]indene  
12, 829



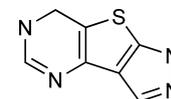
C<sub>3</sub>N<sub>2</sub>-C<sub>4</sub>S-C<sub>4</sub>N<sub>2</sub>  
1H-8-Thia-1,2,4,6-tetraaza-  
cyclopenta[a]indene  
12, 781f



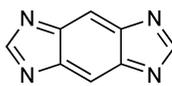
2,3,7b-Triaza-cyclopenta[cd]indene  
12, 829



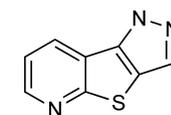
6,7-Dihydro-1H-8-thia-1,2,4,6-  
tetraaza-cyclopenta[a]indene  
12, 783–784



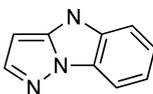
C<sub>3</sub>N<sub>2</sub>-C<sub>3</sub>N<sub>2</sub>-C<sub>6</sub>  
Benzo[1,2-d:4,5-d']diimidazole  
10, 1135–1199



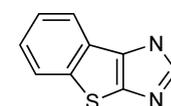
C<sub>3</sub>N<sub>2</sub>-C<sub>4</sub>S-C<sub>5</sub>N  
3H-8-Thia-2,3,7-triaza-  
cyclopenta[a]indene  
12, 783f



8H-3,3a,8-Triaza-cyclopenta[a]  
indene  
11, 199–305



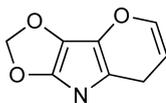
C<sub>3</sub>N<sub>2</sub>-C<sub>4</sub>S-C<sub>6</sub>  
3H-8-Thia-1,3-diaza-  
cyclopenta[a]indene  
10, 77f



C<sub>3</sub>O<sub>2</sub>-C<sub>4</sub>N-C<sub>5</sub>O

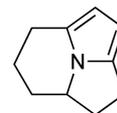
7,8-Dihydro-1,3,4-trioxo-8-aza-cyclopenta[a]indene

3, 368



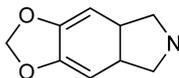
1,2,5,6,7,7a-Hexahydro-pyrrolo[2,1,5-cd]indolizine

11, 17

C<sub>3</sub>O<sub>2</sub>-C<sub>4</sub>N-C<sub>6</sub>

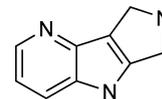
5,6,7,7a-Tetrahydro-4aH-[1,3]dioxolo[4,5-f]isoindole

10, 1181



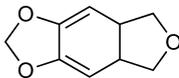
1,2,3,8-Tetrahydro-2,4,8-triaza-cyclopenta[a]indene

12, 775

C<sub>3</sub>O<sub>2</sub>-C<sub>4</sub>O-C<sub>6</sub>

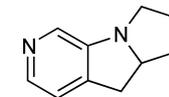
4a,5,7,7a-Tetrahydro-furo [3',4':4,5]benzo[1,2-d][1,3]dioxole

10, 1181

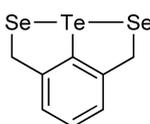


2,3,8,8a-Tetrahydro-1H-3a,5-diaza-cyclopenta[a]indene

12, 797

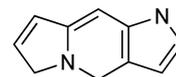
C<sub>3</sub>SeTe-C<sub>3</sub>SeTe-C<sub>6</sub>2a,4-Dihydro-1H-2,3-diselena-2aλ<sup>4</sup>-tellura-cyclopenta[cd]indene

4, 1092-1093



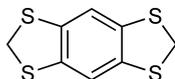
4,6-Dihydro-1H-pyrrolo[3,2-f]indolizine

3, 63

C<sub>3</sub>S<sub>2</sub>-C<sub>3</sub>S<sub>2</sub>-C<sub>6</sub>

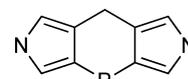
Benzo[1,2-d;4,5-d']bis[1,3]dithiole

10, 1185

C<sub>4</sub>N-C<sub>4</sub>N-C<sub>5</sub>P

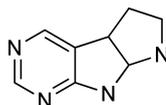
2,4,6,8-Tetrahydro-2,6-diaza-4-phospha-s-indacene

7, 1019, 1020-1021

C<sub>4</sub>N-C<sub>4</sub>N-C<sub>4</sub>N<sub>2</sub>

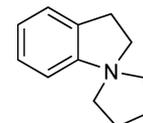
1,2,3,3a,8,8a-Hexahydro-1,5,7,8-tetraaza-cyclopenta[a]indene

12, 776f

C<sub>4</sub>N-C<sub>4</sub>N-C<sub>6</sub>

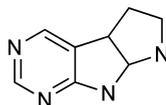
Spiro[1H-indole-1,1'-pyrrolidinium], 2,3-dihydro-, salt

12, 1052f



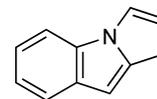
1,2,3,3a,8,8a-Hexahydro-1,5,7,8-tetraaza-cyclopenta[a]indene

12, 777f



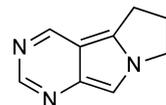
1H-Pyrrolo[1,2-a]indole

6, 161t



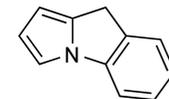
2,3-Dihydro-1H-5,7,8a-triaza-cyclopenta[a]indene

12, 800f



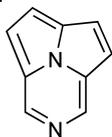
8H-3a-Aza-cyclopenta[a]indene

11, 21



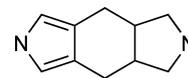
6,7b-Diaza-cyclopenta[cd]indene

12, 829



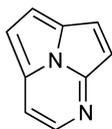
1,2,3,3a,4,6,8,8a-Octahydro-pyrrolo[3,4-f]isoindole

3, 291



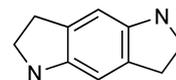
1-Methyl-pyrrolo[1,2-c]pyrimidine

12, 829



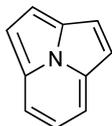
1,2,3,5,6,7-Hexahydro-pyrrolo[2,3-f]indole

10, 1174

C<sub>4</sub>N-C<sub>4</sub>N-C<sub>5</sub>N

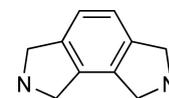
Pyrrolo[2,1,5-cd]indolizine

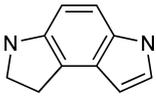
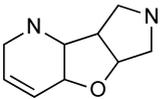
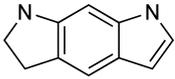
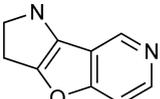
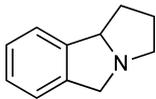
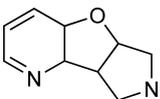
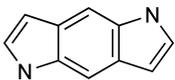
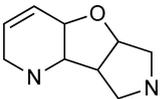
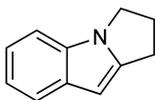
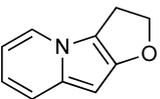
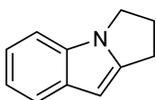
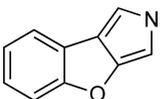
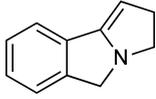
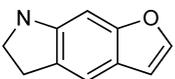
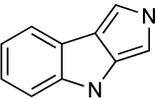
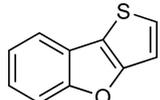
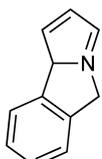
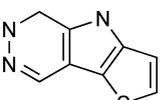
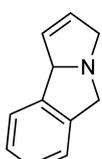
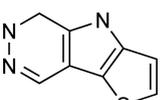
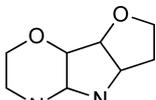
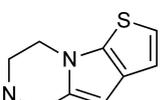
12, 829

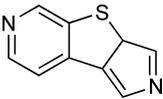
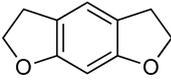
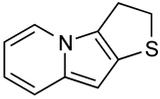
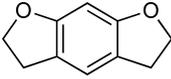
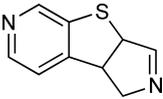
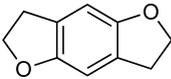
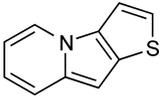
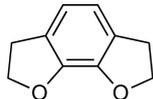
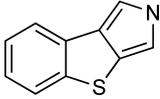
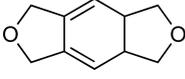
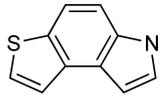
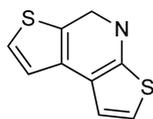
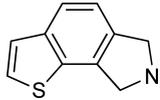
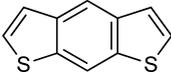
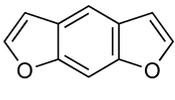
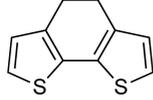
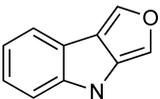
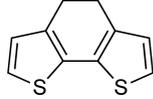
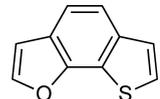
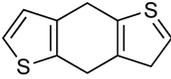
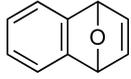
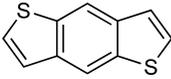
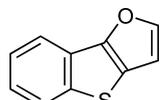
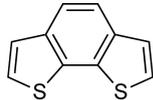


1,2,3,6,7,8-Hexahydro-2,7-diaza-as-indacene

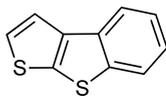
10, 1173



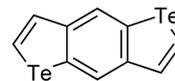
1,2,3,6-Tetrahydro-3,6-diazas-indacene 10, 1167–1168		C <sub>4</sub> N-C <sub>4</sub> O-C <sub>5</sub> N 3H-8-Oxa-3,5-diazacyclopenta[a]indene 12, 780f	
1,2,3,7-Tetrahydropyrrolo[3,2-f]indole 10, 1166		2,3-Dihydro-1H-8-oxa-3,5-diazacyclopenta[a]indene 12, 779f	
2,3,5,9b-Tetrahydro-1H-pyrrolo[2,1-a]isoindole 12, 793		2,3,3a,3b,7a,8a-Hexahydro-1H-8-oxa-2,4-diazacyclopenta[a]indene 12, 778f	
1,5-Dihydro-pyrrolo[2,3-f]indole 10, 1174		2,3,3a,3b,4,5,7a,8a-Octahydro-1H-8-oxa-2,4-diazacyclopenta[a]indene 12, 847f	
2,3-Dihydro-1H-3a-azacyclopenta[a]indene 1, 153, 155–156		2,3-Dihydro-1-oxa-3b-azacyclopenta[a]indene 12, 813	
2,3-Dihydro-1H-3a-azacyclopenta[a]indene 1, 603–604; 11, 1–40		C <sub>4</sub> N-C <sub>4</sub> O-C <sub>6</sub> 2H-8-Oxa-2-aza-cyclopenta[a]indene 10, 16–17	
2,5-Dihydro-3H-pyrrolo[2,1-a]isoindole 12, 794f		6,7-Dihydro-5H-1-oxa-7-aza-s-indacene 10, 1166–1167	
2,8-Dihydro-2,8-diazacyclopenta[a]indene 10, 18, 18		8-Oxa-3-thia-cyclopenta[a]indene 10, 11; 11, 15	
5,9b-Dihydro-pyrrolo[2,1-a]isoindole 11, 15		C <sub>4</sub> N-C <sub>4</sub> S-C <sub>4</sub> N <sub>2</sub> 7,8-Dihydro-6H-3-thia-5,6,8-triaza-cyclopenta[a]indene 12, 782f	
5,9b-Dihydro-3H-pyrrolo[2,1-a]isoindole 11, 17		7,8-Dihydro-6H-3-thia-5,6,8-triaza-cyclopenta[a]indene 12, 784	
C <sub>4</sub> N-C <sub>4</sub> O-C <sub>4</sub> NO Decahydro-3,4-dioxo-7,8-diazacyclopenta[a]indene 12, 784		4,5,6,7-Tetrahydro-3-thia-3b,6-diazacyclopenta[a]indene 12, 821	

C <sub>4</sub> N-C <sub>4</sub> S-C <sub>5</sub> N 8aH-8-Thia-2,6-diaza- cyclopenta[a]indene 12, 781f, 782f		C <sub>4</sub> O-C <sub>4</sub> O-C <sub>6</sub> 2,3,5,6-Tetrahydro-benzo [1,2-b;5,4-b']difuran 9, 685	
2,3-Dihydro-1-thia-3b-aza- cyclopenta[a]indene 12, 816-817		2,3,5,6-Tetrahydro-benzo [1,2-b;5,4-b']difuran 10, 1167	
3a,8a-Dihydro-3H-8-thia-2,6- diaza-cyclopenta[a]indene 12, 781f, 782f		2,3,6,7-Tetrahydro- benzo[1,2-b;4,5-b']difuran 10, 1167, 1173	
1-Thia-3b-aza-cyclopenta[a]indene 12, 818-819		2,3,6,7-Tetrahydro- benzo[2,1-b;3,4-b']difuran 10, 1180	
C <sub>4</sub> N-C <sub>4</sub> S-C <sub>6</sub> 2H-8-Thia-2-aza-cyclopenta[a] indene 10, 16-17		3a,5,7,8a-Tetrahydro- 1H,3H-benzo[1,2-c;4,5-c']difuran 10, 1180	
6H-3-Thia-6-aza-as-indacene 10, 1169		C <sub>4</sub> S-C <sub>4</sub> S-C <sub>5</sub> N 4,5-Dihydro-3,6-dithia- 4-aza-as-indacene 3, 776	
7,8-Dihydro-6H-1-thia- 7-aza-as-indacene 10, 1173		C <sub>4</sub> S-C <sub>4</sub> S-C <sub>6</sub> Benzo[1,2-b:5,4-b0]dithiophene 9, 938f; 3, 865f	
C <sub>4</sub> O-C <sub>4</sub> O-C <sub>6</sub> Benzo[1,2-b;5,4-b']difuran 10, 1174		4,5-Dihydro-1,8-dithia-as-indacene 3, 865f	
C <sub>4</sub> O-C <sub>4</sub> S-C <sub>6</sub> 8H-2-Oxa-8-aza-cyclopenta[a] indene 10, 17		4,5-Dihydro-1,8-dithia-as-indacene 10, 1172, 1175, 1176	
1-Oxa-8-thia-as-indacene 10, 1168		4,8-Dihydro-3H-1λ <sup>4</sup> ,5- dithia-s-indacene 10, 1176	
C <sub>4</sub> O-C <sub>4</sub> O-C <sub>6</sub> 11-Oxa-tricyclo[6.2.1.02,7]undeca- 2(7),3,5,9-tetraene 3, 473; 3, 551		1,5-Dithia-s-indacene 3, 855f	
C <sub>4</sub> O-C <sub>4</sub> S-C <sub>6</sub> [1]Benzothieno[3,2-b]furan 10, 11, 15		1,8-Dithia-as-indacene 10, 1169	

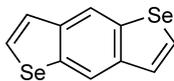
1,8-Dithia-cyclopenta[a]indene  
12, 789f



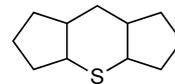
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1,5-Ditelena-s-indacene  
10, 1175



C<sub>4</sub>Se-C<sub>4</sub>Se-C<sub>6</sub>  
1,5-Diselena-s-indacene  
10, 1175



C<sub>5</sub>-C<sub>5</sub>-C<sub>5</sub>S  
Decahydro-4-thia-s-indacene  
7, 783f

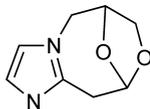


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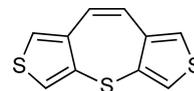
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10,12-Dioxa-3,6-diaza-tricyclo  
[7.2.1.03,7]dodeca-3(7),4-diene  
14, 386



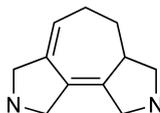
C<sub>4</sub>S-C<sub>4</sub>S-C<sub>6</sub>S

2,4,6-Trithia-cyclopenta[f]  
azulene  
13, 126

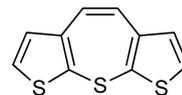


C<sub>4</sub>N-C<sub>4</sub>N-C<sub>7</sub>

2,3,3a,4,5,7,8,9-Octahydro-1H-  
2,8-diaza-cyclopenta[c]azulene  
10, 1190



3,4,5-Trithia-cyclopenta[f]azulene  
13, 126



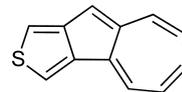
C<sub>4</sub>O-C<sub>4</sub>O-C<sub>7</sub>

1,3a,4,5,7,9-Hexahydro-3H-2,8-  
dioxo-cyclopenta[c]azulene  
10, 1190



C<sub>4</sub>S-C<sub>5</sub>-C<sub>7</sub>

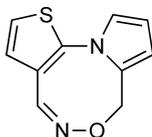
2-Thia-cyclopenta[a]azulene  
3, 850f



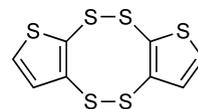
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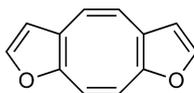
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7H-6-Oxa-1-thia-5,10a-diaza-  
dicyclopenta[a,c]cyclooctene  
14, 494



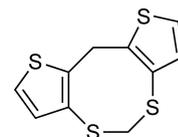
C<sub>4</sub>S-C<sub>4</sub>S-C<sub>4</sub>S<sub>4</sub>  
1,4,5,8,9,10-Hexathia-  
dicyclopenta[a,c]cyclooctene  
4, 983*f*



C<sub>4</sub>O-C<sub>4</sub>O-C<sub>8</sub>  
Cycloocta[1,2-b:6,5-b0]difuran  
10, 1188-1189

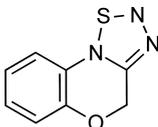


C<sub>4</sub>S-C<sub>4</sub>S-C<sub>6</sub>S<sub>2</sub>  
10H-1,4,6,9-Tetrathia-  
dicyclopenta[a,d]cyclooctene  
14, 230

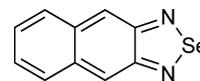


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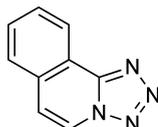
CN<sub>3</sub>S-C<sub>4</sub>NO-C<sub>6</sub>  
2,4-Dihydro-5-oxa-1-thia-2,3,9b-  
triazacyclopenta[a]naphthalene  
6, 493



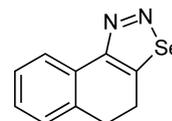
C<sub>2</sub>N<sub>2</sub>Se-C<sub>6</sub>-C<sub>6</sub>  
Naphtho[2,3-*d*][1,2,5]-  
selenadiazole  
6, 568–569



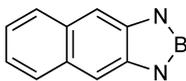
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1,2,3,3a-Tetraaza-cyclopenta[a]  
naphthalene  
7, 87; 6, 344f; 6, 390



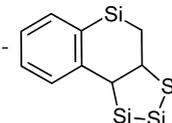
4,5-Dihydro-3-selena-1,2-  
diazacyclopenta[a]naphthalene  
6, 557–558; 6, 562f



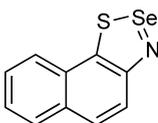
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2,3-Dihydro-1H-1,3-diaza-2-  
bora-cyclopenta[b]naphthalene  
6, 644



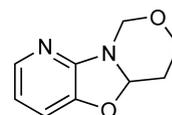
C<sub>2</sub>Si<sub>3</sub>-C<sub>5</sub>Si-C<sub>6</sub>  
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tetrasila-cyclopenta[a]naphthalene  
6, 662, 668



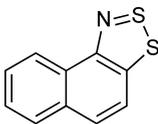
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1-Thia-2λ<sub>4</sub>-selena-3-aza-  
cyclopenta[a]naphthalene  
6, 573f



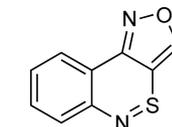
C<sub>3</sub>NO-C<sub>4</sub>NO-C<sub>5</sub>N  
1,9a-Dihydro-2H-3,9-dioxa-  
4a,5-diaza-fluorene  
12, 997



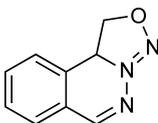
C<sub>2</sub>NS<sub>2</sub>-C<sub>6</sub>-C<sub>6</sub>  
2λ<sup>+</sup><sub>4</sub>,3-Dithia-1-aza-  
cyclopenta[a]naphthalene  
6, 28



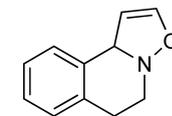
C<sub>3</sub>NO-C<sub>4</sub>NS-C<sub>6</sub>  
2-Oxa-4λ<sup>+</sup>-thia-1,5-diaza-  
cyclopenta[a]naphthalene  
8, 544



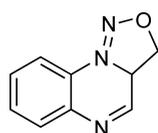
C<sub>2</sub>N<sub>2</sub>O-C<sub>4</sub>N<sub>2</sub>-C<sub>6</sub>  
1,9b-Dihydro-2-oxa-3,3a,4-  
triazacyclopenta[a]naphthalene  
5, 231–232



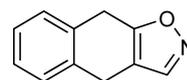
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6,10b-Dihydro-5H-isoxazolo-  
[3,2-*a*]isoquinoline  
4, 386, 387



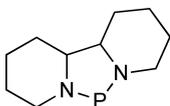
3,3a-Dihydro-2-oxa-1,5,9b-  
triazacyclopenta[a]naphthalene  
5, 214



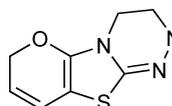
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4,9-Dihydro-naphtho[2,3-*d*]-  
isoxazole  
5, 215f



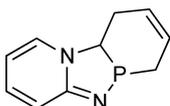
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Decahydro-8a,9a-diaza-9-  
phospha-fluorene  
12, 992



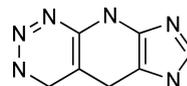
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3,4-Dihydro-2H,6H-5-oxa-9-  
thia-1,2,4a-triaza-fluorene  
12, 996



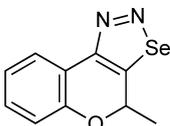
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5,8-Dihydro-4bH-4a,9-diaza-  
8a-phospha-fluorene  
12, 996



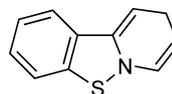
7,9-Dihydro-8H-4-oxa-1-  
thia-3,5,6,7-tetraaza-  
cyclopenta[b]naphthalene  
10, 892

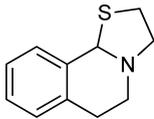
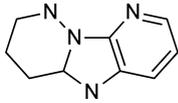
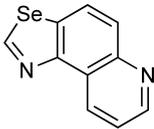
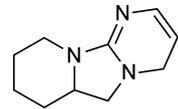
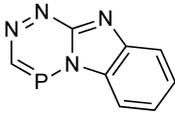
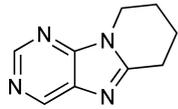
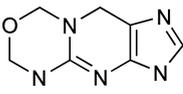
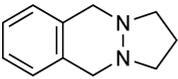
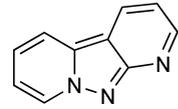
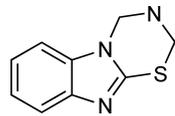
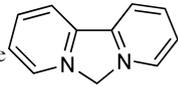
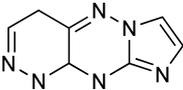
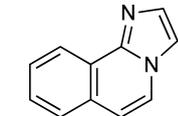
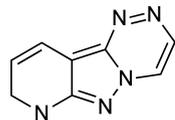
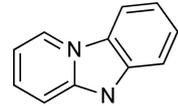
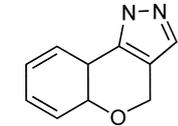
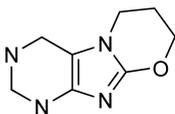
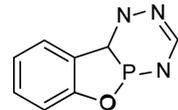
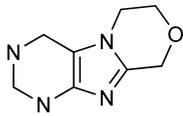
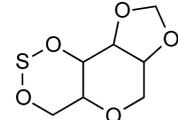


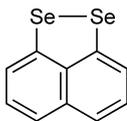
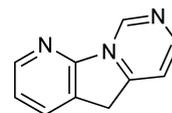
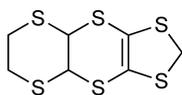
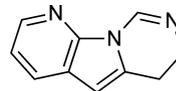
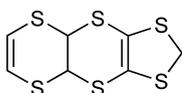
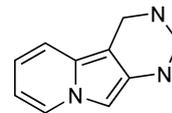
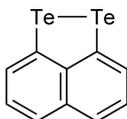
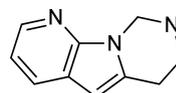
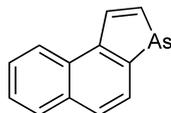
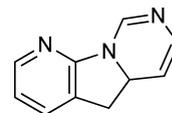
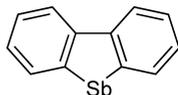
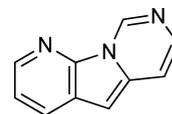
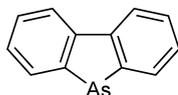
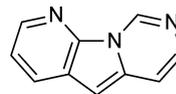
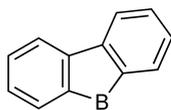
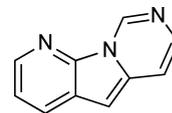
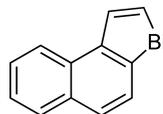
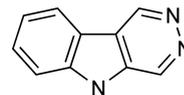
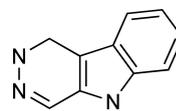
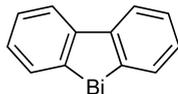
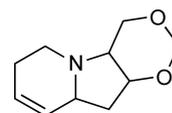
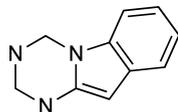
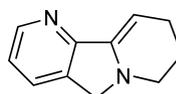
C<sub>2</sub>N<sub>2</sub>Se-C<sub>5</sub>O-C<sub>6</sub>  
4H-5-Oxa-3-selena-1,2-diaza-  
cyclopenta[a]naphthalene  
6, 562f

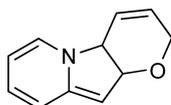
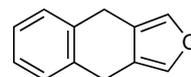
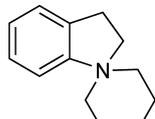
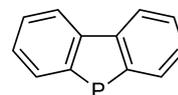
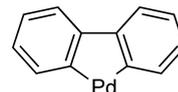
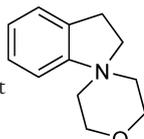
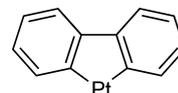
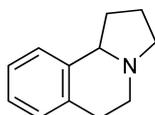
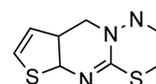
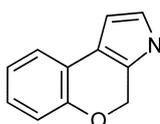
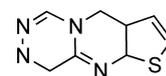
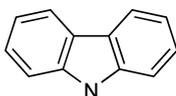
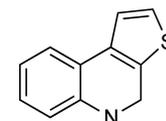
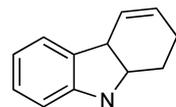
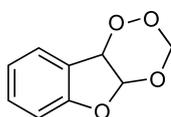
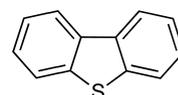
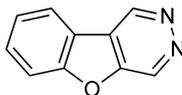
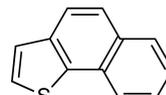
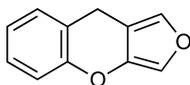
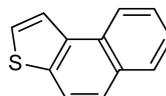
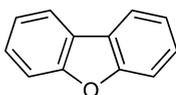
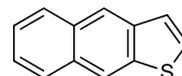
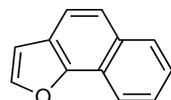
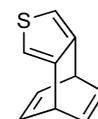


C<sub>3</sub>NS-C<sub>5</sub>N-C<sub>6</sub>  
6H-9-Thia-8a-aza-fluorene  
4, 578

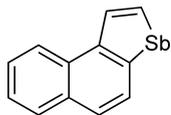


- 2,3,6,10b-Tetrahydro-5H-thiazolo[2,3-a]isoquinoline 4, 671*t*
- 
- C<sub>3</sub>N<sub>2</sub>-C<sub>4</sub>N<sub>2</sub>-C<sub>5</sub>N  
1,2,3,4,9,9a-Hexahydro-4,4a,5,9-tetraaza-fluorene 12, 992–993
- 
- C<sub>3</sub>NSe-C<sub>5</sub>N-C<sub>6</sub>  
3-Selena-1,6-diazacyclopenta[a]naphthalene 4, 791–821
- 
- 5,6,7,8,8a,9-Hexahydro-1H-4,4b,9a-triaza-fluorene 12, 991*f*
- 
- C<sub>3</sub>N<sub>2</sub>-C<sub>2</sub>N<sub>3</sub>P-C<sub>6</sub>  
1,2,4a,9-Tetraaza-4-phospha-fluorene 11, 895–908
- 
- 5,6,7,8-Tetrahydro-2,4,4b,9-tetraaza-fluorene 12, 997
- 
- C<sub>3</sub>N<sub>2</sub>-C<sub>3</sub>N<sub>2</sub>O-C<sub>4</sub>N<sub>2</sub>  
3,5,6,9-Tetrahydro-7-oxa-1,3,4,5,8a-pentaaza-cyclopenta[b]naphthalene 9, 461–462
- 
- C<sub>3</sub>N<sub>2</sub>-C<sub>4</sub>N<sub>2</sub>-C<sub>6</sub>  
2,3,5,10-Tetrahydro-1H-pyrazolo[1,2-b]phthalazine 4, 12
- 
- C<sub>3</sub>N<sub>2</sub>-C<sub>5</sub>N-C<sub>5</sub>N  
Dipyrido[1,2-b;3',2'-d]pyrazole 12, 990
- 
- C<sub>3</sub>N<sub>2</sub>-C<sub>3</sub>N<sub>2</sub>S-C<sub>6</sub>  
3,4-Dihydro-2H-1-thia-3,4a,9-triaza-fluorene 9, 500
- 
- 6H-Dipyrido[1,2-c;2',1'-e]imidazole 12, 991
- 
- C<sub>3</sub>N<sub>2</sub>-C<sub>3</sub>N<sub>3</sub>-C<sub>4</sub>N<sub>2</sub>  
5,8,8a,9-Tetrahydro-1,3a,4,7,8,9-hexaaza-cyclopenta[b]naphthalene 10, 1117
- 
- C<sub>3</sub>N<sub>2</sub>-C<sub>5</sub>N-C<sub>6</sub>  
Imidazo[2,1-a]isoquinoline 4, 209
- 
- C<sub>3</sub>N<sub>2</sub>-C<sub>3</sub>N<sub>3</sub>-C<sub>5</sub>N  
1,2-Dihydro-1,5,6,8a,9-pentaaza-fluorene 12, 993
- 
- 5H-Benzo[4,5]imidazo[1,2-a]pyridine 12, 994
- 
- C<sub>3</sub>N<sub>2</sub>-C<sub>5</sub>O-C<sub>6</sub>  
1,4,5a,9a-Tetrahydro-chromeno-[4,3-c]pyrazole 4, 25
- 
- C<sub>3</sub>N<sub>2</sub>-C<sub>3</sub>N<sub>3</sub>-C<sub>4</sub>N<sub>2</sub>O  
1,2,3,4,6,7-Hexahydro-5H-8-oxa-1,3,4b,9-tetraaza-fluorene 12, 994*f*
- 
- C<sub>3</sub>OP-C<sub>2</sub>N<sub>3</sub>P-C<sub>6</sub>  
4,4a-Dihydro-1H-9-oxa-1,3,4-triaza-9a-phospha-fluorene 12, 537
- 
- 2,3,4,5,6,8-Hexahydro-1H-7-oxa-1,3,4b,9-tetraaza-fluorene 12, 996
- 
- C<sub>3</sub>O<sub>2</sub>-C<sub>3</sub>O<sub>2</sub>S-C<sub>5</sub>O  
Hexahydro-1,3,5,7,9-pentaoxa-8-thia-cyclopenta[a]naphthalene 10, 889
- 

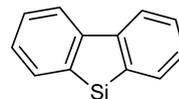
C<sub>3</sub>Se<sub>2</sub>-C<sub>6</sub>-C<sub>6</sub>1,2-Discelena-acenaphthylene  
4, 1094, 1097-1098, 1098-1099, 1099C<sub>4</sub>N-C<sub>4</sub>N<sub>2</sub>-C<sub>5</sub>N9H-3,4a,5-Triaza-fluorene  
12, 990-991C<sub>3</sub>S<sub>2</sub>-C<sub>4</sub>S<sub>2</sub>-C<sub>4</sub>S<sub>2</sub>4a,6,7,8a-Tetrahydro-1,3,4,5,8,9-hexathia-cyclopenta[b]-naphthalene  
8, 8751,2-Dihydro-3,4a,5-triaza-fluorene  
12, 995f4a,8a-Dihydro-1,3,4,5,8,9-hexathia-cyclopenta[b]-naphthalene  
4, 10051,2,3,4-Tetrahydro-1,3,8a-triaza-fluorene  
12, 995C<sub>3</sub>Te<sub>2</sub>-C<sub>6</sub>-C<sub>6</sub>1,2-Ditellura-acenaphthylene  
4, 10941,2,3,4-Tetrahydro-3,4a,5-triaza-fluorene  
12, 995f3H-3-Arsa-cyclopenta[a]-naphthalene  
3, 1149-11799,9a-Dihydro-3,4a,5-triaza-fluorene  
12, 990-991C<sub>4</sub>Sb-C<sub>6</sub>-C<sub>6</sub>5H-Dibenzostibole  
3, 1149-11793,4a,5-Triaza-fluorene  
12, 990-9915H-Benzo[b]arsindole  
3, 1149-11793,4a,5-Triaza-fluorene  
12, 995C<sub>4</sub>B-C<sub>6</sub>-C<sub>6</sub>5H-Dibenzoborole  
3, 1225-12413,4a,5-Triaza-fluorene  
12, 9963H-3-Bisma-cyclopenta[a]-naphthalene  
3, 1149-1179C<sub>4</sub>N-C<sub>4</sub>N<sub>2</sub>-C<sub>6</sub>  
9H-2,3,9-Triaza-fluorene  
8, 404,9-Dihydro-3H-2,3,9-triaza-fluorene  
8, 21f5H-Benzo[b]bismindole  
3, 1149-1179C<sub>4</sub>N-C<sub>4</sub>O<sub>2</sub>-C<sub>5</sub>N  
4a,5,6,8a,9,9a-Hexahydro-4H-1,3-dioxa-4b-aza-fluorene  
12, 997C<sub>4</sub>N-C<sub>3</sub>N<sub>3</sub>-C<sub>6</sub>1,2,3,4-Tetrahydro-1,3,4a-triaza-fluorene  
11, 641C<sub>4</sub>N-C<sub>5</sub>N-C<sub>5</sub>N  
5,7,8,9-Tetrahydro-pyrido[2,3-a]indolizine  
12, 991f

C<sub>4</sub>N-C<sub>5</sub>N-C<sub>5</sub>O4a,9a-Dihydro-2H-1-oxa-  
4b-aza-fluorene  
12, 9934,9-Dihydro-naphtho[2,3-c]furan  
3, 401C<sub>4</sub>N-C<sub>5</sub>N-C<sub>6</sub>Spiro[indoline-1,2-hexeneum, salt  
12, 1052fC<sub>4</sub>P-C<sub>6</sub>-C<sub>6</sub>  
5H-Dibenzophosphole  
3, 1029-1147C<sub>4</sub>Pd-C<sub>6</sub>-C<sub>6</sub>Dibenzopalladiacyclopentadiene  
3, 1287Spiro[indoline-1,4'-morpholinium], salt  
12, 1052fC<sub>4</sub>Pt-C<sub>6</sub>-C<sub>6</sub>Dibenzoplatinacyclopentadiene  
3, 12871,2,3,5,6,10b-Hexahydro-pyrrolo-  
[2,1-a]isoquinoline  
7, 291-292C<sub>4</sub>S-C<sub>3</sub>N<sub>2</sub>S-C<sub>4</sub>N<sub>2</sub>3a,6,7,9a-Tetrahydro-4H,5H-  
1,8-dithia-4a,5,9-triaza-  
cyclopenta[b]naphthalene  
12, 327-340C<sub>4</sub>N-C<sub>5</sub>O-C<sub>6</sub>3,4-Dihydro-5-oxa-3-aza-  
cyclopenta[a]naphthalene  
3, 62fC<sub>4</sub>S-C<sub>3</sub>N<sub>3</sub>-C<sub>4</sub>N<sub>2</sub>3a,7,8,9a-Tetrahydro-4H-1-  
thia-4a,6,7,9-tetraaza-  
cyclopenta[b]naphthalene  
12, 327-340C<sub>4</sub>N-C<sub>6</sub>-C<sub>6</sub>9H-Carbazole  
3, 1-43; 3, 269-351; 3,  
45-268; 3, 269-351C<sub>4</sub>S-C<sub>5</sub>N-C<sub>6</sub>4,5-Dihydro-thieno[2,3-c]quinoline  
3, 7752,4a,9,9a-Tetrahydro-1H-carbazole  
3, 294C<sub>4</sub>O-C<sub>3</sub>O<sub>3</sub>-C<sub>6</sub>4a,9a-Dihydro-1,3,4,9-  
tetraoxa-fluorene  
10, 506C<sub>4</sub>S-C<sub>6</sub>-C<sub>6</sub>Dibenzothiophene  
3, 741-841; 3, 931-974;  
3, 625-739; 3, 625-739; 3,  
843-930C<sub>4</sub>O-C<sub>4</sub>N<sub>2</sub>-C<sub>6</sub>Benzo[4,5]furo[2,3-d]pyridazine  
8, 40Naphtho[1,2-b]thiophene  
3, 931-974C<sub>4</sub>O-C<sub>5</sub>O-C<sub>6</sub>9H-2,4-Dioxa-cyclopenta[b]  
naphthalene  
3, 500Naphtho[2,1-b]thiophene  
3, 931-974C<sub>4</sub>O-C<sub>6</sub>-C<sub>6</sub>Dibenzofuran  
3, 389-406; 3, 407-496; 3,  
571-623Naphtho[2,3-b]thiophene  
3, 931-974Naphtho[1,2-b]furan  
3, 497-5694-Thia-tricyclo[5.2.2.0(2,6)]undeca-  
2,5,8,10-tetraene  
3, 752

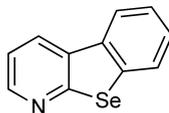
3H-3-Stiba-cyclopenta[a]  
naphthalene  
3, 1149–1179



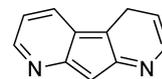
C<sub>4</sub>Si-C<sub>6</sub>-C<sub>6</sub>  
9H-Dibenzosilole  
3, 1152



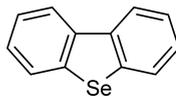
C<sub>4</sub>Se-C<sub>5</sub>N-C<sub>6</sub>  
9-Selena-1-aza-fluorene  
3, 989–990



C<sub>5</sub>-C<sub>5</sub>N-C<sub>5</sub>N  
1H-Cyclopenta[1,2-b:4,3-b0]-  
dipyridine  
10, 1247

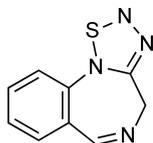


C<sub>4</sub>Se-C<sub>6</sub>-C<sub>6</sub>  
Dibenzoselenophene  
3, 931; 6, 542

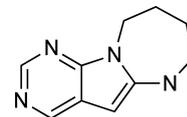


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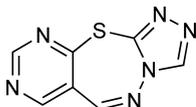
CN<sub>3</sub>S-C<sub>6</sub>-C<sub>5</sub>N<sub>2</sub>  
2,4-Dihydro-1-thia-2,3,5,10b-  
tetraaza-benzo[e]azulene  
6, 493



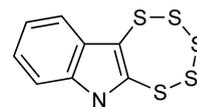
C<sub>4</sub>N-C<sub>4</sub>N<sub>2</sub>-C<sub>5</sub>N<sub>2</sub>  
6,7,8,9-Tetrahydro-5H-2,4,4b,9-  
tetraaza-benzo[a]azulene  
13, 175



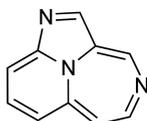
C<sub>2</sub>N<sub>3</sub>-C<sub>4</sub>N<sub>2</sub>-C<sub>4</sub>N<sub>2</sub>S  
4-Thia-2,3,5,7,10,10a-hexaaza-  
benzo[f]azulene  
013, 411f



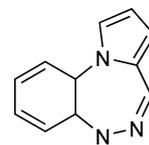
C<sub>4</sub>N-C<sub>6</sub>-C<sub>2</sub>S<sub>5</sub>  
10H-5,6,7,8,9-Pentathia-10-  
aza-benzo[a]azulene  
3, 166



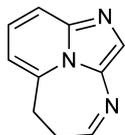
C<sub>3</sub>N<sub>2</sub>-C<sub>5</sub>N-C<sub>5</sub>N<sub>2</sub>  
2,8,9b-Triaza-benzo[cd]azulene  
13, 205



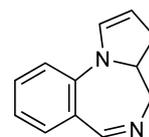
C<sub>4</sub>N-C<sub>6</sub>-C<sub>4</sub>N<sub>3</sub>  
6a,10a-Dihydro-6H-5,6,10b-  
triazza-benzo[c]azulene  
13, 473



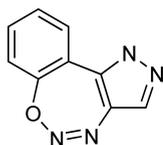
6,7-Dihydro-2,9,9b-triaza-  
benzo[cd]azulene  
13, 172



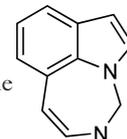
C<sub>4</sub>N-C<sub>6</sub>-C<sub>5</sub>N<sub>2</sub>  
3a,4-Dihydro-3H-benzo[f]-  
pyrrolo[1,2-a][1,4]diazepine  
4, 225



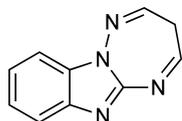
C<sub>3</sub>N<sub>2</sub>-C<sub>6</sub>-C<sub>4</sub>N<sub>2</sub>O  
1H-6-Oxa-1,2,4,5-tetraaza-  
benzo[e]azulene  
13, 389



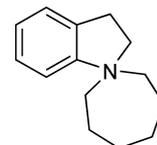
8,9-Dihydro-8,9a-diaza-benzo[cd]azulene  
13, 175



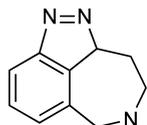
C<sub>3</sub>N<sub>2</sub>-C<sub>6</sub>-C<sub>4</sub>N<sub>3</sub>  
7H-4b,5,9,10-Tetraaza-  
benzo[a]azulene  
13, 418f



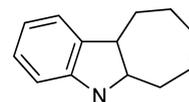
C<sub>4</sub>N-C<sub>6</sub>-C<sub>6</sub>N  
Spiro[indoline-heptenium], salt  
12, 1052f



C<sub>3</sub>N<sub>2</sub>-C<sub>6</sub>-C<sub>6</sub>N  
7,8,9,9a-Tetrahydro-6H-1,2,7-  
triazza-benzo[cd]azulene  
13, 209



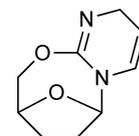
C<sub>4</sub>N-C<sub>6</sub>-C<sub>7</sub>  
5,5a,6,7,8,9,10,10a-Octahydro-  
cyclohepta[b]indole  
3, 327



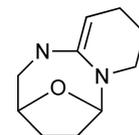
C<sub>4</sub>N-C<sub>3</sub>N<sub>2</sub>S-C<sub>7</sub>  
11-Thia-8,9-diaza-tricyclo[5.4.0.0<sup>4,8</sup>]-  
undeca-2,5,9-triene  
13, 425f



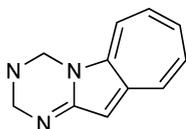
C<sub>4</sub>O-C<sub>4</sub>N<sub>2</sub>-C<sub>4</sub>NO<sub>2</sub>  
8,13-Dioxa-2,6-diaza-  
tricyclo[8.2.1.0<sup>2,7</sup>]trideca-3,6-diene  
14, 204



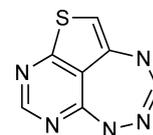
C<sub>4</sub>O-C<sub>5</sub>N-C<sub>4</sub>N<sub>2</sub>O  
13-Oxa-2,8-diaza-  
tricyclo[8.2.1.0<sup>2,7</sup>]tridec-6-ene  
14, 173-174



C<sub>4</sub>N-C<sub>3</sub>N<sub>3</sub>-C<sub>7</sub>  
3,4-Dihydro-2H-1,3,4a-triazza-  
benzo[a]azulene  
11, 639



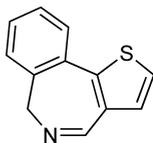
C<sub>4</sub>S-C<sub>4</sub>N<sub>2</sub>-C<sub>4</sub>N<sub>3</sub>  
6,9-Dihydro-2-thia-3,5,6,7,9-  
pentaaza-benzo[cd]azulene  
13, 420



C<sub>4</sub>S-C<sub>6</sub>-C<sub>6</sub>N

6H-1-Thia-5-aza-benzo[e]azulene

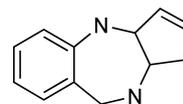
3, 751

C<sub>5</sub>-C<sub>6</sub>-C<sub>5</sub>N<sub>2</sub>

1,3a,4,9,10,10a-Hexahydro-

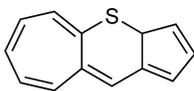
4,10-diaza-benzo[f]azulene

8, 349-350

C<sub>5</sub>-C<sub>5</sub>S-C<sub>7</sub>

3aH-4-Thia-cyclohepta[f]indene

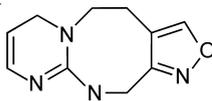
7, 860



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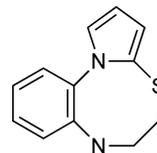
C<sub>3</sub>NO-C<sub>4</sub>N<sub>2</sub>-C<sub>6</sub>N<sub>2</sub>

4,5,10,11-Tetrahydro-6H-2-oxa-  
1,5a,9,10-tetraaza-benzo[a]-  
cyclopenta[e]cyclooctene  
14, 184f



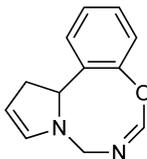
C<sub>4</sub>N-C<sub>6</sub>-C<sub>5</sub>N<sub>2</sub>S

7-Thia-2,10-diaza-tricyclo  
[9.4.0.02,6]pentadeca-  
1(11),3,5,12,14-pentaene  
14, 493



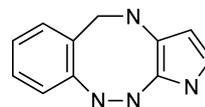
C<sub>4</sub>N-C<sub>6</sub>-C<sub>4</sub>N<sub>2</sub>O

10-Oxa-6,8-diaza-tricyclo[9.4.0.02,6]  
pentadeca-1(11),4,8,12,14-pentaene  
14, 499



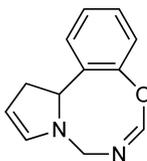
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4,5,10,11-Tetrahydro-1H-  
1,4,10,11-tetraaza-benzo[a]  
cyclopenta[e]cyclooctene  
14, 492



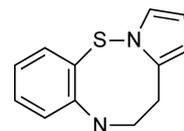
C<sub>4</sub>N-C<sub>6</sub>-C<sub>5</sub>N<sub>2</sub>O

10-Oxa-6,8-diaza-tricyclo[9.4.0.02,6]  
pentadeca-1(11),4,8,12,14-pentaene  
14, 499



C<sub>4</sub>N-C<sub>6</sub>-C<sub>5</sub>N<sub>3</sub>

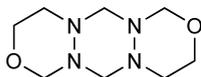
5,6-Dihydro-4H-11-thia-  
6,11a-diaza-benzo[a]  
cyclopenta[d]cyclooctene  
14, 492



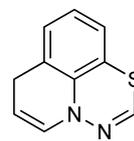
# 6,6,6

$C_2N_4-C_3N_2O-C_3N_2O$

Tetrahydro-2,6-dioxa-4a,8a,  
9a,10a-tetraaza-anthracene  
12, 1019

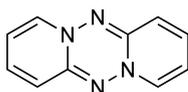


6H-1-Thia-3,3a-diaza-phenalene  
12, 241

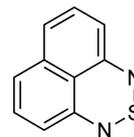


$C_2N_4-C_5N-C_5N$

4a,8a,9,10-Tetraaza-anthracene  
12, 321–325

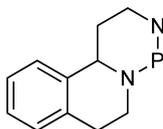


$C_3N_2S-C_6-C_6$   
1H,3H-2-Thia-1,3-diaza-phenalene  
9, 368, 383

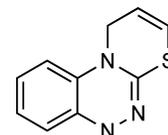


$C_3N_3NOP-C_5N-C_6$

4,4a; 9,10-Tetrahydro-3H-2-  
oxa-10a-aza-1-phospha-phenan-  
threne  
12, 248, 249

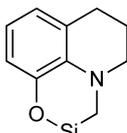


$C_3N_3-CN_4NS-C_6$   
4H,9H-1-Thia-4a,9,10-triaza-  
phenanthrene  
12, 327–340

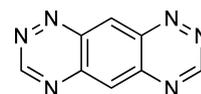


$C_3NOSi-C_5N-C_6$

2,3,5,6-Tetrahydro-4H-1-oxa-3a-  
aza-2-sila-phenalene  
12, 251

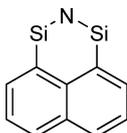


$C_3N_3-C_3N_3-C_6$   
1,2,4,5,7,8-Hexaaza-anthracene  
10, 1259f

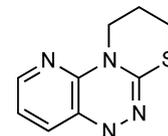


$C_3NSi_2-C_6-C_6$

2,3-Dihydro-1*H*-naphtho[1,8-cd]  
[1,2,6]azadisilene  
9, 940

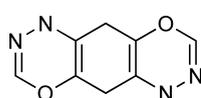


$C_3N_3-C_4NS-C_5N$   
3,4-Dihydro-2H,9H-1-thia-  
4a,5,9,10-tetraaza-phenanthrene  
12, 327–340

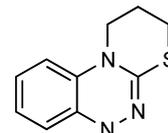


$C_3N_2O-C_3N_2O-C_6$

1,5,9,10-Tetrahydro-4,8-dioxa-  
1,2,5,6-tetraaza-anthracene  
9, 436

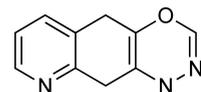


$C_3N_3-C_4NS-C_6$   
3,4-Dihydro-2H,9H-1-thia-  
4a,9,10-triaza-phenanthrene  
12, 327–340

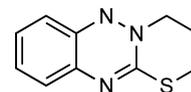


$C_3N_2O-C_5N-C_6$

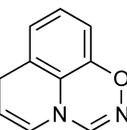
9,10-Dihydro-1H-4-oxa-  
1,2,8-triaza-anthracene  
10, 1259



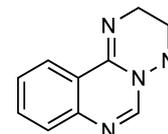
3,4-Dihydro-2H,10H-1-thia-  
4a,9,10-triaza-anthracene  
12, 327–340



6H-1-Oxa-2,3a-diaza-phenalene  
9, 317, 323

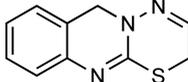


$C_3N_3-C_4N_2-C_6$   
2,3-Dihydro-1H-1,4,9,10a-  
tetraaza-phenanthrene  
12, 327–340

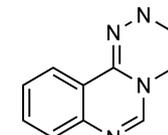


$C_3N_2S-C_4N_2-C_6$

2H,10H-1-Thia-4,4a,  
9-triaza-anthracene  
12, 327–340

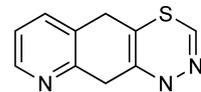


2,3-Dihydro-1H-3,4,9,10a-  
tetraaza-phenanthrene  
12, 327–340

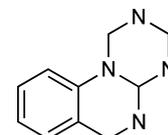


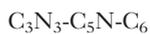
$C_3N_2S-C_5N-C_6$

9,10-Dihydro-1H-4-thia-  
1,2,8-triaza-anthracene  
10, 1259

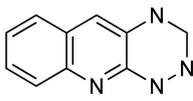


1,3,4,9,10,10a-Hexahydro-2H-  
1,3,4a,10-tetraaza-phenanthrene  
12, 327–340

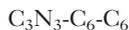
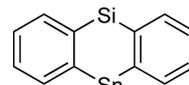




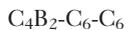
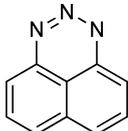
1,2,3,4-Tetrahydro-1,2,4,9-tetraaza-anthracene  
10, 888f



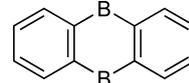
10H-dibenzo[b,c][1,4]stanasiline  
9, 26–27, 26



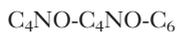
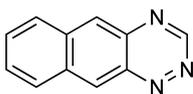
1H-Naphtho[1,8-de][1,2,3]triazine  
9, 1–93



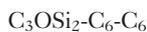
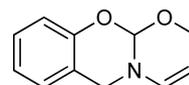
9,10-Dihydro-9,10-dibora-anthracene  
9, 922, 922



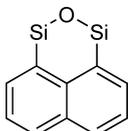
1,2,4-Triaza-anthracene  
9, 95–196



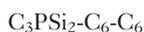
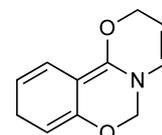
2H,10H-1,9-Dioxa-4a-aza-anthracene  
12, 310



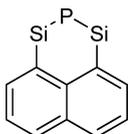
1,3-Dihydronaphtho[1,8-cd][1,2,6]oxadisilene  
9, 940



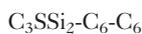
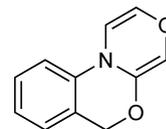
3H,7H-4,9-Dioxa-10a-aza-phenanthrene  
12, 310



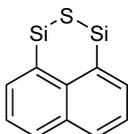
2,3-Dihydro-1H-naphtho[1,8-cd][1,2,6]phosphadisilene  
9, 940



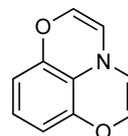
9H-2,10-Dioxa-4a-aza-phenanthrene  
12, 310



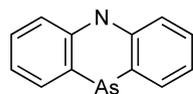
1,3-dihydronaphtho[1,8-cd][1,2,6]thiadisilene  
9, 940



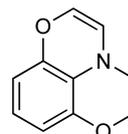
1,6-Dioxa-3a-aza-phenalene  
12, 310



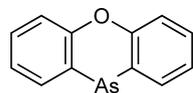
5,10-Dihydro-phenarsazine  
9, 880



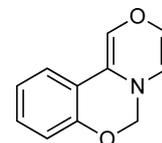
2,3-Dihydro-1,6-dioxa-3a-aza-phenalene  
12, 310



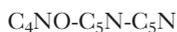
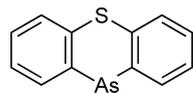
10H-Phenoxarsine  
9, 875–911



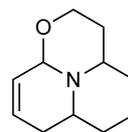
3,9-Dioxa-10a-aza-phenanthrene  
12, 310



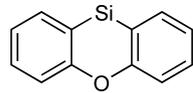
10H-Phenothiarsine  
9, 875–911



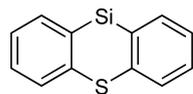
3,3a,4,5,6,6a,7,9a-Octahydro-2H-1-oxa-9b-aza-phenalene  
12, 30f



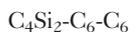
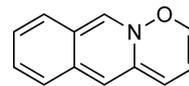
10H-dibenzo[b,c][1,4]oxasiline  
9, 26–27, 26



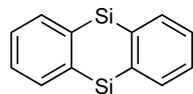
10H-Dibenzo[b,c][1,4]thiasilene  
9, 26–27, 26



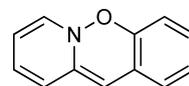
1-Oxa-9a-aza-anthracene  
12, 77–217

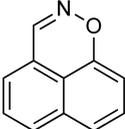
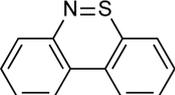
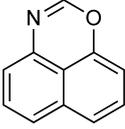
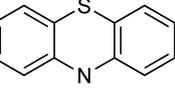
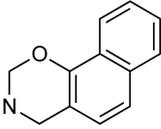
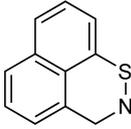
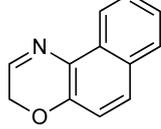
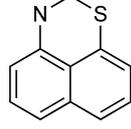
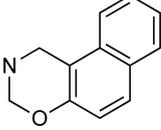
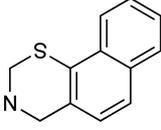
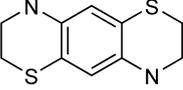
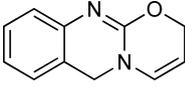
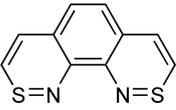
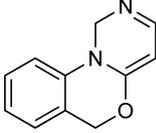
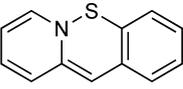
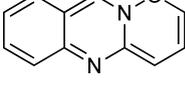
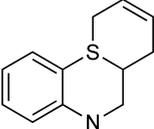
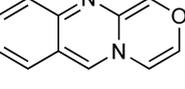
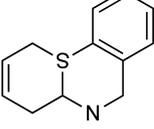
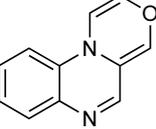
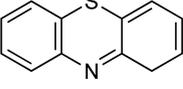
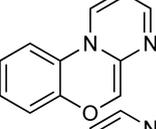
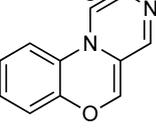


5,10-Dihydrosilanthrene  
9, 26–27, 26

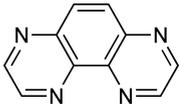
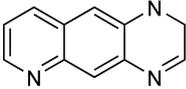
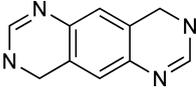
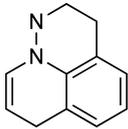
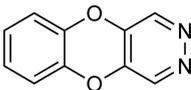
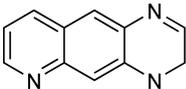
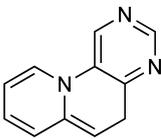
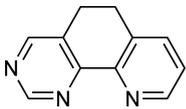
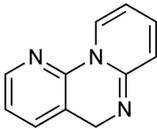
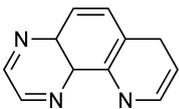
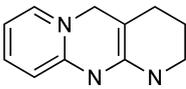
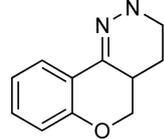
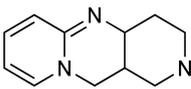
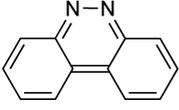
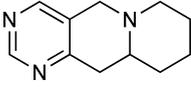
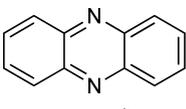
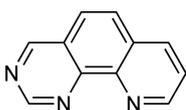
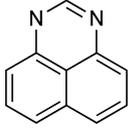
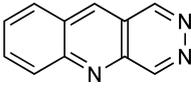
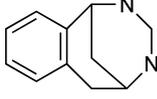
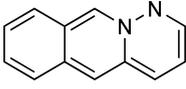
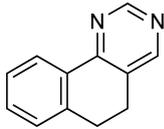
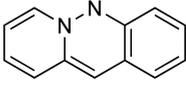
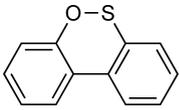
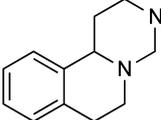


10-Oxa-4a-aza-anthracene  
12, 77–217



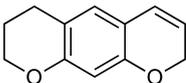
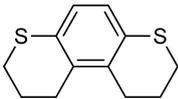
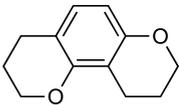
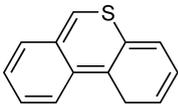
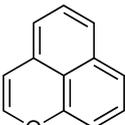
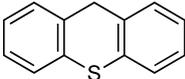
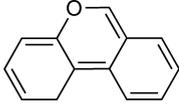
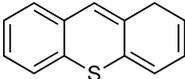
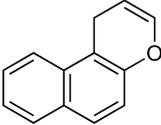
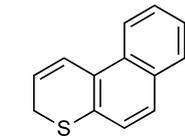
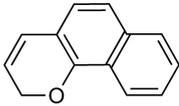
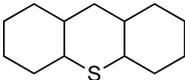
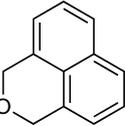
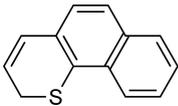
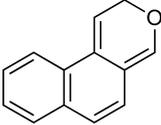
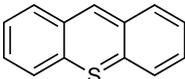
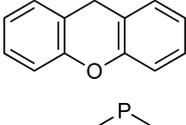
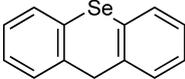
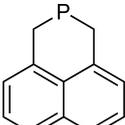
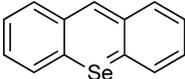
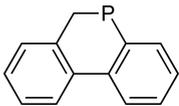
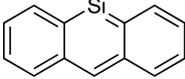
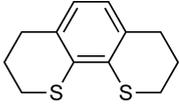
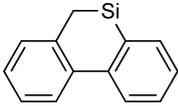
C <sub>4</sub> NO-C <sub>6</sub> -C <sub>6</sub> Naphtho[1,8-de][1,2]oxazine 8, 351, 354-355		9 $\lambda^4$ -Thia-10-aza-phenanthrene 8, 513-566	
Naphtho[1,8-de][1,3]oxazine 8, 374		10H-Phenothiazine 8, 607-675	
3,4-Dihydro-2H-naphtho[2,1-c] [1,3]oxazine 8, 380f		2,3-Dihydro-naphtho[1,8-de] [1,3]thiazine 8, 544	
3H-Naphtho[2,1-b][1,4]oxazine 8, 477		2,3-Dihydro-naphtho[1,8-de] [1,3]thiazine 8, 568	
2,3-Dihydro-1H-naphtho[1,2-c] [1,3]oxazine 8, 380f, 382, 399		3,4-Dihydro-2H-naphtho [2,1-c][1,3]thiazine 8, 600	
C <sub>4</sub> NS-C <sub>4</sub> NS-C <sub>6</sub> 2,3,4,6,7,8-Hexahydro-1,5-dithia- 4,8-diaza-anthracene 8, 655		C <sub>4</sub> N <sub>2</sub> -C <sub>4</sub> NO-C <sub>6</sub> 2H,10H-1-Oxa-4a,9-diaza- anthracene 12, 261	
3 $\lambda^4$ ,6 $\lambda^4$ -Dithia-4,5-diaza- phenanthrene 8, 539		4H,9H-10-Oxa-3,4a-diaza- phenanthrene 12, 261	
C <sub>4</sub> NS-C <sub>5</sub> N-C <sub>6</sub> 10-Thia-4a-aza-anthracene 12, 77-217		1-Oxa-9a,10-diaza-anthracene 12, 261	
C <sub>4</sub> NS-C <sub>5</sub> S-C <sub>6</sub> 1,4,4a,9,10,10a-Hexahydro-4a $\lambda^4$ - thia-9-aza-phenanthrene 8, 607-675		2-Oxa-4a,9-diaza-anthracene 12, 261	
1,4,4a,9,10,10a-Hexahydro-4a $\lambda^4$ - thia-10-aza-phenanthrene 12, 497, 497		2-Oxa-4a,9-diaza-phenanthrene 12, 294	
C <sub>4</sub> NS-C <sub>6</sub> -C <sub>6</sub> 1H-Phenothiazine 8, 607-675		9-Oxa-1,4a-diaza-phenanthrene 12, 261	
3H-2 $\lambda^4$ -Thia-1-aza-phenalene 8, 555f		9-Oxa-2,4a-diaza-phenanthrene 12, 294	

9-Oxa-4,4a-diaza-phenanthrene 12, 261		C <sub>4</sub> N <sub>2</sub> -C <sub>4</sub> N <sub>2</sub> -C <sub>6</sub> Pyridazino[1,2-b]phthalazine 14, 303-474	
C <sub>4</sub> N <sub>2</sub> -C <sub>4</sub> NS-C <sub>5</sub> N Decahydro-1-thia-8a,9a-diaza-anthracene 12, 1019f		1H-Pyrazino[1,2-a]quinoxaline 12, 261	
C <sub>4</sub> N <sub>2</sub> -C <sub>4</sub> NS-C <sub>6</sub> 2H,10H-1-Thia-4a,9-diaza-anthracene 12, 294		1H-1,9a,10-Triaza-anthracene 12, 261	
3H-9-Thia-4,10a-diaza-phenanthrene 12, 294		1H-2,9a,10-Triaza-anthracene 12, 261	
4H,9H-1-Thia-4a,10-diaza-phenanthrene 12, 294		2H-1,4a,9-Triaza-anthracene 12, 261	
10-Thia-2,4a-diaza-anthracene 12, 294		2H-2,4a,9-Triaza-anthracene 12, 261	
C <sub>4</sub> N <sub>2</sub> -C <sub>4</sub> N <sub>2</sub> -C <sub>4</sub> N <sub>2</sub> Dodecahydro-4,5,8a,10a-tetraaza-phenanthrene 12, 1023		3H-4,9,10a-Triaza-phenanthrene 12, 261	
Hexahydro-3a,6a,9a-triaza-phenalene 12, 1025		3H-4,10,10a-Triaza-phenanthrene 12, 261	
2,3,5,6,8,9-Hexahydro-1H,4H,7H-2,3a,6a,8-tetraaza-phenalene 12, 1024		4H-3,4a,10-Triaza-phenanthrene 12, 261	
5,7,8,9-Tetrahydro-6H-1,4,5,8a,10-pentaaza-anthracene 12, 1018f		4H-4,4a,10-Triaza-phenanthrene 12, 261	
C <sub>4</sub> N <sub>2</sub> -C <sub>4</sub> N <sub>2</sub> -C <sub>5</sub> N 6,7,8,8a,9,10-Hexahydro-5H-2,4,4b,7-tetraaza-phenanthrene 12, 1020f		4b,8a-Dihydro-4H-1,4a,9-triaza-phenanthrene 12, 261	
6,7,8,8a,9,10-Hexahydro-5H-1,4b;7,10-tetraaza-phenanthrene 12, 1022		4b,8a-Dihydro-4H-1,4a,10-triaza-phenanthrene 12, 261	
		5,10-Dihydro-pyrazino[2,3-g]quinoxaline 10, 1257	

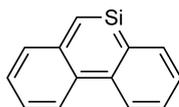
1,4,5,8-Tetraaza-phenanthrene 10, 1258		1,2-Dihydro-pyrido[2,3-g] quinoxaline 10, 1256–1257	
3,4,8,9-Tetrahydro- pyrimido[4,5-g]quinazoline 10, 1257		2,3-Dihydro-1H,7H- pyrido[3,2,1-ij]cinnoline 8, 76	
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C <sub>4</sub> N <sub>2</sub> -C <sub>5</sub> N-C <sub>5</sub> N 10H-1,3,4b-Triaza-phenanthrene 12, 1021		5,6-Dihydro-pyrido[3,2-h] quinazoline 10, 1256–1257	
10H-4,4b,9-Triaza-phenanthrene 12, 1021f		4a,7,10,10b-Tetrahydro- pyrido[2,3-f]quinoxaline 10, 1255–1256	
1,2,3,4,9,10-Hexahydro-1,9,10a- triaza-anthracene 12, 1019f		C <sub>4</sub> N <sub>2</sub> -C <sub>5</sub> O-C <sub>6</sub> 2,3,10,10a-Tetrahydro-1H- 9-oxa-3,4-diaza-phenanthrene 8, 34–35	
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Pyridazino[4,5-b]quinoline 10, 1256–1257		1,2,3,4,5,6-Hexahydro-1,5- methano-benzo[c][1,3]diazocine 14, 185	
1H-Pyridazino[1,6-b]isoquinoline 12, 77–217		5,6-Dihydro-benzo[h]quinazoline 5, 283f	
5H-Pyrido[1,2-b]cinnoline 12, 77–217		C <sub>4</sub> OS-C <sub>6</sub> -C <sub>6</sub> Dibenzo[1,2]oxathiine 8, 677–738	
1,3,4,6,7,11b-Hexahydro-2H- pyrimido[6,1-a]isoquinoline, 2H-1λ <sup>4</sup> -Seleno-4a-aza-naphthalene 7, 251–252			

Phenoxathiine 8, 857-905		1,3-Diselena-phenalene 9, 795	
C <sub>4</sub> O <sub>2</sub> -C <sub>4</sub> O <sub>2</sub> -C <sub>6</sub> 2,3-Dihydro-8H-1,4,5,7-tetraoxa-phenanthrene 10, 1259		9,10-Diselena-phenanthrene 9, 809	
C <sub>4</sub> O <sub>2</sub> -C <sub>5</sub> O-C <sub>6</sub> 2,3-Dihydro-6H-1,4,5-trioxa-anthracene 10, 1256		1,2,3,4,6,7,8,9-Octahydro-selenanthrene 9, 811	
2,3-Dihydro-6H-1,4,5-trioxa-phenanthrene 10, 1256-1257		C <sub>4</sub> SSe-C <sub>6</sub> -C <sub>6</sub> 9-Thia-10-selena-anthracene 9, 811	
C <sub>4</sub> O <sub>2</sub> -C <sub>6</sub> -C <sub>6</sub> 9,10-Dioxa-phenanthrene 8, 677-738		C <sub>4</sub> Si <sub>2</sub> -C <sub>4</sub> Si <sub>2</sub> -C <sub>6</sub> 1,2,3,4,5,6,7,8-Octahydro-1,4,5,8-tetrasil-a-anthracene 9, 942	
Dibenzo[b,c][1,4]dioxin 8, 857-905		C <sub>4</sub> Sn <sub>2</sub> -C <sub>6</sub> -C <sub>6</sub> 9,10-Dihydro-9,10-distanna-anthracene 9, 937	
Naphtho[1,8-de][1,3]dioxine 8, 739-856		C <sub>4</sub> Te <sub>2</sub> -C <sub>6</sub> -C <sub>6</sub> Telluranthrene 9, 818-819	
C <sub>4</sub> S <sub>2</sub> -C <sub>6</sub> -C <sub>6</sub> Dibenzo[1,2]dithiine 8, 677-738		C <sub>5</sub> B-C <sub>5</sub> B-C <sub>5</sub> B 9b-Boraphenalene 12, 573-633	
Naphtho[1,8-de][1,3]dithiine 8, 739-856		1-Bora-tricyclo[3.3.1.1 <sup>3,7</sup> ]decane 12, 573-633	
Thianthrene 8, 857-905; 9, 817		C <sub>5</sub> B-C <sub>6</sub> -C <sub>6</sub> 9,10-Dihydro-9-bora-anthracene 7, 1058-1059	
C <sub>4</sub> Se <sub>2</sub> -C <sub>6</sub> -C <sub>6</sub> Selenanthrene 6, 542; 6, 549f; 9, 796, 817		C <sub>5</sub> Ge-C <sub>6</sub> -C <sub>6</sub> 9-Germa-phenanthrene 7, 1042-1043; 7, 1061	
1,3-Diselena-phenalene 4, 1114		9-Germa-anthracene 7, 1042-1043	
		C <sub>5</sub> N-C <sub>5</sub> N-C <sub>5</sub> N 9,10-Dihydro-8H-3,8a-diaza-phenanthrene 12, 1021f	

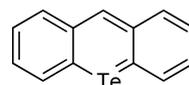
Dodecahydro-pyrido[2,1,6-de]quinolizine 12, 1023		2,3-Dihydro-1H,7H-pyrido[3,2,1-ij]quinoline 12, 42f	
1,3,4,5,6,8-Hexahydro-2H-1,5-methano-pyrido[1,2-a][1,5]diazocine 14, 338f, 340, 352-353, 357f, 361f		5,10-Dihydro-pyrido[2,3-g]quinoline 10, 1229-1268, 1252	
C <sub>5</sub> N-C <sub>5</sub> N-C <sub>5</sub> O 1H,9H-2-Oxa-8a-aza-anthracene 12, 1018f; 12, 77-217		5,10-Dihydro-pyrido[3,2-g]quinoline 10, 1229-1268, 1250-1252, 1252-1254	
4,4a,9,9a-Tetrahydro-1H,3H-2-oxa-7,8a-diaza-anthracene 12, 261		[1,7]Phenanthroline 10, 1248-1249	
9,9a-Dihydro-1H,4aH-2-oxa-8a-aza-anthracene 12, 1018f; 12, 52f; 12, 77-217		[4,7]Phenanthroline 10, 1248-1249, 1252-1254	
C <sub>5</sub> N-C <sub>5</sub> N-C <sub>6</sub> 6H-Pyrido[1,2-a]quinoline 12, 25f		[1,10]Phenanthroline 10, 1229-1268	
1,2,3,4,5,10-Hexahydro-pyrido[3,2-g]quinoline 10, 1243f		1,4,6,9-Tetrahydro-pyrido[3,2-g]quinoline 10, 1248	
1,2,3,4-Tetrahydro-pyrido[3,2-g]quinoline 10, 1249		C <sub>5</sub> N-C <sub>5</sub> O-C <sub>6</sub> 10H-9-Oxa-4-aza-phenanthrene 7, 247	
1,4-Dihydro-pyrido[3,2-g]quinoline 10, 1248-1249		C <sub>5</sub> N-C <sub>5</sub> S-C <sub>6</sub> 3,4,9,10-Tetrahydro-2H-1-thia-8-aza-anthracene 10, 1254	
1,3,4,6,11,11a-Hexahydro-2H-pyrido[1,2-b]isoquinoline 12, 41		C <sub>5</sub> N-C <sub>6</sub> -C <sub>6</sub> Acridine 7, 21	
1,3,4,6,7,11b-Hexahydro-2H-pyrido[2,1-a]isoquinoline 12, 1-75		Phenanthridine 7, 76-77	
1,4,6,9-Tetrahydro-pyrido[3,2-g]quinoline 10, 1248		C <sub>5</sub> O-C <sub>5</sub> O-C <sub>6</sub> 8,12-Dioxa-tricyclo[7.3.1.0 <sup>2,7</sup> ]trideca-2(7); 3,5-triene 14, 417	

3,4-Dihydro-2H,8H-pyrano[3,2-g]chromene 10, 1249–1250		2,3,4,5,6,7-Hexahydro-1,8-dithia-phenanthrene 10, 1260–1261	
3,4,9,10-Tetrahydro-2H,8H-pyrano[2,3-f]chromene 10, 1254		C <sub>5</sub> S-C <sub>6</sub> -C <sub>6</sub> 1H-Dibenzo[b,d]thiin 7, 727–954	
C <sub>5</sub> O-C <sub>6</sub> -C <sub>6</sub> Benzo[de]chromene 7, 337–418; 7, 419–699; 7, 701–726		10H-Dibenzo[b,e]thiin (9H-thioxanthene) 7, 727–954	
1H-Benzo[c]chromene 7, 337–418; 7, 419–699; 7, 701–726		1H-Thioxanthene 7, 727–954	
1H-Benzo[f]chromene 7, 337–418; 7, 419–699; 7, 701–726		3H-Benzo[f]thiochromene 7, 727–954	
2H-Benzo[h]chromene 7, 337–418; 7, 419–699; 7, 701–726		Dodecahydro-thioxanthene 7, 783f	
1H,3H-Benz[de]isochromene 7, 337–418; 7, 419–699; 7, 701–726		2H-Naphtho[1,2-b]thiin 7, 727–954	
2H-Benz[f]isochromene 7, 337–418; 7, 419–699; 7, 701–726		10λ <sup>4</sup> -Thioxanthene 7, 727–954	
9H-Xanthene 7, 337–418; 7, 419–699; 7, 701–726		C <sub>5</sub> Se-C <sub>6</sub> -C <sub>6</sub> 10H-Dibenzo[b,e]selenin (9H-selenoxanthene) 7, 955–1001	
C <sub>5</sub> P-C <sub>6</sub> -C <sub>6</sub> 2,3-Dihydro-1H-2-phospha-phenalene 7, 1017, 1019–1020		10λ <sup>4</sup> -Selenoxanthene 7, 955–1001	
9,10-Dihydro-9-phospha-phenanthrene 7, 1019–1020, 1023		C <sub>5</sub> Si-C <sub>6</sub> -C <sub>6</sub> Dibenzo[b,e]siline 7, 1041	
C <sub>5</sub> S-C <sub>5</sub> S-C <sub>6</sub> 1,2,3,6,7,8-Hexahydro-4,5-dithia-phenanthrene 10, 1260–1261		9,10-Dihydro-9-sila-phenanthrene 7, 1063	

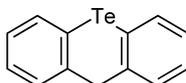
9-Sila-phenanthrene  
7, 1063



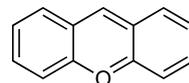
10 $\lambda^4$ -Telluroxanthene  
7, 955-1001



C<sub>5</sub>Te-C<sub>6</sub>-C<sub>6</sub>  
10H-Dibenzo[b,c]tellurinin  
(9H-telluroxanthene)  
7, 955-1001



C<sub>6</sub>O-C<sub>6</sub>-C<sub>6</sub>  
Xanthylum  
7, 337-418; 7, 419-699;  
7, 701-726

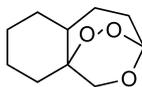


# 6,6,7

C<sub>3</sub>O<sub>3</sub>-C<sub>6</sub>-C<sub>5</sub>O<sub>2</sub>

10,11,13-Trioxa-tricyclo[7.2.2.01,6]  
tridecane

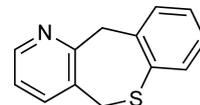
13, 399–431; 13, 80f



C<sub>5</sub>N-C<sub>6</sub>-C<sub>6</sub>S

5,11-Dihydro-10-thia-4-aza-  
dibenzo[a,d]cycloheptene

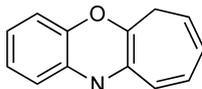
13, 124



C<sub>4</sub>NO-C<sub>6</sub>-C<sub>7</sub>

6,11-Dihydro-5-oxa-11-aza-  
cyclohepta[b]naphthalene

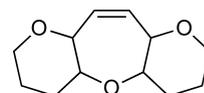
8, 463–464



C<sub>5</sub>O-C<sub>5</sub>O-C<sub>6</sub>O

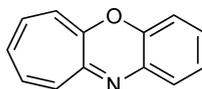
2,3,4,4a,5a,6,7,8,9a,11a-  
Decahydro-1,5,9-trioxa-  
dibenzo[a,d]cycloheptene

13, 63



5-Oxa-11-aza-cyclohepta[b]  
naphthalene

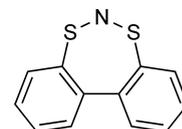
8, 475f, 493



C<sub>6</sub>-C<sub>6</sub>-C<sub>4</sub>NS<sub>2</sub>

5,7-Dithia-6-aza-  
dibenzo[a,c]cycloheptene

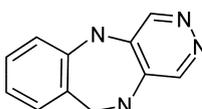
13, 396



C<sub>4</sub>N<sub>2</sub>-C<sub>6</sub>-C<sub>5</sub>NO

10,11-Dihydro-5-oxa-2,3,11-  
triazia-dibenzo[a,d]cycloheptene

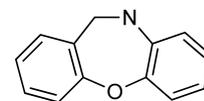
13, 273



C<sub>6</sub>-C<sub>6</sub>-C<sub>5</sub>NO

10,11-Dihydro-dibenzo[b,f]  
[1,4]oxazepine

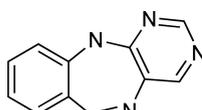
13, 275f



C<sub>4</sub>N<sub>2</sub>-C<sub>6</sub>-C<sub>5</sub>N<sub>2</sub>

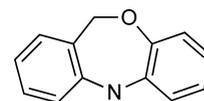
5H-2,4,5,11-Tetraaza-  
dibenzo[a,d]cycloheptene

13, 214



1,2,3,5-Tetrahydro-  
benzo[c][1,4]oxazepine

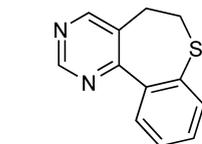
13, 277f



C<sub>4</sub>N<sub>2</sub>-C<sub>6</sub>-C<sub>6</sub>S

5,6-Dihydro-7-thia-1,3-diaza-  
dibenzo[a,c]cycloheptene

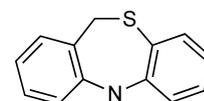
5, 283f



C<sub>6</sub>-C<sub>6</sub>-C<sub>5</sub>NS

5,11-Dihydro-10-thia-5-aza-  
dibenzo[a,d]cycloheptene

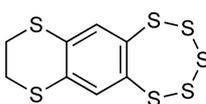
7, 7405



C<sub>4</sub>S<sub>2</sub>-C<sub>6</sub>-C<sub>2</sub>S<sub>5</sub>

2,3-Dihydro-1,4,6,7,8,9,10-  
heptathia-cyclohepta[b]  
naphthalene

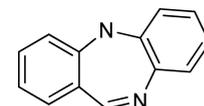
13, 543, 545



C<sub>6</sub>-C<sub>6</sub>-C<sub>5</sub>N<sub>2</sub>

5H-Dibenzo[b,e][1,4]diazepine

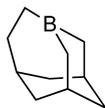
13, 195



C<sub>5</sub>B-C<sub>5</sub>B-C<sub>6</sub>B

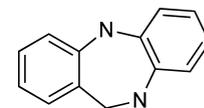
3-Bora-tricyclo[4.3.1.1<sup>3,8</sup>]undecane

12, 573–633



10,11-Dihydro-5H-  
dibenzo[b,e][1,4]diazepine

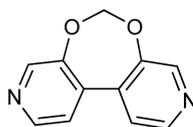
13, 212, 218



C<sub>5</sub>N-C<sub>5</sub>N-C<sub>5</sub>O<sub>2</sub>

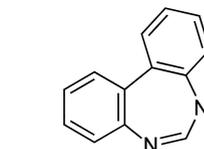
5,7-Dioxa-3,9-diaza-dibenzo[a,c]  
cycloheptene

13, 355



5H-Dibenzo[d,f][1,3]diazepine

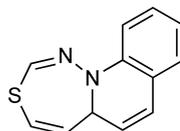
13, 170



C<sub>5</sub>N-C<sub>6</sub>-C<sub>4</sub>N<sub>2</sub>S

6aH-9-Thia-11,11a-diaza-  
cyclohepta[a]naphthalene

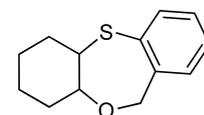
13, 426f



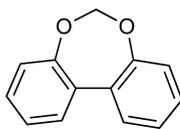
C<sub>6</sub>-C<sub>6</sub>-C<sub>5</sub>OS

5a,6,7,8,9,9a-Hexahydro-  
11H-10-oxa-5-thia-  
dibenzo[a,d]cycloheptene

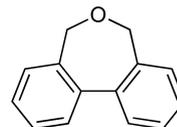
13, 375



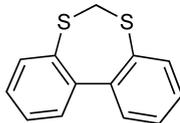
C<sub>6</sub>-C<sub>6</sub>-C<sub>5</sub>O<sub>2</sub>  
5,7-Dioxa-dibenzo[a,c]  
cycloheptene  
13, 351f, 350, 356



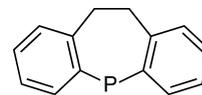
5,7-Dihydro-dibenzo[c,e]oxepine  
13, 45-95



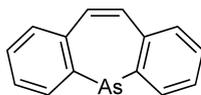
C<sub>6</sub>-C<sub>6</sub>-C<sub>5</sub>S<sub>2</sub>  
5,7-Dithia-dibenzo[a,c]  
cycloheptene  
13, 350, 356, 357



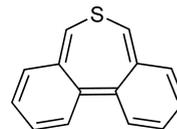
C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>P  
10,11-Dihydro-5H-5-phospha-  
dibenzo[a,d]cycloheptene  
14, 919, 919



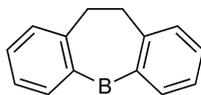
C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>As  
5H-5-Arsa-dibenzo[a,d]  
cycloheptene  
14, 965



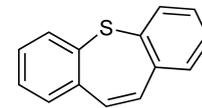
C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>S  
Dibenz[c,e]thiepin  
13, 97-141



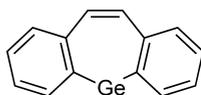
C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>B  
10,11-Dihydro-5H-5-bora-  
dibenzo[a,d]cycloheptene  
14, 1046



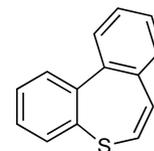
Dibenzo[b,f]thiepine  
13, 97-141



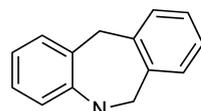
C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>Ge  
5H-5-Germa-dibenzo[a,d]  
cycloheptene  
14, 985



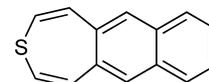
5-Thia-dibenzo[a,c]cycloheptene  
13, 97-141



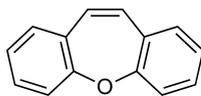
C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>N  
6,11-Dihydro-5H-dibenzo[b,e]  
azepine  
1, 584-585



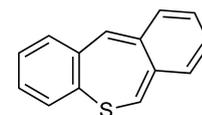
8-Thia-cyclohepta[b]  
naphthalene  
13, 131



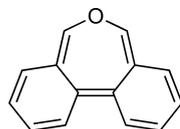
C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>O  
Dibenzo[b,f]oxepine  
13, 59



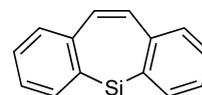
10-Thia-dibenzo[a,d]  
cycloheptene  
13, 97-141



Dibenz[c,e]oxepin  
13, 45-95



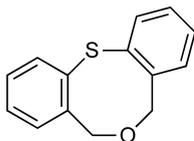
C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>Si  
5H-5-Sila-dibenzo[a,d]  
cycloheptene  
14, 984



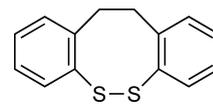
# 6,6,8

<p><math>C_5N-C_5N-C_8</math> Cycloocta[1,2-b;8,7-b0]dipyridine 10, 1259–1260</p>		<p>9,10,11,12-Tetrahydro-8H-7-oxa-11-aza-cycloocta[a]naphthalene 14, 397f</p>	
<p><math>C_5N-C_6-C_6NO</math> 11,12-Dihydro-6H-5-oxa-2,11-diaza-dibenzo[a,e]cyclooctene 14, 398</p>		<p>11,12-Dihydro-6H-5-oxa-12-aza-dibenzo[a,e]cyclooctene 14, 277</p>	
<p><math>C_6-C_6-C_4S_4</math> 5,6,11,12-Tetrathia-dibenzo[a,e]cyclooctene 8, 892; 14, 517–546</p>		<p><math>C_6-C_6-C_6NS</math> 6,7-Dihydro-5H-12-thia-6-aza-dibenzo[a,d]cyclooctene 14, 409</p>	
<p><math>C_6-C_6-C_5NOS</math> 5H,7H-12-Oxa-6-thia-5-aza-dibenzo[a,d]cyclooctene 14, 503</p>		<p>11,12-Dihydro-6H-5-thia-12-aza-dibenzo[a,e]cyclooctene 14, 281–282</p>	
<p>1,2,3,4,4a,6,7,12a-Octahydro-5-oxa-12-thia-7-aza-dibenzo[a,d]cyclooctene 14, 500</p>		<p><math>C_6-C_6-C_6N_2</math> Dibenzo[b,f][1,5]diazocine 8, 404</p>	
<p><math>C_6-C_6-C_5NS_2</math> 6,7-Dihydro-5,12-dithia-6-aza-dibenzo[a,d]cyclooctene 6, 55</p>		<p>5,6,6a,7,8,9,10,10a,11,12-Decahydro-dibenzo[b,f][1,4]diazocine 14, 272</p>	
<p><math>C_6-C_6-C_5S_3</math> 6a,7,8,9,10,10a-Hexahydro-12H-5,6,11-trithia-dibenzo[a,e]cyclooctene 1, 406f</p>		<p>5,6,7,8-Tetrahydro-dibenzo[d,f][1,2]diazocine 14, 118</p>	
<p><math>C_6-C_6-C_6BiN</math> 5,6,7,12-Tetrahydro-6-aza-12-bisma-dibenzo[a,d]cyclooctene 14, 963</p>		<p>5,6,11,12-Tetrahydro-dibenzo[b,f][1,4]diazocine 14, 272</p>	
<p><math>C_6-C_6-C_6NO</math> 6,7-Dihydro-5H-12-oxa-6-aza-dibenzo[a,d]cyclooctene 14, 389, 394f, 398</p>		<p>11,12-Dihydro-dibenzo[c,g][1,2]diazocine 14, 117</p>	
		<p><math>C_6-C_6-C_6N_2O</math> 6,7-Dihydro-5H-12-oxa-5,7-diaza-dibenzo[a,d]cyclooctene 14, 499</p>	

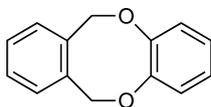
C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>OS  
5H,7H-6-Oxa-12-thia-  
dibenzo[a,d]cyclooctene  
14, 443



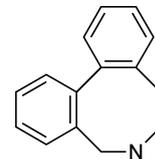
11,12-Dihydro-5,6-dithia-  
dibenzo[a,e]cyclooctene  
14, 160



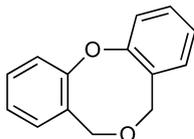
C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>O<sub>2</sub>  
2,3,4,5-Tetrahydro-  
benzo[b]dioxocine  
14, 289f



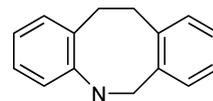
C<sub>6</sub>-C<sub>6</sub>-C<sub>7</sub>N  
5,6,7,8-Tetrahydro-  
dibenzo[c,e]azocine  
14, 8f5



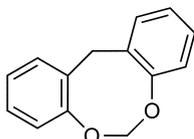
5H,7H-6,12-Dioxa-  
dibenzo[a,d]cyclooctene  
14, 417



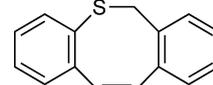
5,6,11,12-Tetrahydro-  
dibenzo[b,f]azocine  
14, 32



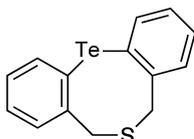
12H-5,7-Dioxa-  
dibenzo[a,d]cyclooctene  
14, 241f



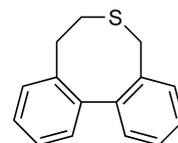
C<sub>6</sub>-C<sub>6</sub>-C<sub>7</sub>S  
6H-5-Thia-dibenzo[a,e]  
cyclooctene  
14, 93



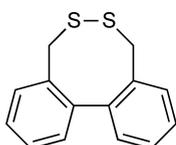
C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>STe  
5H,7H-6-Thia-12-tellura-  
dibenzo[a,d]cyclooctene  
14, 880



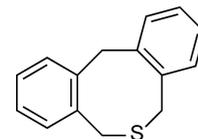
7,8-Dihydro-5H-6-thia-  
dibenzo[a,c]cyclooctene  
14, 94



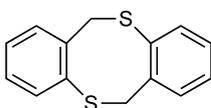
C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>S<sub>2</sub>  
5,8-Dihydro-6,7-dithia-  
dibenzo[a,c]cyclooctene  
14, 160



7,12-Dihydro-5H-6-thia-  
dibenzo[a,d]cyclooctene  
14, 94



6H,12H-Dibenzo[b,f]  
[1,5]dithiocin  
14, 451

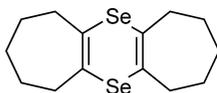


# 6,7,7

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C<sub>4</sub>Se<sub>2</sub>-C<sub>7</sub>-C<sub>7</sub>

2,3,4,5,8,9,10,11-Octahydro-  
1H,7H-6,12-diselena-  
benzo[1,2;4,5]dicycloheptene  
9, 811

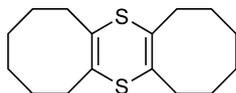


# 6,8,8

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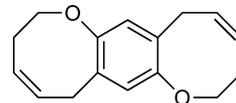
C<sub>4</sub>S<sub>2</sub>-C<sub>8</sub>-C<sub>8</sub>

1,2,3,4,5,6,8,9,10,11,12,13-  
Dodecahydro-7,14-dithia-  
benzo[1,2;4,5]dicyclooctene  
1, 392



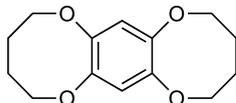
C<sub>6</sub>-C<sub>7</sub>O-C<sub>7</sub>O

2,3,6,9,10,13-Hexahydro-  
1,8-dioxa-benzo[1,2;4,5]  
dicyclooctene  
14, 66

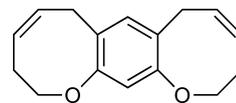


C<sub>6</sub>-C<sub>6</sub>O<sub>2</sub>-C<sub>6</sub>O<sub>2</sub>

2,3,4,5,9,10,11,12-Octahydro-  
1,6,8,13-tetraoxa-  
benzo[1,2;4,5]dicyclooctene  
14, 261-262



3,6,11,12-Tetrahydro-  
2H,8H-1,13-dioxa-  
benzo[1,2;4,5]dicyclooctene  
14, 66



# 3,3,4,4

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C<sub>2</sub>O-C<sub>2</sub>O-C<sub>4</sub>-C<sub>4</sub>

3,7-Dioxatetracyclo[3.3.0.0<sup>2</sup>.4.0<sup>6</sup>,8]

octane

1, 241



# 4,4,5,6

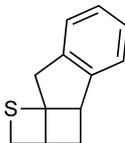
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C<sub>3</sub>S-C<sub>4</sub>-C<sub>5</sub>-C<sub>6</sub>

2-Thia-benzo-tricyclo[4.3.0.01,4]

non-7-ene

2, 435-436



# 4,5,5,6

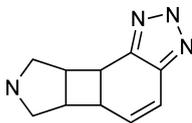
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C<sub>4</sub>-C<sub>2</sub>N<sub>3</sub>-C<sub>4</sub>N-C<sub>6</sub>

2,5a,5b,6,7,8,8a,8b-Octahydro-

1,2,3,7-tetraaza-cyclopenta[3,4]  
cyclobuta[1,2-e]indene

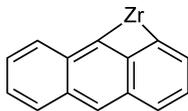
5, 40-41



# 4,6,6,6

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C<sub>3</sub>Zr-C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>  
1H-1-Zircona-cyclobuta[de]  
anthracene  
2, 593



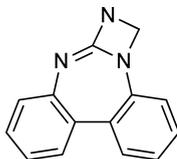
# 4,6,6,7

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C<sub>2</sub>N<sub>2</sub>-C<sub>6</sub>-C<sub>6</sub>-C<sub>5</sub>N<sub>2</sub>

1,2-Dihydro-2,3,9b-triaza-  
dibenzo[a,b]cyclobuta[c]  
cycloheptene

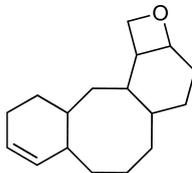
2, 630–631



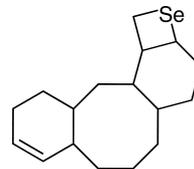
# 4,6,6,8

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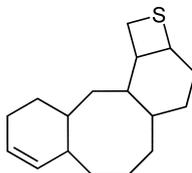
C<sub>3</sub>O-C<sub>6</sub>-C<sub>6</sub>-C<sub>8</sub>  
6-oxatetracyclo [11.3.1.0<sup>λ</sup>  
3,10<sup>λ</sup>.0<sup>λ</sup>4,7<sup>λ</sup>] heptadec-  
13-en-2-yl  
2, 382



6-selenatetracyclo  
[11.3.1.0<sup>λ</sup>,3,10<sup>λ</sup>.0<sup>λ</sup>4,7<sup>λ</sup>]  
heptadec-13-en-2-yl  
2, 470



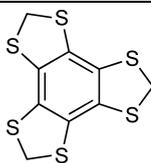
C<sub>3</sub>S-C<sub>6</sub>-C<sub>6</sub>-C<sub>8</sub>  
6-thia-tetracyclo [11.3.1.0<sup>λ</sup>  
3,10<sup>λ</sup>.0<sup>λ</sup>4,7<sup>λ</sup>] heptadec-  
13-en-2-yl  
2, 436, 441–442, 453–454



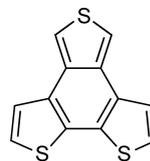
# 5,5,5,6

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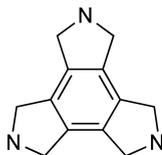
$C_3S_2-C_3S_2-C_3S_2-C_6$   
1,3,4,6,7,9-Hexathia-trindene  
4, 962



$C_4S-C_4S-C_4S-C_6$   
1,5,9-Trithia-trindene  
3, 889f

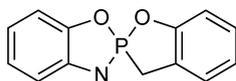


$C_4N-C_4N-C_4N-C_6$   
2,3,4,5,6,7,8,9-Octahydro-1H-  
2,5,8-triaza-trindene  
10, 1180-1181

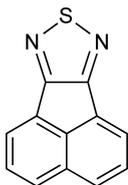


# 5,5,6,6

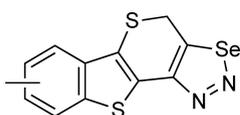
$C_2NOP-C_3OP-C_6-C_6$   
1,6-Dioxo-4-aza-5 $\lambda^5$ -  
phospha-2,7-dibenzo-  
spiro[4.4]nona-2,7-diene  
**12**, 532–533



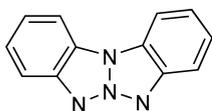
$C_2N_2S-C_5-C_6-C_6$   
8-Thia-7,9-diaza-  
cyclopenta[a]acenaphthylene  
**5**, 528



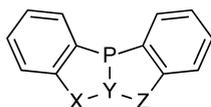
$C_2N_2Se-C_4S-C_5S-C_6$   
4H-5,10-Dithia-3-selena-1,2-  
diazacyclopenta[a]fluorene  
**6**, 562*f*



$C_2N_3-C_2N_3-C_6-C_6$   
5H,7H-Benzotriazolo[1,2-a]  
benzotriazole  
**11**, 199–305

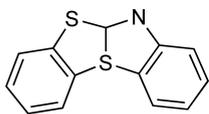


$C_2P(X)(Y)-C_2P(Y)(Z)-C_6-C_6$   
9,10-9a $\lambda^4$ -Trishetero-4b-  
phospha-indeno[1,2-a]indene  
**12**, 537

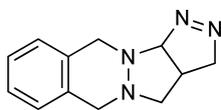


X, Y, Z = B, P, O, S, S

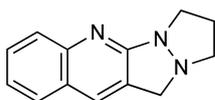
$C_3NS-C_3S_2-C_6-C_6$   
9a,10-Dihydro-4bH-  
4b $\lambda^4$ ,9-dithia-10-aza-  
indeno[1,2-a]indene  
**12**, 501



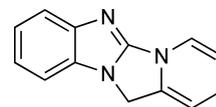
$C_3N_2-C_3N_2-C_4N_2-C_6$   
1,3a,4,9,10,10a-Hexahydro-  
2,3,3b,9a-tetraaza-  
pentaleno[1,2-b]naphthalene  
**12**, 822



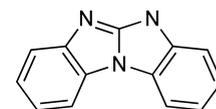
$C_3N_2-C_3N_2-C_5N-C_6$   
2,3-Dihydro-1H,10H-3a,4,10a-  
triazapentaleno[1,2-b]  
naphthalene  
**12**, 822*f*



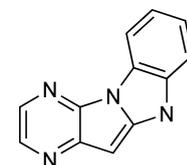
2,10-Dihydro-4a,5,9b-  
triazaindeno[2,1-a]indene  
**12**, 824*f*



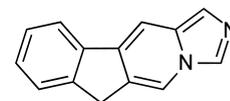
$C_3N_2-C_3N_2-C_6-C_6$   
9H-4b,9,10-Triaza-  
indeno[1,2-a]indene  
**11**, 219



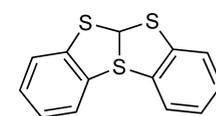
$C_3N_2-C_4N-C_4N_2-C_6$   
9H-1,4,4b,9-Tetraaza-  
indeno[1,2-a]indene  
**12**, 801*f*



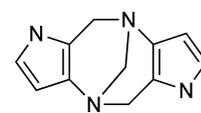
$C_3N_2-C_5-C_5N-C_6$   
9H-2,10a-Diaza-  
cyclopenta[b]fluorene  
**4**, 217*f*



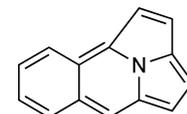
$C_3S_2-C_3S_2-C_6-C_6$   
4b,9a-Dihydro-4b $\lambda^4$ ; 9,10-  
trithia-indeno[1,2-a]indene  
**12**, 501; **4**, 983*f*



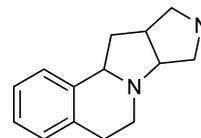
$C_4N-C_4N-C_4N_2-C_4N_2$   
4,5,9,10-tetrahydro-1H,6H-  
dipyrrolo-[3,2-b:3',2'-f][1,5]-  
diazocin-2,7-dicarboxylate  
**14**, 345*f*



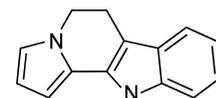
$C_4N-C_4N-C_5N-C_6$   
Pyrrolizino[3,4,5-ab]isoquinoline  
**12**, 838



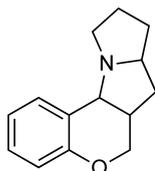
5,7a,8,9,10,10a; **11**,11a-  
Octahydro-6H-pyrrolo[3',4':4,5]  
pyrrolo[2,1-a]isoquinoline  
**12**, 812–813



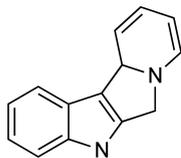
6,11-Dihydro-5H-  
indolizino[8,7-b]indole  
**12**, 32*f*



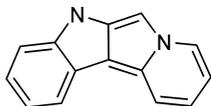
6a,7a,8,9,10,10b-Hexahydro-6H,7H-5-oxa-10a-azapentaleno[1,2-a]naphthalene  
12, 801–802



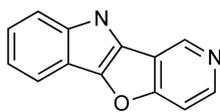
9,10-Dihydro-4cH-8a,10-diazaindeno[1,2-a]indene  
12, 806



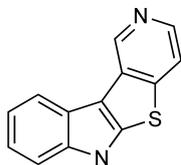
10H-8a,10-Diazaindeno[1,2-a]indene  
10, 19



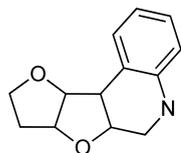
C<sub>4</sub>N-C<sub>4</sub>O-C<sub>5</sub>N-C<sub>6</sub>  
5H-10-Oxa-3,5-diazaindeno[2,1-a]indene  
12, 779f



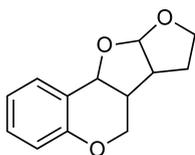
C<sub>4</sub>N-C<sub>4</sub>S-C<sub>5</sub>N-C<sub>6</sub>  
9H-10-Thia-3,9-diazaindeno[1,2-a]indene  
12, 780f



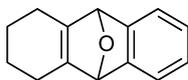
C<sub>4</sub>O-C<sub>4</sub>O-C<sub>5</sub>N-C<sub>6</sub>  
6,6a,8,9,10a,10b-Hexahydro-5H,7aH-7,10-dioxa-5-azapentaleno[1,2-a]naphthalene  
12, 785



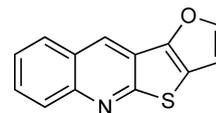
C<sub>4</sub>O-C<sub>4</sub>O-C<sub>5</sub>O-C<sub>6</sub>  
6,6a,6b,7,8,9a-Hexahydro-10aH-5,9,10-trioxapentaleno[2,1-a]naphthalene  
12, 790f



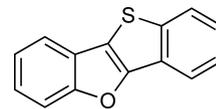
C<sub>4</sub>O-C<sub>4</sub>O-C<sub>6</sub>-C<sub>6</sub>  
11-Oxa-9-benzotricyclo[6.2.1.0<sup>2,7</sup>]undeca-2(7),9-diene  
1, 546



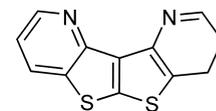
C<sub>4</sub>O-C<sub>4</sub>S-C<sub>5</sub>N-C<sub>6</sub>  
3-Oxa-10-thia-9-azapentaleno[1,2-b]naphthalene  
12, 792



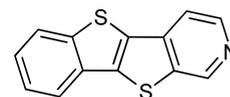
C<sub>4</sub>O-C<sub>4</sub>S-C<sub>6</sub>-C<sub>6</sub>  
5-Oxa-10-thia-indeno[2,1-a]indene  
10, 12, 39



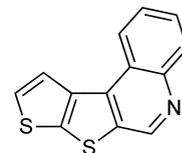
C<sub>4</sub>S-C<sub>4</sub>S-C<sub>5</sub>N-C<sub>5</sub>N  
1,2-Dihydro-9,10-dithia-4,5-diazaindeno[1,2-a]indene  
12, 788



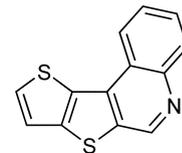
C<sub>4</sub>S-C<sub>4</sub>S-C<sub>5</sub>N-C<sub>6</sub>  
5,10-Dithia-2-azaindeno[2,1-a]indene  
12, 788



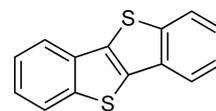
7,8-Dithia-5-azapentaleno[1,2-a]naphthalene  
12, 786



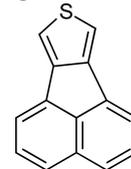
7,10-Dithia-5-azapentaleno[1,2-a]naphthalene  
12, 787f



C<sub>4</sub>S-C<sub>4</sub>S-C<sub>6</sub>-C<sub>6</sub>  
5,10-Dithia-indeno[2,1-a]indene  
10, 40; 3, 853



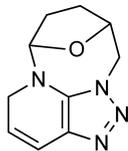
C<sub>4</sub>S-C<sub>5</sub>-C<sub>6</sub>-C<sub>6</sub>  
8-Thia-cyclopenta[a]acenaphthylene  
3, 901–902



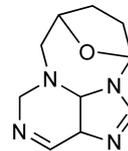
# 5,5,6,7

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C<sub>2</sub>N<sub>3</sub>-C<sub>4</sub>O-C<sub>5</sub>N-C<sub>4</sub>N<sub>2</sub>O  
7,8,9,10-Tetrahydro-5H,6H-  
1,2,5a,10a-tetraaza-7,9-oxa-  
cycloocta[cd]indene  
**14**, 182*f*



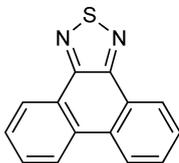
C<sub>3</sub>N<sub>2</sub>-C<sub>4</sub>O-C<sub>4</sub>N<sub>2</sub>-C<sub>4</sub>N<sub>2</sub>O  
7,8,9,10-Tetrahydro-  
5H,6H-2,4,5a,10a-tetraaza-7,9-  
oxa-cycloocta[cd]indene  
**14**, 180*f*



# 5,6,6,6

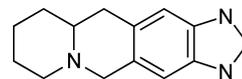
C<sub>2</sub>N<sub>2</sub>S-C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>

2-Thia-1,3-diaza-cyclopenta[l]  
phenanthrene  
5, 530



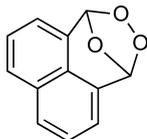
C<sub>3</sub>O<sub>2</sub>-C<sub>5</sub>N-C<sub>5</sub>N-C<sub>6</sub>

6,7,8,9,9a,10-Hexahydro-  
5H-1,3-dioxo-5a-aza-  
cyclopenta[b]anthracene  
12, 38f



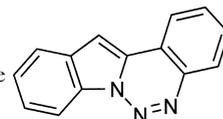
C<sub>2</sub>O<sub>3</sub>-C<sub>5</sub>O-C<sub>6</sub>-C<sub>6</sub>

1,4-Epoxy-1H,4H-  
naphtho[1,8-de][1,2]dioxepin  
13, 313



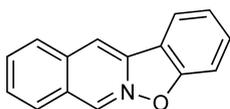
C<sub>4</sub>N-C<sub>3</sub>N<sub>3</sub>-C<sub>6</sub>-C<sub>6</sub>

5,6,6a-Triaza-benzo[a]fluorene  
11, 635



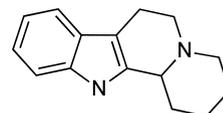
C<sub>3</sub>NO-C<sub>5</sub>N-C<sub>6</sub>-C<sub>6</sub>

11-Oxa-10a-aza-  
benzo[b]fluorene  
7, 50



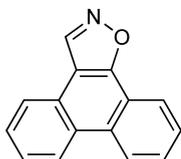
C<sub>4</sub>N-C<sub>5</sub>N-C<sub>5</sub>N-C<sub>6</sub>

1,2,3,4,6,7,12,12b-  
Octahydro-indolo[2,3-a]  
quinolizine  
12, 51f

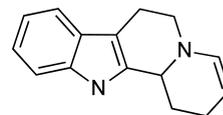


C<sub>3</sub>NO-C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>

1-Oxa-2-aza-  
cyclopenta[l]phenanthrene  
4, 391

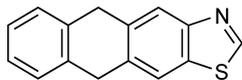


1,2,6,7,12,12b-Hexahydro-  
indolo[2,3-a]quinolizine  
12, 52f

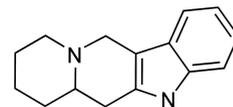


C<sub>3</sub>NS-C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>

5,10-Dihydro-1-thia-3-  
aza-cyclopenta[b]anthracene  
4, 666

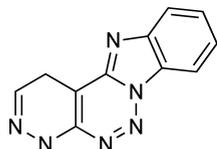


6,7,8,9,10,12-Hexahydro-  
5H,6aH-indolo[2,3-b]  
quinolizine  
12, 36f

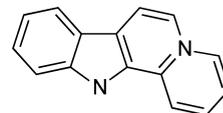


C<sub>3</sub>N<sub>2</sub>-C<sub>3</sub>N<sub>3</sub>-C<sub>4</sub>N<sub>2</sub>-C<sub>6</sub>

1,4-Dihydro-3,4,5,6,6a,11-  
hexaaza-benzo[a]fluorene  
10, 1126

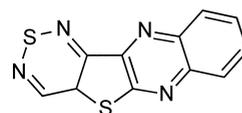


12H-Indolo[2,3-a]quinolizine  
12, 32f



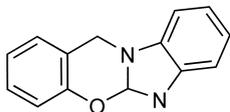
C<sub>4</sub>S-C<sub>3</sub>N<sub>2</sub>S-C<sub>4</sub>N<sub>2</sub>-C<sub>6</sub>

11aH-3,11-Dithia-2,4,5,10-  
tetraaza-benzo[b]fluorene  
9, 356, 391



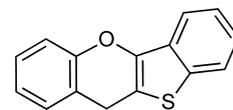
C<sub>3</sub>N<sub>2</sub>-C<sub>4</sub>NO-C<sub>6</sub>-C<sub>6</sub>

10a,11-Dihydro-5H-10-oxa-  
4b,11-diaza-benzo[b]fluorene  
4, 202f



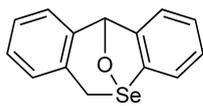
C<sub>4</sub>S-C<sub>5</sub>O-C<sub>6</sub>-C<sub>6</sub>

10H-5-Oxa-11-thia-benzo[b]  
fluorene  
3, 863f



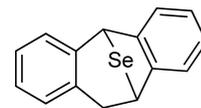
C<sub>3</sub>OSe-C<sub>4</sub>OSe-C<sub>6</sub>-C<sub>6</sub>

9-Oxa-1λ<sup>4</sup>-selena-3,6-dibenzo-  
bicyclo[3.3.1]nona-3,6-diene  
4, 1103



C<sub>4</sub>Se-C<sub>5</sub>Se-C<sub>6</sub>-C<sub>6</sub>

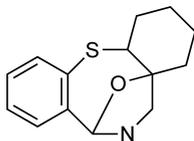
8-Selena-2,6-dibenzo-  
bicyclo[3.2.1]octa-2,6-diene  
12, 492



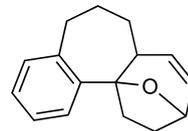
# 5,6,6,7

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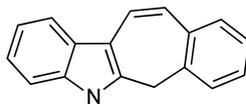
C<sub>3</sub>NO-C<sub>6</sub>-C<sub>6</sub>-C<sub>5</sub>OS  
13-Oxa-7-thia-11-aza-  
benzotricyclo[8.2.1.0<sup>1,6</sup>]  
tridec-8-ene  
**14**, 416*f*



C<sub>4</sub>O-C<sub>5</sub>O-C<sub>6</sub>-C<sub>7</sub>  
13-Oxa-2-benzo-  
tricyclo[8.2.1.0<sup>1,7</sup>]tridec-8-ene  
**3**, 522



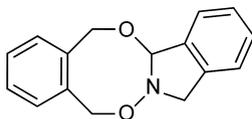
C<sub>4</sub>N-C<sub>6</sub>-C<sub>6</sub>-C<sub>7</sub>  
5,6-Dihydro-benzo[5,6]  
cyclohepta[1,2-b]indole  
**3**, 105*f*



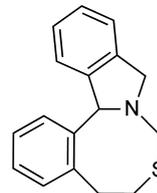
# 5,6,6,8

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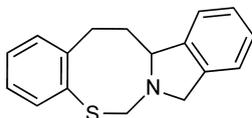
C<sub>4</sub>N-C<sub>6</sub>-C<sub>6</sub>-C<sub>5</sub>NO<sub>2</sub>  
4b,6,7,8,9,11-Hexahydro-  
5,10-dioxa-10a-aza-benzo  
[7.8]cycloocta[a]indene  
**14**, 495



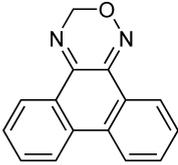
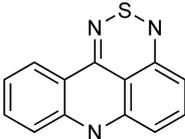
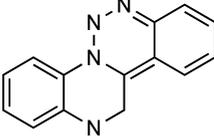
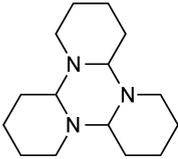
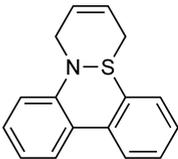
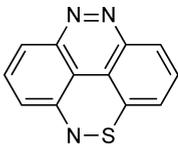
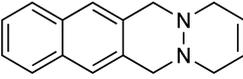
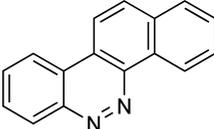
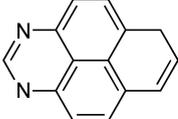
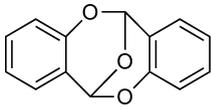
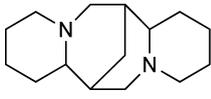
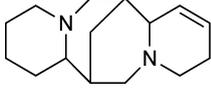
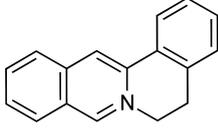
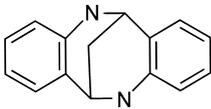
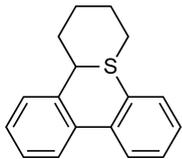
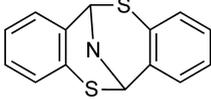
4b,7,8,11-Tetrahydro-9-  
thia-10a-aza-benz[5.6]  
cycloocta[a]indene  
**14**, 195



C<sub>4</sub>N-C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>NS  
4b,5,6,11-Tetrahydro-9-  
thia-10a-aza-benz[7.8]  
cycloocta[a]inden  
**14**, 231f



# 6,6,6,6

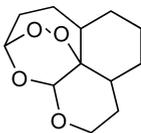
- $C_3N_2O-C_6-C_6-C_6$   
 3H-2-Oxa-1,4-diaza-triphenylene  
**9**, 348
 
- $C_3N_2S-C_5N-C_6-C_6$   
 3H,7H-2-Thia-1,3,7-triaza-  
 benzo[de]anthracene  
**10**, 896
 
- $C_3N_3-C_4N_2-C_6-C_6$   
 11,12-Dihydro-5H-4b,5,6,12-  
 tetraaza-chrysenes  
**12**, 327–340
 
- $C_3N_3-C_5N-C_5N-C_5N$   
 Dodecahydro-4a,8a,12a-  
 triaza-triphenylene  
**7**, 194–195
 
- $C_4NS-C_4NS-C_6-C_6$   
 4,4a-Dihydro-1H-4a $\lambda^4$ -  
 thia-12b-aza-triphenylene  
**8**, 540; **12**, 494
 
- $5H-4-Thia-5,9,10-triaza-pyrene$   
**8**, 72
 
- $C_4N_2-C_4N_2-C_6-C_6$   
 1,4,6,13-Tetrahydro-  
 benzo[g]pyridazino[1,2-b]  
 phthalazine  
**8**, 37
 
- $C_4N_2-C_6-C_6-C_6$   
 5,6-Diaza-chrysenes  
**8**, 78
 
- 1,6-Dihydro-benzo[gh]perimidine  
**10**, 65–127
 
- $C_4O_2-C_4O_2-C_6-C_6$   
 2,6,9-Trioxa-3,7-dibenzo-  
 bicyclo[3.3.1]nona-3,7-diene  
**14**, 441f
 
- $C_5N-C_5N-C_5N-C_5N$   
 Dodecahydro-7,14-methano-  
 dipyrdo[1,2-a;1',2'-c][1,5]  
 diazocine  
**14**, 334f, 342, 347f
 
- 1,3,4,7,7a,10,11,13,14,14a-  
 Decahydro-2H,6H-7,14-  
 methano-dipyrdo[1,2-a;1',2'-c]  
 [1,5]diazocine  
**14**, 331f, 333f, 342, 347f
 
- $C_5N-C_5N-C_6-C_6$   
 5,6-Dihydro-isoquino[3,2-a]  
 isoquinoline  
**12**, 47
 
- 5,6,11,12-Tetrahydro-6,12-  
 methano-dibenzo[b,f][1,5]  
 diazocine  
**14**, 306, 343
 
- $C_5S-C_5S-C_6-C_6$   
 1,2,3,4,4a,12b-Hexahydro-  
 4a $\lambda^4$ -thia-triphenylene  
**12**, 485, 488
 
- $C_6-C_6-C_4NS-C_4NS$   
 6H,12H-Dibenzo[b,f][1,5]  
 dithiocin-6,12-imine  
**14**, 462f
 

# 6,6,6,7

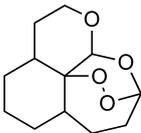
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$C_3O_3-C_5O-C_6-C_5O_2$

Dodecahydro-1,10-dioxa-9,10b-  
epoxy-cyclohepta[de]naphthalene  
10, 847-913; 13, 299-319;  
9, 597, 599, 617

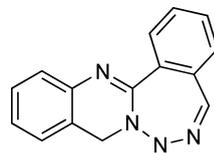


9, 597, 599, 617



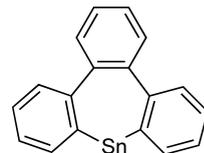
$C_4N_2-C_6-C_6-C_4N_3$

7,8-Dihydro-6,7,7a,13-  
tetraaza-benzo[3,4]cyclohepta  
[1,2-b]naphthalene  
13, 389f



$C_6-C_6-C_6-C_6-Sn$

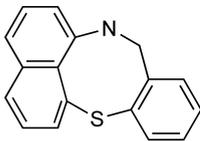
9H-9-Stanna-tribenzo[a,c,e]  
cycloheptene  
14, 986



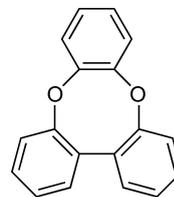
# 6,6,6,8

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C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>NS  
10,11-Dihydro-7-thia-11-  
aza-benz[8.9]cycloocta[de]  
naphthalene  
14, 415



C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>O<sub>2</sub>  
Tribenzo[b,e,g][1,4]dioxine  
14, 290f



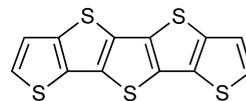
# 5,5,5,5,5

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C<sub>4</sub>S-C<sub>4</sub>S-C<sub>4</sub>S-C<sub>4</sub>S-C<sub>4</sub>S

3,4,5,8,9-Pentathia-cyclopenta[1,2-a;4,3-a']dipentalene

0311

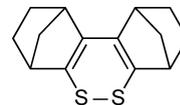


# 5,5,5,5,6

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C<sub>5</sub>-C<sub>5</sub>-C<sub>5</sub>-C<sub>5</sub>-C<sub>4</sub>S<sub>2</sub>

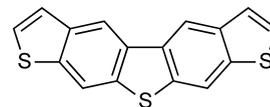
1,2,3,4,7,8,9,10-Octahydro-1,4:7,10-dimethanodibenzo[c,e][1,2]dithiin,  
8, 677-738



# 5,5,5,6,6

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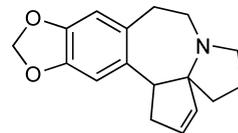
C<sub>4</sub>S-C<sub>4</sub>S-C<sub>4</sub>S-C<sub>6</sub>-C<sub>6</sub>  
Di(thiopheno)[b,d]thiophene  
10, 1171



# 5,5,5,6,7

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C<sub>3</sub>O<sub>2</sub>-C<sub>4</sub>N-C<sub>5</sub>-C<sub>6</sub>-C<sub>6</sub>N  
Cephalotaxine  
1, 163



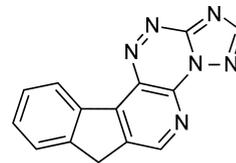
# 5,5,6,6,6

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C<sub>2</sub>N<sub>3</sub>-C<sub>5</sub>-C<sub>3</sub>N<sub>3</sub>-C<sub>5</sub>N-C<sub>6</sub>

1H-Indeno[1',2':4,5]pyrido[2,3-c][1,2,4]triazolo[5,1-c][1,2,4]triazine

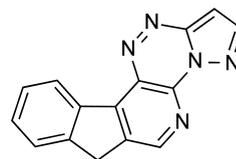
10, 888f



C<sub>3</sub>N<sub>2</sub>-C<sub>5</sub>-C<sub>3</sub>N<sub>3</sub>-C<sub>5</sub>N-C<sub>6</sub>

1H-Indeno[1',2':4,5]pyrido[2,3-c]pyrazolo[5,1-c][1,2,4]triazine

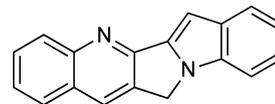
10, 888f



C<sub>4</sub>N-C<sub>4</sub>N-C<sub>5</sub>N-C<sub>6</sub>-C<sub>6</sub>

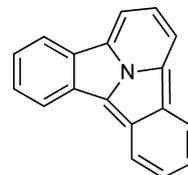
5H-4b,11-Diaza-benzo[4,5]pentaleno[1,2-b]naphthalene

12, 794



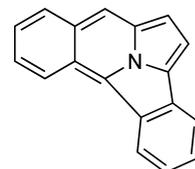
11c-Aza-indeno[1,2,3-jk]fluorene

12, 838



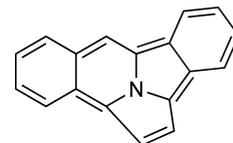
Benzo[1,2]pyrrolizino[3,4,5-ab]isoquinoline

12, 838



Benzo[6,7]pyrrolizino[3,4,5-ab]isoquinoline

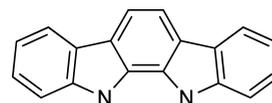
12, 838



C<sub>4</sub>N-C<sub>4</sub>N-C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>

11,12-Dihydro-11,12-diaza-indeno[2,1-a]fluorene

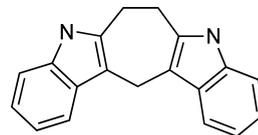
10, 1171, 1172



# 5,5,6,6,7

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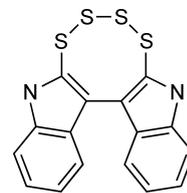
C<sub>4</sub>N-C<sub>4</sub>N-C<sub>6</sub>-C<sub>6</sub>-C<sub>7</sub>  
6,7,8,13-tetrahydro-5H-Cyclohepta[1,2-b:5,4-b']diindole,  
10, 1189



# 5,5,6,6,8

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C<sub>4</sub>N-C<sub>4</sub>N-C<sub>6</sub>-C<sub>6</sub>-C<sub>4</sub>S<sub>4</sub>  
5,10-dihydro-[1,2,3,4]Tetrathiocino[5,6-b:8,7-b']diindole,  
3, 167-168



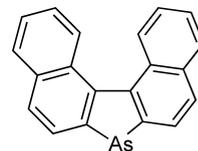
# 5,6,6,6,6

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C<sub>4</sub>As-C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>

7H-7-Arsa-dibenzo[c,g]fluorene

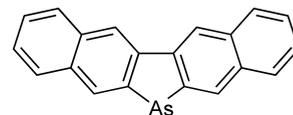
3, 1149–1179



C<sub>4</sub>(As)-C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>

12H-12-Arsa-dibenzo[b,h]fluorene

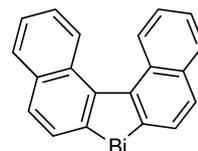
3, 1149–1179; 14, 261



C<sub>4</sub>Bi-C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>

7H-7-Bisma-dibenzo[c,g]fluorene

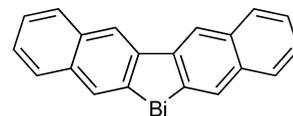
3, 1149–1179



C<sub>4</sub>(Bi)-C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>

12H-12-Bisma-dibenzo[b,h]fluorene

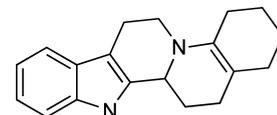
3, 1149–1179; 14, 261



C<sub>4</sub>N-C<sub>5</sub>N-C<sub>5</sub>N-C<sub>6</sub>-C<sub>6</sub>

1,2,3,4,5,6,11,11b; 12,13-Decahydro-4b,11-diaza-indeno[2,1-a]phenanthrene

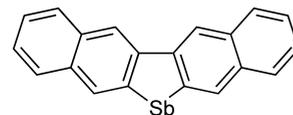
12, 56



C<sub>4</sub>(Sb)-C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>

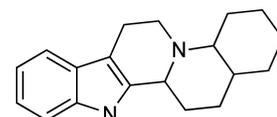
12H-12-Stiba-dibenzo[b,h]fluorene

3, 1149–1179; 14, 261



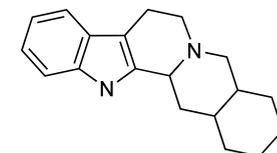
1,2,3,4,4a,5,6,11,11b,12,13,13a-Dodecahydro-4b,11-diaza-indeno[2,1-a]phenanthrene

12, 57f

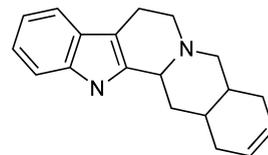


1,2,3,4,4a,5,7,8,13,13b,14,14a-Dodecahydro-indolo[2',3':3,4]pyrido[1,2-b]isoquinoline

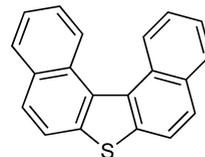
12, 38f



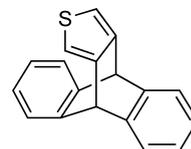
1,4,4a,5,7,8,13,13b,14,14a-Decahydro-indolo[2',3':3,4]pyrido[1,2-b]isoquinoline  
12, 37



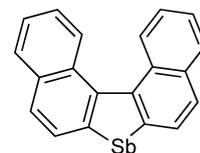
C<sub>4</sub>S-C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>  
7-Thia-dibenzo[c,g]fluorene  
3, 879f



4-Thia-8,10-dibenzo-tricyclo[5.2.2.0<sup>2,6</sup>]undeca-2,5,8,10-tetraene  
3, 752



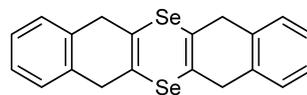
C<sub>4</sub>Sb-C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>  
7H-7-Stiba-dibenzo[c,g]fluorene  
3, 1149-1179



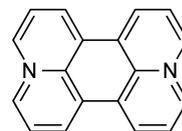
# 6,6,6,6,6

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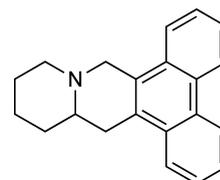
$C_4Se_2-C_6-C_6-C_6-C_6$   
5,7,12,14-Tetrahydro-6,13-diselena-pentacene  
9, 819f



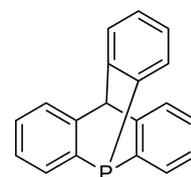
$C_5N-C_5N-C_5N-C_5N-C_6$   
3a,9a-Diaza-perylene  
12, 52f



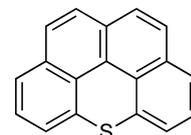
$C_5N-C_5N-C_6-C_6-C_6$   
9,10,11,12,13,14-Hexahydro-9aH-13a-aza-benzo[b]triphenylene  
12, 48f



$C_5P-C_5P-C_6-C_6-C_6$   
10H-5,10[1',2']-Benzenoacridophosphine  
7, 1018–1019, 1020



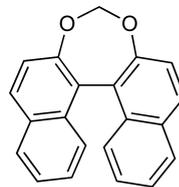
$C_5S-C_6-C_6-C_6-C_6$   
6-Thia-benzo[cd]pyrene  
7, 753



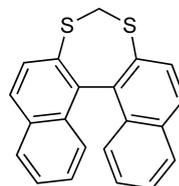
# 6,6,6,6,7

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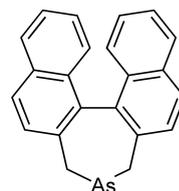
$C_6-C_6-C_6-C_6-C_5O_2$   
3,5-Dioxa-cyclohepta[2,1-a;3,4-a']dinaphthalene  
13, 355



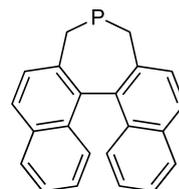
$C_6-C_6-C_6-C_6-C_5S_2$   
3,5-Dithia-cyclohepta[2,1-a;3,4-a']dinaphthalene  
13, 349, 350



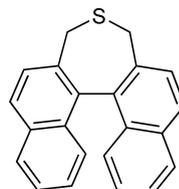
$C_6-C_6-C_6-C_6-C_6As$   
4,5-Dihydro-3H-4-arsa-cyclohepta[2,1-a;3,4-a']dinaphthalene  
14, 962



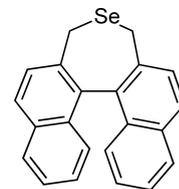
$C_6-C_6-C_6-C_6-C_6P$   
4,5-Dihydro-3H-4-phospha-cyclohepta[2,1-a;3,4-a']dinaphthalene  
14, 901-944



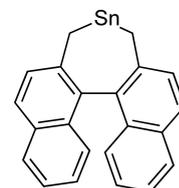
$C_6-C_6-C_6-C_6-C_6S$   
3,5-Dihydro-4-thia-cyclohepta[2,1-a;3,4-a']dinaphthalene  
13, 125-126, 129-130



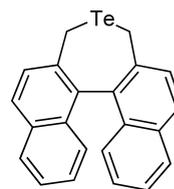
$C_6-C_6-C_6-C_6-C_6Se$   
3,5-Dihydro-4-selena-cyclohepta[2,1-a;3,4-a']dinaphthalene  
14, 877f, 877-878



$C_6-C_6-C_6-C_6-C_6Sn$   
4,5-Dihydro-3H-4-stanna-cyclohepta[2,1-a;3,4-a']dinaphthalene  
14, 986



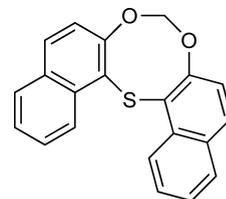
C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>Te  
3,5-Dihydro-4-tellura-cyclohepta[2,1-a;3,4-a']dinaphthalene  
**14**, 879



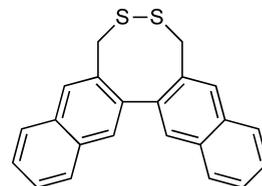
# 6,6,6,6,8

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$C_6-C_6-C_6-C_6-C_5O_2S$   
5,7-Dioxa-12-thia-dinaphtho[a,d]cyclooctene  
14, 499–500



$C_6-C_6-C_6-C_6-C_6S_2$   
5,8-Dihydro-6,7-dithia-dinaphtho[a,c]cyclooctene  
14, 160



# 6,6,6,7,7

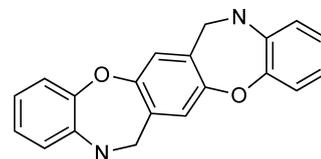
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C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>-C<sub>5</sub>NO-C<sub>5</sub>NO

7,8,15,16-Tetrahydro-5,13-dioxa-8,16-diaza-dibenzo[d,d']benzo

[1,2-a;4,5-a']dicycloheptene

13, 273



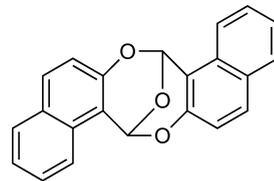
# 6,6,6,6,6,6

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C<sub>4</sub>O<sub>2</sub>-C<sub>4</sub>O<sub>2</sub>-C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>

8,16-Epoxy-8H,16H-dinaphtho[2,1-b:29,19-f][1,5]dioxocine

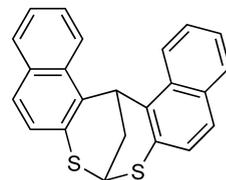
14, 441f



C<sub>5</sub>S-C<sub>5</sub>S-C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>

2,8-Dithia-3,6-dinaphtho-bicyclo[3.3.1]nona-3,6-diene

14, 233f



# 6,6,6,6,6,8

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C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>-C<sub>6</sub>O<sub>2</sub>  
5,8-dioxa-6,7-benzo-dinaphtho[a,c]cyclooctene  
14, 261

