



Recommended Storage Groups for Common Acids and Bases

This list includes common acids and bases that are not classified as pyrophoric, water reactive or a flammable liquid under GHS. Chemicals are sorted by CAS#. A few substances that do not have a CAS# assigned appear at the end of the list. The CAS#, when assigned, should appear on the GHS container label. You may also search the list on the particular chemical/product name. Only acids and bases that are classified as corrosive to eyes and/or skin under GHS are included. The solvent for select acid or base solutions are given in parenthesis after the name. Organic acids [OA], inorganic acids [IA], and inorganic bases [IB] are assigned to designated storage groups. Many organic bases are assigned to the PW or FL storage groups. The remaining organic bases that do not fall into any other storage group are assigned the General Storage group [GS] in this list. For convenience these may be assigned to a designated Organic Base group, but this is not necessary for compatibility. The Comments column includes any special storage requirements. Where potential incompatibilities within a group exists the type of incompatible chemical is listed. Review SDS and product literature for additional storage information.

CAS #	Name	Synonyms	Storage Group	Comments
10034-85-2	Hydriodic acid	Hydriotic acid	IA	2-8° C
10035-10-6	Hydrobromic acid	Hydrogen Bromide	IA	
100-85-6	Benzyltrimethylammonium hydroxide solution (H2O)		GS	
10424-65-4	Tetramethylammonium hydroxide, pentahydrate		GS	
10450-60-9	Periodic acid		IA	
10519-96-7	Potassium trimethylsilanolate	Trimethylsilanol potassium salt	GS	
1070-89-9	Sodium bis(trimethylsilyl)amide	Hexamethyldisilazane sodium salt	GS	
107-92-6	Butyric acid		OA	
108-31-6	Maleic anhydride	2,5-Furandione	OA	
109334-81-8	Triethylmethylammonium hydroxide solution (H2O)	Methyltriethylammonium hydroxide	GS	
109-52-4	Valeric acid	n-Valeric acid, Pentanoic acid	OA	
110-15-6	Succinic acid	Butanedioic acid	OA	
110-85-0	Piperazine	1,4-Diazacyanocyclohexane, Diethylenediamine	GS	
112-05-0	Nonanoic acid	Pelargonic acid, Acid C ₉	OA	
1122-58-3	4-(Dimethylamino)pyridine	N,N-Dimethylpyridin-4-amine, DMAP	AT	Skin
116-53-0	(±)-2-Methylbutyric acid		OA	
1173018-43-3	Bromodichloroacetic acid-1- ¹³ C		OA	
1196086-79-9	Tetrabutylphosphonium malonate		GS	
12026-05-0	Rubidium hydroxide hydrate		IB	
1215692-10-6	Bromoacetic acid- ¹³ C ₂ ,d ₃		OA	
1218765-25-3	Bromoacetic acid-1- ¹³ C, ¹⁸ O ₂		OA	
12200-64-5	Sodium hydroxide, monohydrate		IB	
12230-71-6	Barium hydroxide, octahydrate		IB	
12260-45-6	Cesium hydroxide hydrate		IB	
123-41-1	Choline hydroxide solution (H2O)		GS	
124-04-9	Adipic acid	Hexanedioic acid	OA	
124-07-2	Octanoic acid (caprylic)	Caprylic acid	OA	

CAS #	Name	Synonyms	Storage Group	Comments
124-41-4	Sodium methoxide	Sodium methylate	GS	
12501-23-4, 1343-93-7	Phosphotungstic acid hydrate		IA	Strong oxidizing acids
127-17-3	Pyruvic acid	α -Ketopropionic acid, 2-Oxopropionic acid	OA	2-8° C
1305-62-0	Calcium hydroxide		IB	
1305-78-8	Calcium oxide		GS	
1310-58-3	Potassium hydroxide	Caustic potash	IB	
1310-65-2	Lithium hydroxide		IB	
1310-66-3	Lithium hydroxide, monohydrate		IB	KA aluminum, zinc
1310-73-2	Sodium hydroxide	Caustic soda	IB	
1310-82-3	Rubidium hydroxide solution (H ₂ O)		IB	
1311-10-0	Strontium hydroxide octahydrate		IB	
1323-19-9	Triisopropylphthalenesulfonic acid sodium salt		GS	
1336-21-6	Ammonium hydroxide	Ammonia aqueous, Ammonia water	IB	
13537-32-1	Fluorophosphoric acid solution (H ₂ O)		IA	Strong oxidizing acids
13598-36-2	Phosphorous acid	Phosphonic acid	IA	
138800-17-6	2,8,9-Trimethyl-2,5,8,9-tetraaza-1-phosphabicyclo[3.3.3]undecane hydrochloride		GS	
13881-91-9	Aminomethanesulfonic acid		OA	
141-52-6	Sodium ethoxide	Sodium ethylate	GS	
141-82-2	Malonic acid	Propanedioic acid	OA	
142-62-1	Hexanoic acid	Caproic acid, Acid C ₆	OA	
143-07-7	Lauric acid	ABL, Dodecanoic acid	OA	
14341-48-1	Bromoacetic acid-d ₃		OA	
144-62-7	Oxalic acid		OA	
14518-69-5	Tetrabutylphosphonium hydroxide solution (H ₂ O)	TBPH	GS	
14593-46-5	Sodium tert-pentoxide	tert-Amyl alcohol sodium salt, Sodium tert-amoxide	GS	
147741-30-8	Tetrabutylammonium hydroxide 30-hydrate		GS	
1493-13-6	Trifluoromethanesulfonic acid	Triflic acid	OA	
15077-13-1	Formic acid triethylamine complex 5:2	Triethylammonium formate 2:5	OA	
1681-52-3	Chloroacetic acid-1- ¹³ C		OA	
16872-11-0	Tetrafluoroboric acid solution (H ₂ O)		IA	
16940-81-1	Hexafluorophosphoric acid solution (H ₂ O)		IA	2-8° C Strong oxidizing acids
16961-83-4	Fluosilicic acid	Fluorosilicic acid, hexafluorosilicic acid, Hydrogen hexafluorosilicate	IA	Strong oxidizing acids

CAS #	Name	Synonyms	Storage Group	Comments
1710-98-1	4-tert-Butylbenzoyl chloride		OA	
17194-00-2	Barium hydroxide		IB	
1730-91-2	(S)-(+)-2-Methylbutyric acid		OA	2-8° C
173470-69-4	Trichloroacetic acid-1- ¹³ C		OA	
173470-70-7	Dichloroacetic acid-1- ¹³ C		OA	
17756-56-8	Tetrahexylammonium hydroxide solution (H2O)		GS	
1796-85-6	Chloroacetic acid-d ₃		OA	
18027-10-6	Sodium trimethylsilanolate	Trimethylsilanol sodium salt	GS	
1839-15-2	Chloroacetic acid- ¹³ C ₂		OA	
18480-07-4	Strontium hydroxide		IB	strong oxidizing agents
18497-13-7	Chloroplatinic acid hexahydrate	Hexachloroplatinic acid	IA	
1899-02-1	Trimethylphenylammonium hydroxide solution (H2O)	Phenyltrimethylammonium hydroxide, TMAH	GS	
1907-33-1	Lithium tert-butoxide		GS	
2004-14-0	Lithium trimethylsilanolate	Trimethylsilanol lithium salt	GS	
2052-49-5	Tetrabutylammonium hydroxide solution (H2O)		GS	
21351-79-1	Cesium hydroxide solution		IB	
22326-55-2	Barium hydroxide monhydrate		IB	
23854-38-8	Magic acid	Fluorosulfuric acid-antimony pentafluoride 1:1	IA	- 20° C
2388-07-0	Lithium ethoxide		GS	
2388-10-5	Lithium isopropoxide	Lithium 2-propanolate	GS	
2414-98-4	Magnesium ethoxide	Magnesium ethylate	GS	
24363-36-8	Barium tert-butoxide	Barium di-t-butoxide	GS	2-8° C
2466-09-3	Pyrophosphoric acid	Diphosphoric acid	IA	
26158-00-9	Benzenesulfonic acid monohydrate		OA	
26782-75-2	(S)-(-)-2-Bromo-3-methylbutyric acid	(S)-2-Bromoisovaleric acid	OA	
27610-45-3	Sodium sulfide hydrate		IB	
2767-90-0	4-Piperidinopyridine	1-(4-Pyridyl)piperidine, 4-Piperidinopyridine	IB	
286367-78-0	Dichloroacetic acid-2- ¹³ C		OA	
29166-72-1	2-tert-Butyl-1,1,3,3-tetramethylguanidine		GS	
2950-43-8	Hydroxylamine-O-sulfonic acid		IA	2-8° C Acid chlorides, acid anhydrides
298-12-4	Glyoxylic acid solution (H2O)	Formylformic acid, Oxoethanoic acid	OA	
3001-72-7	1,5-Diazabicyclo[4.3.0]non-5-ene	DBN	GS	Chloroformates
32149-57-8	Magnesium di-tert-butoxide	Magnesium tert-butoxide	GS	
335-67-1	Perfluorooctanoic acid	PFOA. Pentadecafluorooctanoic acid, Perfluorocaprylic acid, Perfluorooctanoic acid	OA	
35103-79-8	Cesium hydroxide monohydrate		IB	
35386-24-4	1-(2-Methoxyphenyl)piperazine		GS	

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37267-86-0	Metaphosphoric acid		IA	
381-73-7	Difluoroacetic acid		OA	
38765-83-2	Butyric acid-1- ¹³ C	Butanoic acid-1- ¹³ C	OA	
4039-32-1	Lithium bis(trimethylsilyl)amide	Hexamethyldisilazane lithium salt	GS	
40949-94-8	Potassium bis(trimethylsilyl)amide	Hexamethyldisilazane potassium salt, Potassium hexamethyldisilazide	GS	
4124-30-5	Dichloroacetic anhydride		OA	
4499-86-9	Tetrapropylammonium hydroxide solution (H2O)		GS	
4598-61-2	Tetrapentylammonium hydroxide solution (H2O)		GS	
495-69-2	Hippuric acid	N-Benzoylglycine, Benzoylaminoacetic acid	OA	
50-21-5	Lactic acid	2-Hydroxypropionic acid, DL-Lactic acid, Acidium iacticum	OA	
503-74-2	Isovaleric acid	3-Methylbutanoic acid, 3-Methylbutyric acid	OA	
505-86-2	Hexadecyltrimethylammonium hydroxide solution (H2O)		GS	2-8° C
51429-74-4	Phosphomolybdic acid hydrate	Molybdophosphoric acid	IA	
52947-00-9	Bromoacetic acid- ¹³ C ₂	¹³ C Labeled bromoacetic acid	OA	
556-81-0	Hexamethonium hydroxide solution (H2O)	N,N,N,N',N',N'-Hexamethylhexamethylenediammonium dihydroxide	GS	2-8° C
55757-50-1	Iodoacetic acid-2- ¹³ C		OA	
5589-96-8	Bromochloroacetic acid		OA	
563-96-2	Glyoxylic acid monohydrate	Formylformic acid, Oxoethanoic acid	OA	
57858-24-9	Bromoacetic acid-1- ¹³ C		OA	
5807-14-7	1,5,7-Triazabicyclo[4.4.0]dec-5-ene	1,3,4,6,7,8-Hexahydro-2H-pyrimido[1,2-a]pyrimidine, Hhpp, TBD	GS	
5872-08-2	(+/-)-Camphor-10 sulfonic acid	Camphor-10-sulfonic acid (β), (±)-β-Camphorsulphonic acid	OA	
599-00-8	Trifluoroacetic acid-d		OA	
6089-09-4	4-Pentynoic acid	Propargylacetic acid	OA	2-8° C
6153-56-6	Oxalic acid Dihydrate	Ethanedioic acid	OA	
6192-52-5	p-Toluenesulfonic acid mixture of isomers monohydrate		OA	
6303-21-5	Phosphinic acid	Hypophosphorous acid	IA	
631-64-1	Dibromoacetic acid		OA	
63403-57-6	Dichloroacetic acid-d ₂		OA	
64891-77-6	Bromoacetic acid-2- ¹³ C		OA	
65-85-0	Benzoic acid		OA	
66178-41-4	Trifluoromethanesulfonic acid-d	Deuterofluormethanesulfonic acid, Triflic acid-D	OA	
6674-22-2	1,8-Diazabicyclo[5.4.0]undec-7-ene	2,3,4,6,7,8,9,10-Octahydropyrimido[1,2-a]azepine, DBU	GS	Chloroformates
68-11-1	Thioglycolic acid	Mercaptoacetic acid	OA	-20 C
6915-15-7	Malic acid	(±)-2-Hydroxysuccinic acid, DL-Hydroxybutanedioic acid, DL-Malic acid	OA	
69-72-7	Salicylic acid	2-Hydroxybenzoic acid	OA	
705-07-9	Titanium(III) chloride solution (hydrochloric acid)		IA	

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75-59-2	Tetramethylammonium hydroxide solution (H2O)		GS	alkali metals, halogens, aluminum
75-75-2	Methanesulfonic acid Solution (H2O)		OA	
75-96-7	Tribromoacetic acid		OA	
7601-90-3	Perchloric acid	PCA	IA	Designated bin. Store away from organic chemicals
76-03-9	Trichloroacetic acid	TCA	OA	2-8° C
76-04-0	Chlorodifluoroacetic acid		OA	
76-05-1	Trifluoroacetic acid	TFA	OA	
7647-01-0	Hydrochloric acid		IA	
7664-38-2	Phosphoric acid	Orthophosphoric acid	IA	
7664-39-3	Hydrofluoric acid	HF	IA	Designated bin in IA group
7664-93-9	Sulfuric acid		IA	
7697-37-2	Nitric acid		IA	
7782-68-5	Iodic acid		IA	
7782-78-7	Nitrosylsulfuric acid solution (sulfuric acid)		IA	
7782-99-2	Sulfur dioxide solution	Sulfurous acid, Sulfurous anhydride	IA	
7790-94-5	Chlorosulfonic acid		IA	
77-98-5	Tetraethylammonium hydroxide solution (H2O)	TEA hydroxide	GS	
79-08-3	Bromoacetic acid		OA	
79-09-4	Propionic acid	Acid C3, Propanyl acid	OA	
79-11-8	Chloroacetic acid	Monochloroacetic acid	OA	
79-14-1	Glycolic acid	Hydroxyacetic acid	OA	
79-33-4	L-(+)-Lactic acid	(S)-2-Hydroxypropionic acid, Sarcolactic acid	OA	
79-41-4	Methacrylic acid	2-Methacrylic acid, 2-Methylpropenoic acid	OA	
79-43-6	Dichloroacetic acid		OA	2-8° C
8006-28-8	Soda Lime		IB	
8014-95-7	Sulfuric acid, Fuming	Oleum	IA	
8017-16-1	Polyphosphoric acid		IA	
80-59-1	trans-2-Methyl-2-butenic acid	trans-2,3-Dimethylacrylic acid, Tiglic acid	OA	
81675-81-2	Phosphazene base P1-t-Bu	tert-Butylimino-tris(dimethylamino)phosphorane, N'-tert-Butyl-N,N,N',N'',N''-hexamethylphosphorimidic triamide	GS	
857291-01-1	Bromoacetic acid- ¹⁸ O ₂		OA	
857367-60-3	Magnesium bis(hexamethyldisilazide)	Bis(hexamethyldisilazido)magnesium, Mg(HMDS)2	GS	
865-33-8	Potassium methoxide	Potassium methylate	GS	
865-34-9	Lithium methoxide	Lithium methylate	GS	
865-47-4	Potassium tert-butoxide	Potassium tert-butylate, Potassium t-butoxide	GS	chlorinated solvents, Reducing agents
865-48-5	Sodium tert-butoxide		GS	
86-87-3	1-Naphthylacetic acid	α-Naphthaleneacetic acid, 1-Naphthylacetic acid, NAA	OA	
87-69-4	Tartaric acid	(2R,3R)-(+)-Tartaric acid, L-(+)-Tartaric acid, L-Threarcic acid	OA	
88-89-1	Picric acid (H2O)	2,4,6-Trinitrophenol, PA	GS	
917-58-8	Potassium ethoxide		GS	

CAS #	Name	Synonyms	Storage Group	Comments
94-75-7	2,4-Dichlorophenoxyacetic acid	2,4-D	OA	
95500-19-9	Diethyldimethylammonium hydroxide solution (H2O)		GS	
98-11-3	Benzenesulfonic acid		OA	
CAS #	Name	Synonyms	Storage Group	Comments
NA	(S)-3-methyl-pentanoic acid		OA	
NA	Dibromoacetic acid-1- ¹³ C		OA	
NA	2-tert-Butylimino-2-diethylamino-1,3-dimethyl-perhydro-1,3,2-diazaphosphorine on polystyrene		GS	
NA	1,5,7-Triazabicyclo[4.4.0]dec-5-ene bound to polystyrene	1,3,4,6,7,8-Hexahydro-2H-pyrimido[1,2-a]pyrimidine bound to polystyrene, 7-Methyl-1,5,7-triazabicyclo[4.4.0]dec-5-ene on polystyrene	GS	