Oxygen Heterocycles

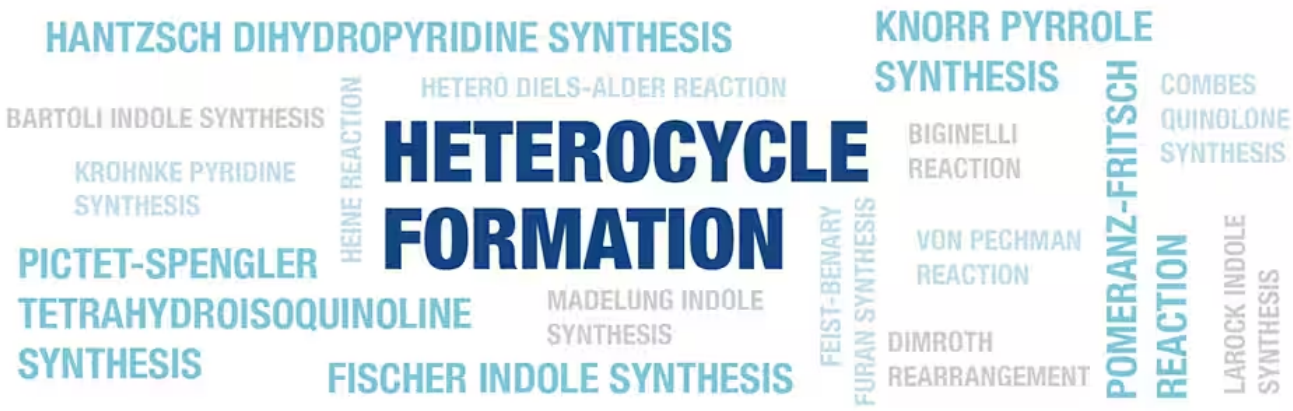
Oxygen heterocyclic compounds are organic cyclic compounds containing one or more oxygen atoms in the ring. They may be aliphatic or aromatic in nature. Oxygen heterocycles constitute an important class of heterocyclic compounds largely due to their natural abundance and diverse biological functions. The heterocyclic ring may contain one or more oxygen atoms which influence the physio-chemical and biological properties of the compounds. They can be classified as monocyclic oxygen heterocycles and fused oxygen heterocycles. Some of the monocyclic compounds are oxirane, oxetane, dioxetane, furan, oxolane, dioxolane, dioxane, and trioxane. For fused heterocycles, the examples include benzofuran, dibenzofuran, benzopyran, benzodioxine, chromene, and xanthene.

Oxygen heterocycles have a potential use as solvents in many organic reactions. For example, tetrahydrofuran is an excellent solvent for organic and organometallic reactions. Another category is crown ether, which are important due to their ability to solvate positively charged ions that under normal conditions would not be soluble in an organic solvent. Oxygen heterocycles having alpha,beta-unsaturated bonds are used widely in organic transformations. Oxygen heterocyclic compounds form the basis of sugar chemistry and its derivatives, which have many potential uses in pharmaceuticals as drugs to treat certain types of diseases. Many natural and semi-synthetic oxygen heterocyclic compounds are known, and which find application as therapeutic compounds in the treatment of, for instance, anticancer, congestive heart failure, and dyslipidemia.

Benzodioxanes

Benzodioxanes (Dihydrobenzodioxines) are bicyclic compounds having a benzene ring fused to a dioxane ring. Depending on the relative positions of the oxygen atoms, there are three isomers possible for benzodioxane, namely 1,2-benzodioxane, 1,3-benzodioxane and 1,4-benzodioxane.

Benzodioxane derivatives are known for their broad spectrum of biological activities. The 1,4-benzodioxane moiety is an excellent building block for organic synthesis and widely used in designing some of the therapeutic agents having alpha-adrenergic blocking, antigrastic, spasmolytic, antipsychotic, anxiolytic, hepatoprotective properties and I2 imidazoline receptor agonist. The Benzodioxane skeleton is present in several pharmaceuticals including Eltoprazine, Fluparoxan, Piperoxan, Prosympal, Piperoxan, and Prosympal. There are also reports on some 1,3-benzodioxane derivatives possessing anti-inflammatory activity with low toxicity, or analgesic, mucolytic and antipyretic activity. There are a large number of reviews on the stereochemistry of 1,3-benzodioxanes.



H54755	1,3-Benzodioxole-5-sulfonyl chloride, 95%
L01421	1,4-Benzodioxan-6-amine, 99%
B20661	1,4-Benzodioxane-2-carboxylic acid, 97%
H26571	1,4-Benzodioxane-2-thiocarboxamide, 97%
L20296	1,4-Benzodioxane-6-boronic acid, 97%
A18696	1,4-Benzodioxane-6-carboxaldehyde, 99%
H66992	1,4-Benzodioxane-6-carboxylic acid, 95%
H31670	1,4-Benzodioxane-6-sulfonyl chloride
A17558	1,4-Benzodioxane, 98%
B22149	2-Bromomethyl-1,4-benzodioxane, 97%
L04137	2-Chloromethyl-1,4-benzodioxane, 97%
A14170	2-Hydroxymethyl-1,4-benzodioxane, 98%
31434	4,7-Dihydroxy-1,10-phenanthroline
H27709	5-Bromo-1,4-benzodioxane, 95%

Dioxoles / Dioxolanes

Dioxoles are five membered heterocyclic compounds containing two oxygen atoms. Dioxoles, particularly fluorinated dioxoles, are used as co-monomers to make polymers that find use in forming protective coatings for chemical resistance. Dioxole functionalized metal-organic frameworks have also been recently reported.

Dioxolanes (also known as Dihydrodioxole) belong to that class of compounds that bear a dioxalane moiety which are five-membered heterocyclic acetals (that are saturated derivatives of dioxoles). They are related to tetrahydrofuran by interchange of one oxygen atom for another CH2 group. They exist in two isomeric forms namely 1,2-Dioxolane and 1,3-Dioxolane. In organic synthesis, dioxalanes are routinely synthesised as protecting groups for diols. They survive a variety of chemical conditions such as alkaline conditions and are inert to organometallic reagents. Dioxolanes are used as a solvent and as a monomer for the production of polyacetals which are very high molecular weight compounds having less toxicity. Being strong and ridged, this polymer finds use as a substitute for metals in many engineering applications where low-friction properties are important. Dioxolanes are also used as stabilizer for halogenated organic solvents and are an excellent solvent for paints and coatings.

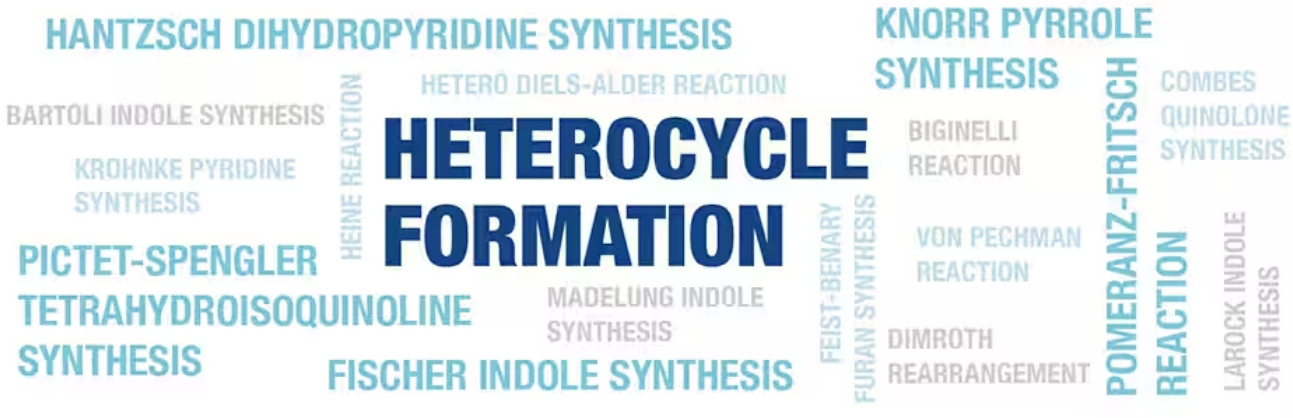
A18882	(1,3-Dioxolan-2-ylmethyl)triphenylphosphonium bromide, 98%
42897	1,3-Dioxolane, 99.5%, stab.
L19533	2-(1,3-Dioxolan-2-on-4-yl)-1-ethylboronic acid pinacol ester, 97%
H26071	2-(1,3-Dioxolan-2-yl)ethylboronic acid pinacol ester, 97%
B21823	2,2,4-Trimethyl-1,3-dioxolane, 99%
A11441	2-(2-Bromoethyl)-1,3-dioxolane, 95%, stab. with silver
H32056	2,2-Dichloro-1,3-benzodioxole, 97%
L00482	2,2-Dimethyl-1,3-dioxolane, 98+%
H32816	2-(3,4-Difluorophenyl)-1,3-dioxolane, 98%
L19604	2-Bromobenzaldehyde ethylene acetal, 98%
A19312	2-Bromomethyl-1,3-dioxolane, 97%
H31971	2-Ethyl-2-vinyl-1,3-dioxolane, 98%
H32187	2-Ethyl-4-methyl-1,3-dioxolane, cis + trans, 99%
H31933	2-Ethyl-4-methyl-1,3-dioxolane solution in acetonitrile (1000mg/L)

H62587	2-Fluoro-3,4-methylenedioxybenzeneboronic acid pinacol ester, 96%
A12824	2-Methyl-1,3-dioxolane, 98%
H63420	(2R,5R)-1-[2-(1,3-Dioxolan-2-yl)phenyl]-2,5-dimethylphospholane, 97%
H51795	3-(1,3-Dioxolan-2-yl)thiobenzamide, 97%
H53286	3-(2-Methyl-1,3-dioxolan-2-yl)benzeneboronic acid, 97%
B24779	3-Aminobenzaldehyde ethylene acetal, 97%
L19611	3-Bromobenzaldehyde ethylene acetal, 98+%
H58963	4-(1,3-Dioxolan-2-yl)benzonitrile, 97%
H51856	4-(1,3-Dioxolan-2-yl)thiobenzamide, 97%
H55735	4-Chloromethyl-5-methyl-2-oxo-1,3-dioxole, 97%
H61502	4-Fluoro-1,3-dioxolan-2-one, 98%
H27766	(4S,5S)-(+)-4,5-Bis(fluoromethyl)-2,2-dimethyl-1,3-dioxolane, 90+%
H60822	4-Vinyl-1,3-dioxolan-2-one, 99%
B21065	5,6-Methylenedioxy-2-phenylindole, 97%
A15735	Ethylene carbonate, 99%
H33781	Methyl (±)-2,2-dimethyl-1,3-dioxolane-4-carboxylate, 97+%
B23037	(R)-(-)-2,3-O-Isopropylideneglycerol, 96%
L18559	(R)-(+)-4-Chloromethyl-2,2-dimethyl-1,3-dioxolane, 98%, ee 98%
B24488	(S)-(+)-2,3-O-Isopropylideneglycerol, 98%

Oxiranes (epoxides)

Oxiranes, also referred to as epoxides, are organic compounds in which an oxygen atom is bonded to two adjacent carbon atoms, forming a 3-membered ring. The three-membered ring in oxirane is highly strained and readily opens under mild conditions. This property is extensively used in organic synthesis. For example, oxirane on treatment with reagents like water, methanol, hydrochloric acid, and base forms ethylene glycol, methyl cellosolve, 2-chloroethanol and polyethylene glycol, respectively. A unique behaviour of oxiranes is the trans-annular fission, which involves the cleavage of C-C and C-O bonds, which may occur with or without the accompanying hydrogen transfer to oxygen.

Oxiranes are critical in the manufacture of detergents, thickeners, solvents, and plastics. In the medical equipment industry, steam is replaced by oxirane to sterilize heat sensitive tools as it does not leave any residue. The prominent derivative of oxirane, ethylene glycol, can be converted into polyester fibers or polyethylene terephthalate (PET) resin. Polyester fibres are used in clothing, carpets, and upholstery; PET resin is a recyclable plastic used for packaging film and bottles.



H61782	1-[2-(2,4-Difluorophenyl)-2,3-epoxypropyl]-1H-1,2,4-triazole methanesulfonate, 98%
H66536	1-(2,3-Epoxypropyl)-2-nitroimidazole, 97%
L06768	1,2,7,8-Diepoxyoctane, 97%
L09869	1,2-Epoxy-3,3,3-trifluoropropane, 98%
L19291	1,2-Epoxy-3-methylbutane, 98+%
L07033	1,2-Epoxy-7-octene, 97%
H36581	(±)-1,2-Epoxybutane, 99%
L07289	1,2-Epoxydecane, 97%
L07609	1,2-Epoxyhexane, 96%
L07622	1,2-Epoxyoctadecane, tech. 85%
B21463	1,2-Epoxyoctane, 97%
L12632	1,4-Butanediol diglycidyl ether, 96%
H57452	1-Oxa-6-azaspiro[3.4]octane oxalate, 96%
H57854	2-Oxa-5-azaspiro[3.4]octane oxalate, 96%

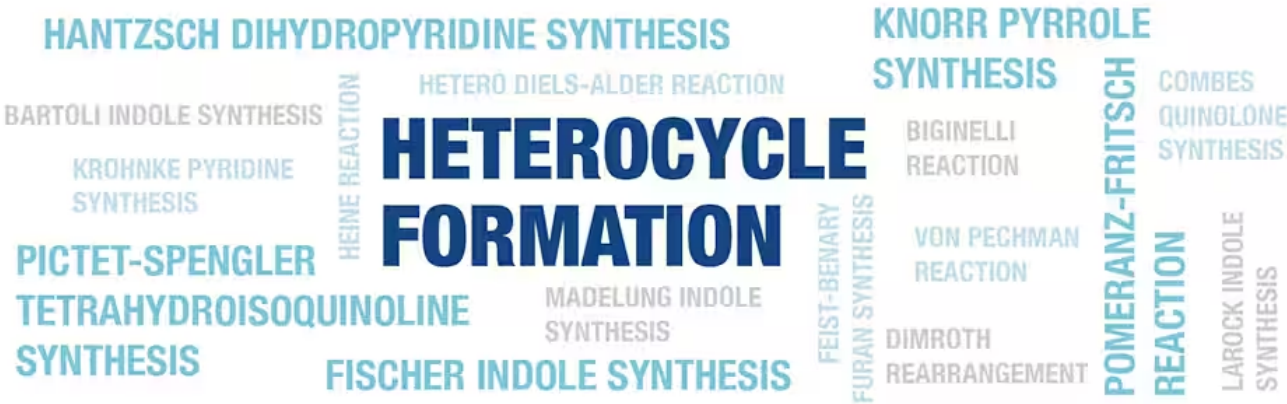
H57634	2-Oxa-6-azaspiro[3.3]heptane hemioxalate, 96%
H57579	2-Oxa-6-azaspiro[3.4]octane, 95%
H57834	2-Oxa-7-azaspiro[3.5]nonane hemioxalate, 97%
H56000	(2S)-(+)-Glycidyl p-toluenesulfonate, 99%
L06951	3,3-Dimethyl-1,2-epoxybutane, 95%
A18431	(3-Glycidoxypropyl)trimethoxysilane, 97%
H53360	4-(2-Oxiranylmethoxy)benzeneboronic acid pinacol ester, 98%
H26516	(±)-4-Chlorostyrene oxide, 97+%
H26600	(±)-4-Fluorostyrene oxide, 97%
H61917	4-Hydroxymethyl-2,6,7-trioxa-1-phosphabicyclo[2.2.2]octane 1-oxide, 98%
H55945	4-tert-Butylphenyl glycidyl ether, 95%
H34134	6-Boc-1-oxa-6-azaspiro[2.5]octane, 97%
H57658	6-Oxa-1-azaspiro[3.3]heptane hemioxalate, 95%
L11634	Allyl glycidyl ether, 97%
L13980	Benzyl (R)-(-)-glycidyl ether, 98+%
L14033	Benzyl (S)-(+)-glycidyl ether, 98+%
L03919	Butadiene diepoxide, 95%
L00238	Butadiene monoxide, 98%

L03874	Chalcone alpha,beta-epoxide, 98%
L10320	cis-2,3-Epoxybutane, 98%
L02940	Dicyclopentadiene diepoxide, 98%
A15823	(±)-Epichlorohydrin, 99%
H52099	erythro-N-Boc-3,5-difluoro-L-phenylalanine epoxide, 95%
B23654	Ethyl 3-methyl-3-phenylglycidate, cis + trans, 98%
B22990	Ethyl 3-phenylglycidate, cis + trans, 90+%
H27891	Ethyl (S)-2-oxiranylacetate, 97%
H53508	Glycidyl 2,2,3,3-tetrafluoropropyl ether, 97%
L10136	Glycidyl 2-methylphenyl ether, tech. 85%
A19780	Glycidyl 4-methoxyphenyl ether, 98%
L11133	Glycidyl methacrylate, 97%, stab. with 100ppm 4-methoxyphenol
B21768	Glycidyl phenyl ether, 99%
H64289	Glycidyl (S)-(+)-3-nitrobenzenesulfonate, 98%
L09773	Isobutylene oxide, 99+%
L19768	Isoprene monoxide, 95%
30765	(±)-Propylene oxide, 99+%

L14198	(R)-(-)-Epichlorohydrin, 98+%
L18557	(R)-(-)-Glycidyl butyrate, 98%
B21884	(R)-(+)-Propylene oxide, 99%
B21245	(R)-(+)-Styrene oxide, 98%
L14298	(S)-(+)-Epichlorohydrin, 98+%
H63502	(S)-(-)-Glycidol, 99+%, ee 99+%
L18558	(S)-(+)-Glycidyl butyrate, 98%, ee 98%
H32961	(S)-(-)-Glycidyl trityl ether, 98%, ee 98%
B22341	(S)-(-)-Propylene oxide, 99%
L07821	(±)-Styrene oxide, 98%
B22005	trans-2,3-Epoxybutane, 97%

Benzodioxoles

Benzodioxoles are compounds which have an aromatic ring and are a heterocyclic compound containing the methylenedioxy functional group. They are also referred to as 1,2-methylenedioxybenzenes. Benzodioxoles are prepared by reacting catechol derivatives with disubstituted halomethanes. Some of the well known compounds of benzodioxole series are 1,3-Benzodioxole, Safrole and Piperonal.



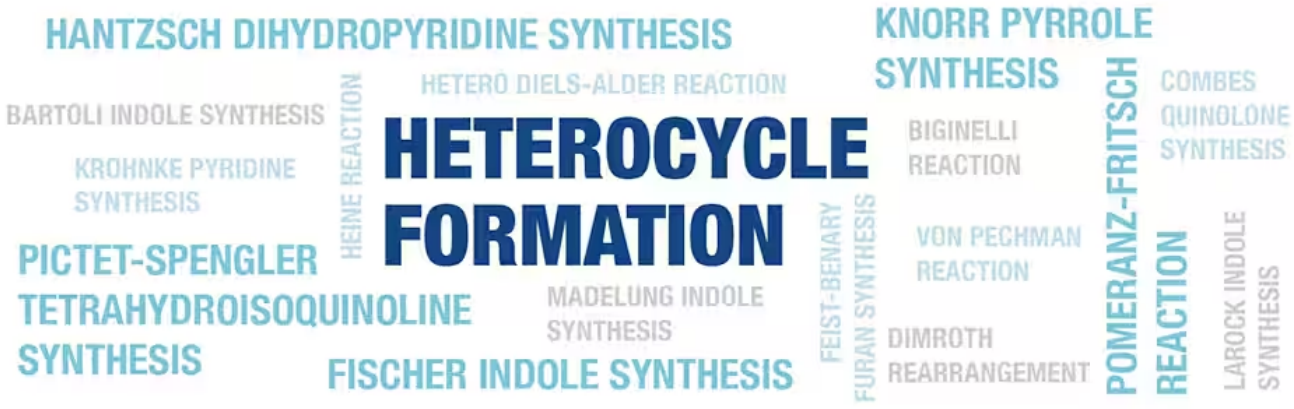
L13109	1,2-Dibromo-4,5-(methylenedioxy)benzene, 98%
B24838	1,2-Methylenedioxy-4-nitrobenzene, 98+%
L13643	1-(3,4-Methylenedioxy)phenyl-2-butanone, 96%
A14192	1,3-Benzodioxole, 99%
H26296	2-(1,3-Benzodioxol-5-yl)piperazine, 95%
L19157	2,2-Difluoro-1,3-benzodioxole-4-carbonyl chloride, 97%
H26447	2,2-Difluoro-1,3-benzodioxole-4-carboxaldehyde, 97%
B24232	2,2-Difluoro-1,3-benzodioxole-5-carboxaldehyde, 97%
B23610	2,2-Difluoro-1,3-benzodioxole-5-carboxylic acid, 97+%
B20540	2,2-Difluoro-1,3-benzodioxole, 97%
H66445	2-[3,4-(Methylenedioxy)phenyl]ethylamine, 95%
H60208	2-[3,4-(Methylenedioxy)phenyl]ethylamine hydrochloride, 95%
B21788	2'-Amino-4',5'-methylenedioxyacetophenone hydrochloride, 98%
A18208	2-Bromo-4,5-methylenedioxycinnamic acid, 97%
H52666	2-Formyl-4,5-(methylenedioxy)benzeneboronic acid, 96%
H27924	2-Methyl-3-[(3,4-methylenedioxy)phenyl]propionic acid
A13597	3',4'-(Methylenedioxy)acetophenone, 98%
A12975	3,4-(Methylenedioxy)aniline, 98+%
B24217	3,4-(Methylenedioxy)benzeneboronic acid, 98%

A12661	3,4-(Methylenedioxy)benzyl alcohol, 98%
L08675	3,4-(Methylenedioxy)benzylideneacetone, 98%
L10501	3,4-(Methylenedioxy)benzyl isothiocyanate, 94%
L09139	3,4-Methylenedioxy-beta-nitrostyrene, 98%
A10122	3,4-(Methylenedioxy)cinnamic acid, predominantly trans, 99%
A11229	3,4-(Methylenedioxy)phenylacetic acid, 98%
L09518	3,4-(Methylenedioxy)phenylacetonitrile, 98+%
L20273	3,4-(Methylenedioxy)phenylglyoxal hydrate, 97%, dry wt basis
H51835	3,4-(Methylenedioxy)thiobenzamide, 97%
A18778	3-Ethyl-2-methylbenzoxazolium iodide, 95%
L06258	4-(3,4-Methylenedioxy)phenyl-2-butanone, 98%
L11841	4',5'-Methylenedioxy-2'-nitroacetophenone, 96%
L08014	4,5-Methylenedioxy-2-nitrocinnamic acid, 98%
B22797	4-Amino-2,2-difluoro-1,3-benzodioxole, 97+%
A17906	4-Bromo-1,2-(methylenedioxy)benzene, 98%
B24389	4-Bromo-2,2-difluoro-1,3-benzodioxole, 97%
B24336	5-Amino-2,2-difluoro-1,3-benzodioxole, 97+%
B23661	5-Bromo-2,2-difluoro-1,3-benzodioxole, 97%
B22534	5-Chloro-1,3-benzodioxole, 98%

L08213	5-Methoxypiperonal, 97%
A17510	6-Bromopiperonal, 98%
L05972	6-Chloropiperonyl alcohol, 98%
L05606	6-Chloropiperonyl chloride, 97%
A14039	6-Nitropiperonal, 98+%
A18140	6-Nitropiperonyl alcohol, 98+%
44534	N-Benzylidene-3,4-(methylenedioxy)benzylamine, 98+%
A13510	Piperine, 98%
A14072	Piperonal, 99%
L11952	Piperonaldoxime, 99%
H60771	Piperonyl butoxide, tech. 90%
A14105	Piperonylic acid, 98+%

Furans & THFs

Furans are a group of heterocyclic organic compounds, consisting of a five-membered aromatic ring with four carbon atoms and one oxygen atom. Furan derivatives, namely furfural and furfuryl alcohol, are used as speciality solvents. Further, these are the main ingredients of thermosetting resin, namely a *furan resin*, endowed with specific properties like corrosion resistance, high carbon yield, stability at high temperature, low fire hazard and higher physical strength. These resins are used in foundry molds, fibreglass composites, cements and plastic insulation foams. It is a versatile building block for constructing several important compounds. The furan ring system is a constituent of the chemical structure of various compounds having antibacterial, antiviral, anti-inflammatory, antifungal, antitumor, antihyperglycemic, analgesic and anticonvulsant properties.



L20001	1,2-Cyclohexanedicarboxylic anhydride, cis + trans, 97%
B24045	1-(2-Furyl)-1,3-butanedione, 96%
L18704	1-(2-Tetrahydrofuroyl)piperazine, 97%
B23105	1-Furfurylpyrrole, 99%
A15386	2,2'-Furil, 98%
B23972	2,2'-Furil dioxime, mixture of isomers, 97%
A15272	2,2'-Furoin, 98%
H31757	2-(2-Furyl)-1,3-diphenylimidazolidine, 96%
H51801	2-(2-Furyl)-4-methylthiazole-5-carboxylic acid, 97%
L15518	2,3-Dibromofuran, 97%, stab. with 0.5% calcium carbonate
B20575	2,3-Dihydrofuran, 98+%
L15705	2,3-Dimethylfuran, 99%
L12919	2,3-Dimethylmaleic anhydride, 97%
L15612	2,3-Diphenylmaleic anhydride, 98%

B25028	2,5-Dihydro-2,5-dimethoxyfuran, cis + trans, 99%
A11687	2,5-Dimethoxytetrahydrofuran, cis + trans, 98%
A12182	2,5-Dimethyl-3(2H)-furanone, 94%
L18422	2,5-Dimethyl-3-furoyl chloride, 98%
A12833	2,5-Dimethylfuran, 98+%
L13142	2(5H)-Furanone, 96%
A16172	2-Acetyl-5-methylfuran, 98+%
L13771	2-Acetylbenzo[b]furan, 99%
A14938	2-Acetylfuran, 99%
H58851	2-Amino-4-(2-furyl)thiazole, 97%
H26287	2-Butyrylfuran, 97%
H52312	2-(Ethoxycarbonyl)furan-5-boronic acid pinacol ester, 96%
A15520	2-Ethylfuran, 98+%
H32013	2-Furaldehyde 2,2-dimethylhydrazone, 98%
A16167	2-Furaldehyde, 98%
31305	2-Furaldehyde, ACS, 98% min
B25075	2-Furamide, 97%
A11454	2-Furoic acid, 98%
A13630	2-Furoic acid hydrazide, 98%

A12214	2-Furonitrile, 98+%
A14497	2-Furoylacetonitrile, 97%
L06960	2-Furoyl chloride, 98+%
B22171	2-Furylacetone, 99%
H26351	2-Heptanoylfuran, 96%
B22306	2-Hexanoylfuran, 99%
A15593	2-Methoxyfuran, 97%
A10125	2-Methyl-3-(2-furyl)propenal, 97%
B24928	2-Methyl-3-furoic acid, 98%
B21998	2-Methyl-5-(methylthio)furan, 99%
B20988	2-Methyl-5-phenyl-3-furoic acid, 97%
B23692	2-Methylfuran, 98+%, stab.
B20890	2-Methyltetrahydrofuran-3-one, 98+%
L07356	2-Methyltetrahydrofuran, 99%, stab. with ca 150-400ppm BHT
A13376	2-n-Butylfuran, 98%
A10604	2-n-Heptylfuran, 97%
H26698	2-n-Hexylfuran, 97%

A11607	2-n-Pentylfuran, 98%
B21703	2-n-Propylfuran, 99%
H26754	2-Propionylfuran, 97%
H26491	2-Valerylfuran, 97%
H33472	3-(2-Furyl)-1H-pyrazole, 97%
L06220	3-(2-Furyl)-2-phenylpropenal, 97%
A13042	3-(2-Furyl)acrolein, 99%
B21653	3-(2-Furyl)acrylic acid, 99%
H27273	3-(2-Furyl)propionic acid, 97%
H27378	3-(2-Methyl-3-furylthio)-4-heptanone, 97%
L13143	3-(3-Furyl)acrylic acid, 98%
B22671	3-(5-Methyl-2-furyl)butyraldehyde, 99%
A15545	3-Acetyl-2,5-dimethylfuran, 98%
H34071	3-Acetylfuran, 97%
L11721	3-Amino-5-(2-furyl)-1H-pyrazole, 97%
H56119	(3aR,4S,5R,6aS)-(-)-Hexahydro-5-hydroxy-4-hydroxymethyl-2H-cyclopenta[b]furan-2-one, 98%
B23543	3-Bromofuran, 97%, stab. with 0.5% calcium carbonate
L15198	3-Formylfuran-2-boronic acid, 97%

A11334	3-Furaldehyde, 97%, stab. with ca 0.05% BHT
L15519	3-Furaldehyde diethyl acetal, 98%
H28599	3-(Furfurylaminocarbonyl)benzeneboronic acid pinacol ester, 97%
H52992	3-(Furfurylcarbamoyl)benzeneboronic acid, 97%
L11629	3-Furoic acid, 99%
L14019	3-Furonitrile, 98%
L01763	3-Methyl-2-furoic acid, 98+%
H28130	3-(Tetrahydrofurfurylaminocarbonyl)benzeneboronic acid pinacol ester, 97%
H52380	4-(2-Fluorophenyl)tetrahydropyran-4-carbonitrile, 97+%
H58115	4-(2-Furyl)-2-methylthiazole, 97%
A19456	4-(2-Furyl)-3-buten-2-one, cis + trans, 98%
H27560	4-(2-Methyl-3-furylthio)-5-nonanone, 95%
H52363	4-(3-Chlorophenyl)tetrahydropyran-4-carbonitrile, 97+%
H53096	4-(3-Furfurylureido)benzeneboronic acid pinacol ester, 98%
H52379	4-[3-(Trifluromethyl)phenyl]tetrahydropyran-4-carbonitrile, 97+%
A10693	4,4,4-Trifluoro-1-(2-furyl)-1,3-butanedione, 98%
L15517	4,5-Dibromo-2-furoic acid, 97%
H26994	4-Bromo-2-furaldehyde, 97%

H52355	4-Bromofuran-2-carboxamide, 96%
H29236	4-(Furfurylaminocarbonyl)benzeneboronic acid pinacol ester, 97%
H52970	4-(Furfurylcarbamoyl)benzeneboronic acid, 97%
H51121	4-(Furfuryliminomethyl)benzeneboronic acid pinacol ester, 97%
H50316	5-(1-Pyrrolidinyl)-2-furaldehyde, 98%
H50405	5-(2,4-Dichlorophenyl)furan-2-carbonyl chloride, 97%
H50409	5-(2,5-Dichlorophenyl)furan-2-carbonyl chloride, 99%
H50400	5-(2-Chloro-4-nitrophenyl)-2-furoyl chloride
H50401	5-(2-Chloro-5-nitrophenyl)-2-furoyl chloride, 95%
H50398	5-(2-Fluorophenyl)-2-furoyl chloride
B25737	5-(2-Furyl)-1H-pyrazole-3-carboxylic acid, 97%
H34479	5-(2-Furyl)isoxazole, 95%
H58560	5-(2-Furyl)thieno[2,3-d]pyrimidin-4(3H)-one, 97%
H50392	5-(2-Methyl-4-nitrophenyl)furan-2-carbonyl chloride

H50394	5-(3,4-Dichlorophenyl)furan-2-carbonyl chloride
H50395	5-(3-Chloro-2-methylphenyl)furan-2-carbonyl chloride
H50404	5-(3-Chlorophenyl)-2-furoyl chloride
H50407	5-(3-Nitrophenyl)-2-furoyl chloride
H50609	5-(4-Bromophenyl)furan-2-carbonitrile, 97%
H50402	5-(4-Chloro-3-nitrophenyl)-2-furoyl chloride
H51763	5-(4-Cyanophenyl)-2-furoic acid, 95%
H50408	5-(4-Nitrophenyl)-2-furoyl chloride
H58812	5-(5-Methyl-2-furyl)thieno[2,3-d]pyrimidin-4(3H)-one, 97%
H26942	5-Bromo-2-(2-furyl)pyridine, 95%
B22536	5-Bromo-2-furaldehyde, 98%, stab. with 2% ethanol
A14840	5-Bromo-2-furoic acid, 99%
L19971	5-Chloro-2-furaldehyde, 98%, stab. with 2% ethanol
L06659	5-Ethyl-2-furaldehyde, 98%
L17920	5-Formylfuran-2-boronic acid, 95%
A12475	5-Hydroxymethyl-2-furaldehyde, 97%
L19670	5-Iodo-2-furaldehyde, 97%
H50314	5-Methoxymethyl-2-furoic acid, 99%

A13264	5-Methyl-2-furaldehyde, 98%
H31282	5-Methylfuran-2-boronic acid pinacol ester, 97%
A10618	5-Nitro-2-furaldehyde, 99%
A18169	5-Nitro-2-furaldehyde diacetate, 97%
A18593	5-Nitro-2-furaldehyde semicarbazone, 98+%
L01374	5-Nitro-2-furaldoxime, 97%
A10597	5-Nitro-2-furoic acid, 98+%
L10486	5-Nitro-2-furonitrile, 97%
H50403	5-Phenyl-2-furoyl chloride
A19258	5-tert-Butyl-2-methyl-3-furoic acid, 97%
H34241	6-Chloro-4-(furfurylamino)pyrimidine, 96%
B22967	alpha-Acetyl-gamma-butyrolactone, 98+%
L07602	alpha-Angelicalactone, 98%
A17344	alpha-Bromo-gamma-butyrolactone, 97%
89121	Borane-d₃, 1M in tetrahydrofuran
44188	Borane-d₃, 1M in tetrahydrofuran, packaged under Argon in resealable ChemSeal□ bottles
43291	Borane-tetrahydrofuran complex, 1M soln. in THF, packaged under Argon in resealable ChemSeal□ bottles

	L13961	Borane-tetrahydrofuran complex, 1M soln. in THF, stab. with 5mmol NaBH4
	L17593	Boron trifluoride-tetrahydrofuran complex, BF₃ 45.5%
	A16006	cis-Aconitic anhydride, 98%
	L05238	Citraconic anhydride, 98%
	H34162	Ethyl 2-amino-4-(5-methyl-2-furyl)thiophene-3-carboxylate, 96%
	A13909	Ethyl 2-furoate, 99%
	H25791	Ethyl 3-(2-furyl)-1H-pyrazole-5-carboxylate, 98%
	A18732	Ethyl 3-(2-furyl)propionate, 98%
	B21766	Ethyl 3-(furfurylthio)propionate, 97%
	H50397	Ethyl 4-(5-chlorocarbonyl-2-furyl)benzoate
	H52343	Ethyl 5-bromo-2-furoate, 97+%
	B24861	Ethyl 5-nitro-2-furoate, 97%
	H28718	Furan-2,5-dicarboxylic acid, 98%
	B23842	Furan-2-boronic acid, 97%
	L18366	Furan-2-boronic acid pinacol ester, 96%

Pyrans / Tetrahydropyrans

Pyrans, also known as oxines, are six-membered heterocyclic, non-aromatic compounds, consisting of five carbon atoms and one oxygen atom in the ring with two double bonds. There exist two isomers of pyran, 2H-pyran & 4H-pyran, that differ only in the location of the double bonds. Pyranoflavonoids, containing pyrans in the ring, are biologically important. As biologically active molecules possessing diverse pharmacological activities, pyran based molecules find applications as antimicrobials, antivirals, mutagenic compounds, antiproliferatives, sex pheromones, antitumor compounds, and for cancer therapy and central nervous system activity. Some of the pyran derivatives are widely employed as cosmetics and pigments and as potential biodegradable agrochemicals.

Tetrahydropyrans, also called as oxanes, are organic compounds consisting of a saturated six-membered ring containing five carbon atoms and one oxygen atom. The tetrahydropyran ring system forms the core of pyranose sugars, such as glucose. As a protecting group, the 2-tetrahydropyranyl group is extensively used in organic synthesis for the protection of alcohols as tetrahydropyranyl ether. This confers protection to the alcohol from a variety of reaction conditions. The deprotection is relatively simple, involving acidic hydrolysis with formation of 5-hydroxypentanal as by product. Compounds bearing tetrahydropyrans have been considered to be a valuable addition to the growing list of compounds that find utility in the design of liquid crystals for LCD applications.

H32369	1-(2-Tetrahydropyranyl)-1H-imidazole-5-boronic acid pinacol ester, 95%
H27783	1-(2-Tetrahydropyranyl)-1H-pyrazole-4-boronic acid neopentyl glycol ester, 95%
H27036	1-(2-Tetrahydropyranyl)-1H-pyrazole-5-boronic acid pinacol ester, 95%
H64246	1-(2-Tetrahydropyranyl)-1H-pyrazole, 98%
H64012	1-(2-Tetrahydropyranyl)-3-(trifluoromethyl)-1H-pyrazole-5-boronic acid, 95%
H53385	2-(3-Butynyloxy)tetrahydropyran, 98%
A18217	2,4,6-Triphenylpyrylium tetrafluoroborate, 97%
H25914	2-(4-Bromophenoxy)tetrahydropyran, 98%
A12799	2,6-Dimethyl-4-pyrone, 99%
L01081	2-(8-Bromooctyloxy)tetrahydropyran, tech. 90%
44774	2-Bromo-3-(2-tetrahydropyranyloxy)pyridine, 97%
L17417	2-(Hydroxymethyl)tetrahydropyran, 94%
H31846	2-Iodo-1-(2-tetrahydropyranyl)-1H-imidazole, 95%
H53290	3-(2-Tetrahydropyranyloxy)benzeneboronic acid pinacol ester, 95%

B25286	3,3-Dimethylglutaric anhydride, 97%
H56124	3,4-Dihydro-2H-pyran-2-methanol, 96%
H28506	(3,4-Dihydro-2H-pyran-6-yl)dimethylsilanol, 97%
L02731	3,4-Dihydro-2H-pyran, 99%
B24609	3,4-Dihydro-2-methoxy-2H-pyran, 99%
H32726	3,5-Dimethyl-1-(2-tetrahydropyranyl)-1H-pyrazole-4-boronic acid neopentyl glycol ester, 95%
H32478	3,5-Dimethyl-1-(2-tetrahydropyranyl)-1H-pyrazole-4-boronic acid pinacol ester, 95%
H64452	3,6-Dihydro-2H-pyran-4-boronic acid pinacol ester, 98%
H66595	3-Bromotetrahydro-4H-pyran-4-one, 90%
A10735	3-Hydroxy-2-methyl-4-pyrone, 99%
H50821	4-(2-Fluorophenyl)tetrahydropyran-4-carboxaldehyde, 99%
H52361	4-(2-Methoxyphenyl)tetrahydropyran-4-carbonitrile, 97+%
H50818	4-(2-Methoxyphenyl)tetrahydropyran-4-carboxaldehyde, 97%
H52378	4-(2-Methylphenyl)tetrahydropyran-4-carbonitrile, 97+%
H50819	4-(2-Methylphenyl)tetrahydropyran-4-carboxaldehyde, 99%
H50445	4-(2-Tetrahydropyranyloxy)benzeneboronic acid, 96%
H50820	4-(3-Chlorophenyl)tetrahydropyran-4-carboxaldehyde, 98%
H52376	4-(3-Methoxyphenyl)tetrahydropyran-4-carbonitrile, 97+%
H50815	4-(3-Methoxyphenyl)tetrahydropyran-4-carboxaldehyde, 98%

A11755	4,6-Diphenyl-2-pyrone, 98%
H64522	4-Acetyltetrahydropyran, 97%
H27578	4-(Boc-amino)tetrahydropyran-4-carboxylic acid, 95%
H32968	4-Bromo-3,5-dimethyl-1-(2-tetrahydropyranyl)-1H-pyrazole, 95%
H26074	4-Hydroxy-3,6-dimethyl-2-pyrone, 97%
L11457	4-Hydroxy-6-methyl-2-pyrone, 98%
H64568	4-(Hydroxymethyl)tetrahydropyran, 98%
H61395	4-Methoxy-6-methyl-2H-pyran-2-one, 97%
H50816	4-Phenyltetrahydropyran-4-carboxaldehyde, 95%
H34026	4-Tetrahydropyranyl methanesulfonate, 95%
H31755	5-Bromo-1-(2-tetrahydropyranyl)-1H-indazole, 95%
H63779	6-Chloro-9-(2-tetrahydropyranyl)purine, 99%
A18565	Alginic acid sodium salt, very low viscosity
B25521	Coumalic acid, 97%
A17827	Dehydroacetic acid, 98%
A11756	delta-Decanolactone, 97%
A19274	delta-Hexanolactone, 98%

B24794	delta-Tetradecanolactone, 98%
L04794	delta-Valerolactone, 98%, may contain polymer
A15955	Ethyl isodehydroacetate, 98%
A19732	gamma-Decanolactone, 98%
A19642	gamma-Hexanolactone, 98%
A11152	Glutaric anhydride, 98%
A10760	Kojic acid, 99%
H25932	Methyl 2-oxo-2H-pyran-3-carboxylate, 98%
B25330	Methyl coumalate, 98%
H27774	Tetrahydro-2,2-dimethyl-4H-pyran-4-one, 95%
A19010	Tetrahydro-4H-pyran-4-one, 98%
H64340	Tetrahydropyran-4-carboxylic acid, 98%
A13392	Tetrahydropyran, 98+%

Benzofurans

Benzofurans, alternatively known as coumarone or benzo[b]furan, are heterocyclic compounds having fused benzene and furan rings. Benzofurans are compounds with a planar structure having 10 pi electrons that include the lone pair on oxygen atom, which makes it more susceptible to electrophilic attack. Introduction of benzofurans in organic synthesis, particularly drug synthesis, involves generally the use of their metalated species as nucleophiles in addition reactions or in metal-catalysed cross-coupling reactions.

Benzofurans behave like condensed aromatic systems and are mainly found in fractions of coal tar. Benzofurans are stable towards alkali and readily polymerize on treatment with sulfuric acid, due to which they are useful for the preparation of low cost chemically relatively inert resins. In nature, benzofurans have occupied an important role among the plant phenols & several pharmacologically active compounds. Benzofurans have also made significant and distinctive contributions to biology. They exhibit several biological activities that range from antifungal, antiviral, antimicrobial, antitumor, anti-inflammatory, antioxidant, antitubercular, antiplasmodial, insecticidal, and trypanocidal to antagonists for the H3 receptor and angiotensin II (Dawood, KM. Benzofuran Derivatives: a Patent Review. Expert Opin. Ther. Pat. 2013, 23(9), 1133-56).

H52479	2,3-Dihydrobenzo[b]furan-5-boronic acid, 97%
H59602	2,3-Dihydrobenzo[b]furan-5-carboxaldehyde, 97%
H33579	2,3-Dihydrobenzo[b]furan-5-sulfonyl chloride, 97%
A11368	2,3-Dihydrobenzo[b]furan, 98%
H50593	2-Acetyl-5-bromobenzo[b]furan, 99%
H52364	2-Acetyl-5-methoxybenzo[b]furan, 97+%
L06308	2-Acetyl-5-nitrobenzo[b]furan, 98%
B21139	2-Acetyl-7-methoxybenzo[b]furan, 97%
H64596	2-Bromodibenzofuran, 98%
A18617	2-Coumaranone, 97%
L07805	2-n-Butylbenzo[b]furan, 98%
A16529	3,3',4,4'-Benzophenonetetracarboxylic dianhydride, 97+%
H26215	3,6-Difluorophthalic anhydride, 97%
L13126	3-Acetoxybenzo[b]furan, 98%

A10202	3-Coumaranone, 97%
A12275	3-Fluorophthalic anhydride, 98%
B21044	3-Methylbenzo[b]furan-2-carboxylic acid, 97%
B22864	3-Methylphthalic anhydride, 96%
A15857	3-Nitrophthalic anhydride, 97%
A13319	3-n-Propylidenephthalide, (E)+(Z), 96%
L16181	3-Phenylphthalide, 99%
L16150	4,4'-(Hexafluoroisopropylidene)diphthalic anhydride, 99%
B21352	4-Fluorophthalic anhydride, 98%
L08020	4-Nitrophthalic anhydride, tech. 90%
B20265	5-Acetyl-2,3-dihydrobenzo[b]furan, 97%
H33344	5-Amino-2,3-dihydrobenzo[b]furan, 97%
H50239	5-Chlorobenzo[b]furan-2-carboxylic acid, 97%
A18896	6-Aminophthalide, 95%
L10951	6-Hydroxy-2,3-dihydrobenzo[b]furan-3-one, 97%
B20375	6-Nitrophthalide, 97%
H33948	7-Bromo-5-fluorobenzo[b]furan, 97%
H34347	7-Bromo-5-methylbenzo[b]furan, 97%
H33129	7-Bromobenzo[b]furan, 97%

B21143	7-Ethoxybenzo[b]furan-2-carboxylic acid, 97%
B21185	7-Methoxybenzo[b]furan-2-carboxylic acid, 97%
B23676	Benzo[b]furan-2-boronic acid, 98%
L02456	Benzo[b]furan-2-carboxaldehyde, 99%
A15579	Benzo[b]furan-2-carboxylic acid, 98+%
L19550	Benzo[b]furan-3-acetonitrile, 99%
H64389	Benzo[b]furan-3-boronic acid, 98%
A15225	Benzo[b]furan, 97+%
H29358	Benzofurazan-5-boronic acid pinacol ester, 97%
B24951	cis-5-Norbornene-endo-2,3-dicarboxylic anhydride, 97%
H64905	Dibenzofuran-2-carboxaldehyde, 98%
43899	Dibenzofuran-2-sulfonic acid hydrate, 97%
L19830	Dibenzofuran-4-boronic acid, 98+%
A16521	Dibenzofuran, 98%
H27124	Ethyl 3-aminobenzo[b]furan-2-carboxylate, 97%
B24745	Ethyl 4,5,6,7-tetrafluoro-2-methylbenzo[b]furan-3-carboxylate, 97%
B21066	Ethyl 7-methoxybenzo[b]furan-2-carboxylate, 97%

A19874	Ethyl benzofuroxan-5-carboxylate, 97%
43749	Fluorescamine
A17192	Menthofuran, 95%
H62997	Nalpha-Boc-Nomega-(2,2,4,6,7-pentamethyl-2,3-dihydrobenzo[b]furan-5-ylsulfonyl)-D-arginine, 95%
H62887	Nalpha-Fmoc-Nomega-(2,2,4,6,7-pentamethyl-2,3-dihydrobenzo[b]furan-5-ylsulfonyl)-D-arginine, 98%
H59039	Nalpha-Fmoc-Nomega-(2,2,4,6,7-pentamethyl-2,3-dihydrobenzo[b]furan-5-ylsulfonyl)-L-arginine, 98%
H52115	Nalpha-Fmoc-Nomega-(2,2,4,6,7-pentamethyl-2,3-dihydrobenzo[b]furan-5-ylsulfonyl)-L-beta-homoarginine, 95%
A10353	n-Butylidenephthalide, (E)+(Z), 95%
38705	Phenolphthalein, ACS
45592	Phthalan, 96%
A14955	Phthalic anhydride, 99%
A15516	Phthalide, 98+%
L13347	Sodium 2-dibenzofuransulfonate hydrate, 98+%
B24550	Tetrabromophthalic anhydride, 98%
A17404	Tetrachlorophthalic anhydride, 98%
A11998	Tetraphenylphthalic anhydride, 97+%
B23896	Thymolphthalein

Isobenzofurans

Isobenzofurans belong to a class of heterocyclic compounds, which consists of a benzene ring fused to the 3,4- positions of the furan ring. Isomeric with benzofurans, they are alternatively referred to as Benzo[c]furans and 2-Oxa-2H-isoindenes. They are highly reactive and rapidly polymerize. Even though they are unstable, stable compounds with more complex structures having isobenzofuran moieties are known. The isobenzofuran nucleus contains 10 pi-electrons similar to isoindole. Unlike isoindole, this molecule exhibits greater reactivity. Highly reactive at the 1- and 3-positions, the isobenzofuran ring readily participates in various transformations that allow for the regeneration of the aromaticity of the benzene ring.

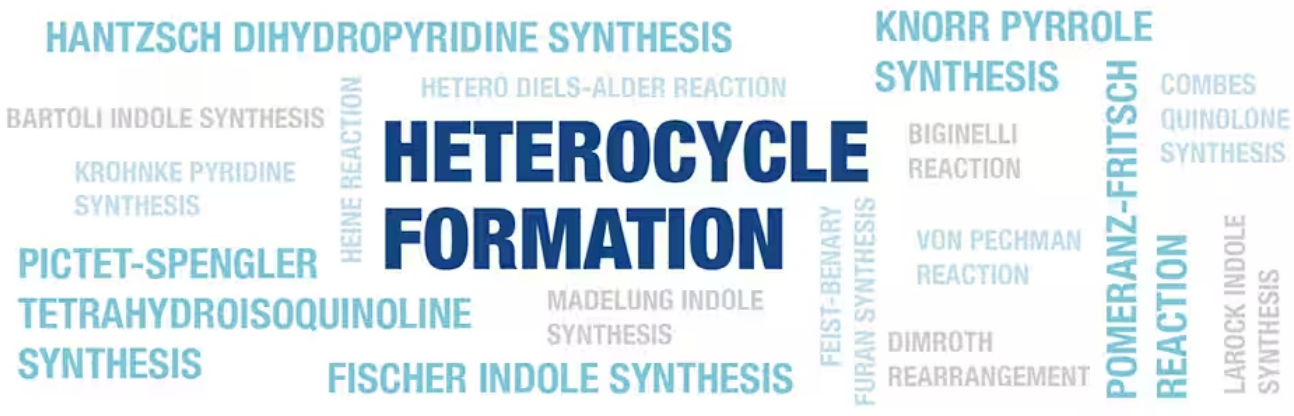
	B23003	1,2,4-Benzenetricarboxylic anhydride, 97%
	L00101	1,3-Diphenylisobenzofuran, 97%
	B23328	4-Methyl-1,2-cyclohexanedicarboxylic anhydride, mixture of isomers, 98%
	H66457	5-Aminophthalide, 97%
	41221	alpha-Naphtholphthalein
	B21431	cis-4-Cyclohexene-1,2-dicarboxylic anhydride, 95%
	A17135	Phenolphthalein, 98%
	A10217	Phthalan, 98%

(Thio) Chromanes / Chromenes & Flavones

Chromane, also known as benzodihydropyran, is a heterocyclic chemical compound with the structural feature of more complex compounds like vitamins E (tocopherols and tocotrienols) and pharmaceutical drugs like troglitazone, ormeloxifene, and nebivolol. Functionalised chromanes express potentially useful biological activities. An example of a naturally occurring chromane is vitamin E, which acts as an antioxidant. Several chromanes with similar structural moiety exhibit multidrug transporter inhibition, peptidoleukotriene antagonist and biosynthesis inhibition activities. Another example of a biologically active chromane is sorbinil, which functions as an aldose reductase inhibitor.

Chromenes, also known as benzopyrans, are heterocyclic organic compounds that result from the fusion of a benzene ring with a pyran ring. There are two isomers that vary by the orientation of the fusion of the two rings with reference to the oxygen, resulting in chromene (1-benzopyran) and isochromene (2-benzopyran), the number denotes where the oxygen atom is located by standard naphthalene-like nomenclature. The derivatives of benzopyran are potassium channel openers having antihypertensive, cardio-protective, myocardial protective, peripheral vasodilating and anti-ischemic activities.

Flavones are a class of flavonoids having the base structure containing 2-phenylchromen-4-one. Flavones are mainly found in cereals and herbs. Flavones have effects on CYP (P450) activity which are enzymes that metabolize most drugs in the body.



H27841	2',3-Dihydroxyflavone, 97%
H27229	2',6-Dihydroxyflavone, 97%
B25039	2'-Hydroxyflavanone, 98%
L07948	2-Thioisochroman-4-one, 98%
L14207	3,3',4',7-Tetrahydroxyflavone, 96%
L14186	3',4',5,7-Tetrahydroxyflavone, 97%
L14496	3',4',5,7-Tetramethoxyflavone, 97%
H27348	3,4',7,8-Tetrahydroxyflavone hydrate, 97%
L13829	3',4',7,8-Tetramethoxyflavone, 97%
L14161	3',4'-Dihydroxyflavone, 97%
L14160	3',4'-Dimethoxyflavone, 97%
B20528	3',5,7-Trihydroxy-4'-methoxyflavanone, 97%
L14223	3,5,7-Trihydroxyflavone, 97%
L14495	3',5-Dihydroxy-4',6,7-trimethoxyflavone, 97%

H26989	3,6-Dihydroxyflavone, 97%
A12532	3-Acetylcoumarin, 98+%
L14031	3-Aminocoumarin, 97%
H32041	3-Bromo-6-chlorochromone, 96%
H32163	3-Bromo-6-fluorochromone, 97%
A14591	3-Bromochromone, 97%
A15262	3-Butyrylcoumarin, 98+%
H27494	3-Chlorocoumarin, 97%
H26943	3-Hydroxy-3'-methoxyflavone, 97%
H27354	3-Hydroxy-4'-methoxyflavone, 97%
H27750	3-Hydroxy-5-methoxyflavone, 97%
H27059	3-Hydroxy-6-methoxyflavone, 97%
B25109	3'-Hydroxyflavanone, 98%
A18110	3-Hydroxyflavone, 98+%
H34295	3-Iodochromone, 97%
L09834	4',5,7-Trihydroxyflavanone, 97%
L15041	4',5,7-Trihydroxyflavone, 97%
L14169	4',5-Dihydroxy-7-methoxyflavone, 97%
H27650	4',5-Dihydroxyflavone, 95%

B22877	4',7-Dihydroxyisoflavone, 97%
L13838	4',7-Dimethoxyisoflavone, 97%
43402	4-Bromomethyl-6,7-dimethoxycoumarin, 95%
L07908	4-Chloro-3-nitrocoumarin, 98%
A14940	4-Chromanol, 97%
A11242	4-Chromanone, 98+%
A12221	4-Hydroxy-3-nitrocoumarin, 98%
H30959	4'-Hydroxy-6-methylflavone, 97%
A14394	4-Hydroxycoumarin, 98+%
B24829	4'-Hydroxyflavanone, 98%
A13670	4-Methoxycoumarin, 98%
A10337	4-Methylumbelliferone, 97%
L14185	5,6,7-Trihydroxyflavone, 97%
B22670	5,6,7-Trimethoxyflavone, 97%
H27039	5,6-Dihydroxyflavone, 97%
43853	5,7-Dihydroxy-4'-methoxyisoflavone, 98%
A14528	5,7-Dihydroxy-4-methylcoumarin, 98%

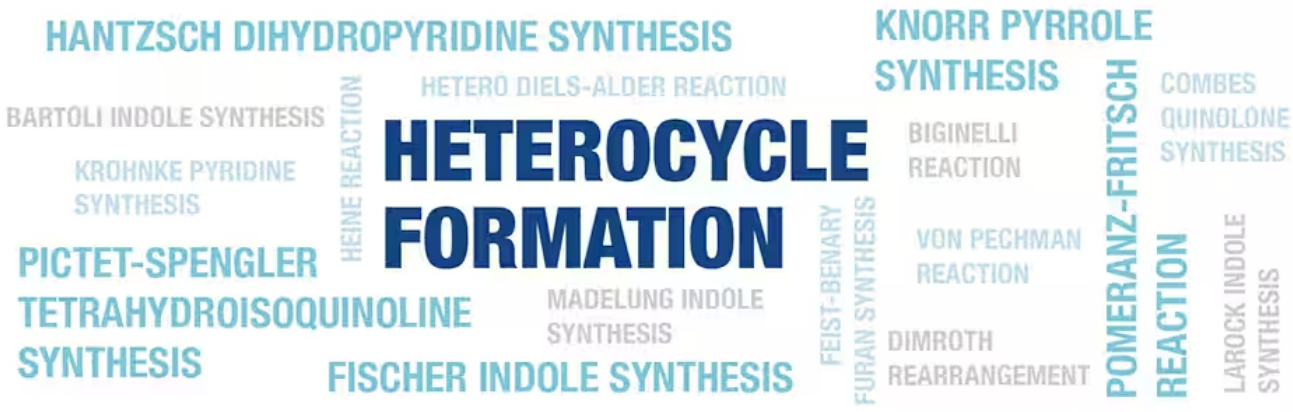
L14178	5,7-Dihydroxyflavone, 98%
B23226	5,7-Dimethoxycoumarin, 98%
L14187	5-Hydroxyflavone, 97%
B23700	5-Methoxyflavone, 97%
A11902	6,7-Dihydroxy-4-methylcoumarin, 97%
A15393	6,7-Dihydroxycoumarin, 98+%
L11168	6-Aminocoumarin hydrochloride, 97%
B25003	6-Bromo-3-butyrylcoumarin, 97%
H32053	6-Bromo-3-formylchromone, 97%
H32009	6-Bromochromone-2-carboxylic acid, 97%
H31905	6-Bromochromone-3-carboxylic acid, 97%
A15354	6-Bromocoumarin-3-carboxylic acid, 97%
H31968	6-Bromothiochroman-4-one, 95%
A13425	6-Chloro-2H-chromene-3-carboxylic acid, 97%
H32290	6-Chloro-3-iodo-4H-chromen-4-one, 97%
H26997	6-Chloro-7-methylchromone, 98%
A14975	6-Chlorochroman-4-one, 99%
H27087	6-Chlorochromone-3-carbonitrile, 98%

A10304	6-Chlorothiochroman-4-one, 98%
L11209	6-Fluorochroman-4-one, 97%
H32714	6-Fluorochromone-2-carboxylic acid, 97%
H32857	6-Fluorochromone-3-carboxaldehyde, 97%
H31907	6-Fluorochromone, 97%
L14742	6-Hydroxy-2H-chromene-3-carboxaldehyde, 97%
L07192	6-Hydroxy-4-methylcoumarin, 99%
B23755	6-Hydroxyflavanone, 98+%
B25016	6-Hydroxyflavone, 98%
B25240	6-Methoxyflavanone, 98%
B24616	6-Methoxyflavone, 98%
H27825	6-Methylchromone-3-carbonitrile, 99%
H27002	6-Methylchromone, 98%
A19382	6-Methylcoumarin, 99%
H27167	6-Nitrochromone, 97%
A14792	6-Nitrocoumarin, 98+%
L14069	7,8-Dihydroxy-4-methylcoumarin, 97%
H27852	7,8-Dihydroxyflavone hydrate, 97%

A15017	7-Amino-4-methylcoumarin, 98%
A18400	7-Amino-4-(trifluoromethyl)coumarin, 97%
B21938	7-Diethylamino-4-methylcoumarin, 99%
B20065	7-Ethoxy-4-methylcoumarin, 98%
L14116	7-Ethoxycoumarin, 99%
H31881	7-Fluorochroman-4-one, may contain up to 15% 5-isomer, 98% (sum of isomers)
A18562	7-Hydroxy-4-(methoxymethyl)coumarin, 98%
L07896	7-Hydroxy-4-methyl-8-nitrocoumarin, 98%
H64167	7-Hydroxy-4'-nitroisoflavone, 98%
A16537	7-Hydroxy-4-(trifluoromethyl)coumarin, 98%
L04082	7-Hydroxycoumarin, 98%
B24720	7-Hydroxyflavanone, 99%
A18538	7-Hydroxyflavone, 98%
A11785	7-Methoxy-4-methylcoumarin, 99%

Dioxans / Dioxins

Dioxanes (dioxacyclohexanes), are six membered cyclic organic compounds containing two oxygen atoms. Depending on the relative positions of oxygen atoms three isomers are possible - 1,2-dioxane, 1,3-dioxane and 1,4-dioxane. Most of the dioxanes are 1,4-isomers. Simple 1,4-dioxane is a versatile aprotic solvent used for a variety of practical applications. It has higher boiling range and less toxicity compared to tetrahydrofuran and hence used as a substitute to THF in some chemical processes. Owing to its oxygen atoms, they act as a Lewis base and are used to solvate many inorganic compounds. Dioxane finds use as a stabilizer for 1,1,1-trichloroethane for storage in aluminium containers by forming an adduct with aluminium chloride, and as a solvent in inks and adhesives. A dioxane solution of sulfur trioxide is useful for Beckmann rearrangements, sulfonation of alkenes, and arenes. Dioxane based compounds find use as chiral solvating agents for the determination of enantiomeric excess and as chiral derivatizing agents in the determination of absolute configuration. 1,3-Dioxanes are employed as a means of protection of carbonyl groups during organic transformations.

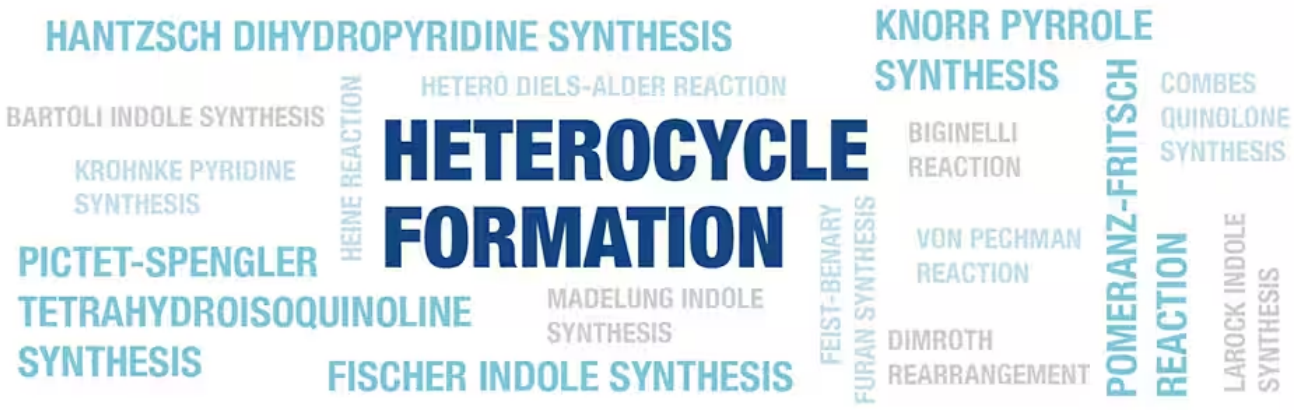


A14189	1,3-Dihydroxyacetone dimer, 97%
L19210	1,4-Dioxane-2,3-diol, 97%
B20096	1,4-Dioxane-2,5-dione, 97%
A14188	1,4-Dioxane, 99+%, stab. with ca 5-10ppm BHT
36516	1,4-Dioxane-d₈, 99% (Isotopic)
H33597	1,4-Dioxene, 98%
L04909	[2-(1,3-Dioxan-2-yl)ethyl]triphenylphosphonium bromide, 98+%
A14254	2,2,6-Trimethyl-1,3-dioxin-4-one, cont. up to ca 6% acetone
L00958	2-(2-Bromoethyl)-1,3-dioxane, 98%
L20177	2,2-Dimethyl-1,3-dioxan-5-one, tech. 90%
B22466	2-(4-Cyanophenyl)-5-n-pentyl-1,3-dioxane, 99+%
H32351	2-Ethyl-5,5-dimethyl-1,3-dioxane, 99%
H32308	2-Ethyl-5,5-dimethyl-1,3-dioxane solution in acetonitrile (1000mg/L)
L16954	2H-Perfluoro-5-methyl-3,6-dioxanonane, 97%

	L08767	5,5-Dimethyl-1,3-dioxan-2-one, tech.
	B21858	5,5-Dimethyl-1,3-dioxane-2-butanal, 96%
	B24498	Diglycolic anhydride, 97%
	L09026	DL-Lactide, 99%
	A15603	Isopropylidene malonate, 97%
	L09031	L-Lactide, 98+%

Oxetanes

Oxetanes are heterocyclic organic compounds with a four-membered ring with three carbon atoms and one oxygen atom. In the field of pharmaceuticals, oxetane fragments are often employed as bio-isosteres for gem-dimethyl and carbonyl groups. In drug discovery, the introduction of an oxetane is found to favourably modulate the physiochemical and pharmacokinetic profile of the molecules (Wuitschik, G.; Carreira, E. M.; Wagner, B.; Fischer, H.; Parrilla, I.; Schuler, F.; Rogers-Evans, M.; Muller, K. Oxetanes in Drug Discovery: Structural and Synthetic Insights. *J. Med. Chem.,* **2010,** *53*, 3227-3246). An example of a natural product containing an oxetane ring is taxol, which has evinced considerable interest among researchers due to its success in the treatment of cancer.



H66276	2-(Bromomethyl)oxetane, 96%
H66525	2-(Iodomethyl)oxetane, 97%
H57776	2-Methyl-N-(3-oxetanylidene)propane-2-sulfinamide, 95%
H66218	2-Oxetanemethanol, 96%
H57588	3-Amino-3-methyloxetane, 95%
H66510	3-(Aminomethyl)oxetane, 96%
H57248	3-Aminooxetane, 95%
H57437	3-Bromooxetane, 95%
H53497	3-Ethyl-3-oxetanemethanol, 97%
H57302	3-Iodooxetane, 95%
B25111	3-Methyl-3-oxetanemethanol, 97%
H64011	3-Methyl-3-(p-toluenesulfonyloxymethyl)oxetane, 98%
H57425	3-(Methylamino)oxetane, 95%
H66283	3-Methyloxetane-3-carboxylic acid, 96%
H66333	3-Oxetanemethanol, 96%
H57928	3-Oxetanol, 95%
H57870	3-Oxetanone, 95%
H57569	3-Oxetanyl p-toluenesulfonate, 96%

B23197	beta-Propiolactone, 97%
H57376	Methyl 2-(3-oxetanylidene)acetate, 95%
A14452	Trimethylene oxide, 97%

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