PHYSICAL CONSTANTS OF INORGANIC COMPOUNDS

The compounds in this table were selected on the basis of their laboratory and industrial importance, as well as their value in illustrating trends in the variation of physical properties with position in the periodic table. An effort has been made to include the most frequently encountered inorganic substances; organometallics are not covered, with the exception of metal salts of organic acids. Many, if not most, of the compounds that are solids at ambient temperature can exist in more than one crystalline modification. The information given here applies to the most stable or common crystalline form. In cases where two or more forms are of practical importance, separate entries will be found in the table.

In the default listing, the compounds are arranged primarily in alphabetical order by the most commonly used name. However, adjustments are made in many instances in order to bring closely related compounds together. For example, hydrides of elements such as boron, silicon, and germanium are grouped together immediately following the entry for the parent element, since they would otherwise be scattered throughout the table. Likewise, the oxoacids of an element are given in one group when a strict alphabetical order would separate them (e.g., sulfuric acid and fluorosulfuric acid). The data fields in the table are described below.

- **Name**: Systematic name for the substance. The valence state of a metallic element is indicated by a Roman numeral, e.g., copper in the +2 state is written as copper(II) rather than cupric.
- **Synonym**: Another name in common use.
- **Formula**: The formula as most commonly written (generally, not in Hill order). The formula given does not necessarily specify the actual structure of the compound. For example, aluminum chloride is designated as $AlCl_3$, even though a more accurate representation of the structure in the solid phase (and, under some conditions, in the gas phase) is Al_2Cl_6. A few exceptions are made, such as the use of Hg_2^{+2} for the mercury(I) ion.
- **CAS Reg. No**.: Chemical Abstracts Service Registry Number. An asterisk* following the CAS RN for a hydrate indicates that the number refers to the anhydrous compound. In most cases the generic CAS RN for the compound is given rather than the number for a specific crystalline form or mineral.
- **Mol. Wt.**: Molecular weight (relative molar mass) as calculated with the 1997 IUPAC Recommended Atomic Weights. The number of decimal places corresponds to the number of places in the atomic weight of the least accurately known element (e.g., one place for lead compounds, two places for compounds of selenium, germanium, etc.); a maximum of three places is given. For compounds of radioactive elements for which IUPAC makes no recommendation, the mass number of the isotope with longest half-life is used, and the result is rounded to the nearest integer.
- **Physical Form**: The crystal system is given, when available, for compounds that are solid at room temperature, together with color and other descriptive features.
- **mp**: Normal melting point in °C. The notation “tp” indicates the temperature where solid, liquid, and gas are in equilibrium at a pressure greater than one atmosphere (i.e., the normal melting point does not exist). When available, the triple point pressure is listed.

- **bp**: Normal boiling point in °C (referred to 101.325 kPa or 760 mmHg pressure). The notation "sp" following the number indicates the temperature where the pressure of the vapor in equilibrium with the solid reaches 101.325 kPa. See Reference 8, p. 23, for further discussion of sublimation points and triple points. A notation "sub" without a temperature being given indicates that there is a perceptible sublimation pressure above the solid at ambient temperatures.
- **ρ**: Density. Values for solids and liquids are given in g/cm^3 and can be assumed to refer to temperatures near room temperature unless otherwise stated. Values for gases are the calculated ideal gas densities in g/L at 25°C and 101.325 kPa.
- **Sol**. Aqueous solubility expressed as the number of grams of the compound (excluding any water of hydration) that will dissolve in 100 g of water. The temperature in °C is given as a superscript.
- **Qualitative Sol**: Qualitative information on the solubility in various solvents is given. The abbreviations are:
  - i insoluble
  - sl slightly soluble
  - s soluble
  - vs very soluble
  - reac reacts

LIST OF ABBREVIATIONS

Ac	acetyl
ace	acetone
acid	acid solutions
alk	alkaline solutions
amorp	amorphous
anh	anhydrous
aq	aqueous
blk	black
brn	brown
bz	benzene
chl	chloroform
col	colorless
conc	concentrated
cry	crystals, crystalline
cub	cubic
cyhex	cyclohexane
dec	decomposes
dil	dilute
diox	dioxane
eth	ethyl ether
EtOH	ethanol
exp	explodes, explosive
flam	flammable

gl	glass, glassy
grn	green
hc	hydrocarbon solvents
hex	hexagonal
hp	heptane
hex	hexane
hyd	hydrate
hyg	hygroscopic
i	insoluble in
liq	liquid
MeOH	methanol
mono	monoclinic
octahed	octahedral
oran	orange
orth	orthorhombic
os	organic solvents
peth	petroleum ether
pow	powder
prec	precipitate
pur	purple
py	pyridine
reac	reacts with
refrac	refractory
rhom	rhombohedral
s	soluble in
silv	silvery
sl	slightly soluble in
soln	solution
sp	sublimation point
stab	stable
subl	sublimes
temp	temperature
tetr	tetragonal
thf	tetrahydrofuran
tol	toluene
tp	triple point
trans	transition, transformation
tricl	triclinic
trig	trigonal
unstab	unstable
viol	violet
visc	viscous
vs	very soluble in
wh	white
xyl	xylene
yel	yellow

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Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Actinium		Ac	Ac	7440-34-8	227	1051	3198	10		
Actinium bromide	Actinium tribromide	$AcBr_3$	$AcBr_3$	33689-81-5	467		800 subl	5.85		s H_2O
Actinium chloride	Actinium trichloride	$AcCl_3$	$AcCl_3$	22986-54-5	333		960 subl	4.81		
Actinium fluoride	Actinium trifluoride	AcF_3	AcF_3	33689-80-4	284			7.88		i H_2O
Actinium iodide	Actinium triiodide	AcI_3	AcI_3	33689-82-6	608					s H_2O
Actinium oxide		Ac_2O_3	Ac_2O_3	12002-61-8	502	1977		9.19		i H_2O
Aluminum		Al	Al	7429-90-5	26.982	660.32	2519	2.70		i H_2O; s acid, alk
Aluminum ammonium sulfate	Ammonium alum	$AlH_4NO_8S_2$	$AlNH_4(SO_4)_2$	7784-25-0	237.148					sl H_2O; i EtOH
Aluminum ammonium sulfate dodecahydrate	Aluminum alum	$AlH_{28}NO_{20}S_2$	$AlNH_4(SO_4)_2 \cdot 12H_2O$	7784-26-1	453.331	94.5	> 280 dec	1.65		s H_2O; i EtOH
Aluminum antimonide		AlSb	AlSb	25152-52-7	148.742	1065		4.26		
Aluminum arsenide		AlAs	AlAs	22831-42-1	101.903	1740		3.76		
Aluminum borate	Eremeyevite	$Al_4B_2O_9$	$2Al_2O_3 \cdot B_2O_3$	11121-16-7	273.543	≈1050				i H_2O
Aluminum borohydride	Aluminum tetrahydroborate	AlB_3H_{12}	$Al(BH_4)_3$	16962-07-5	71.51	−64.5	44.5			reac H_2O
Aluminum bromate nonahydrate		$AlBr_3H_{18}O_{18}$	$Al(BrO_3)_3 \cdot 9H_2O$	11126-81-1*	572.826	62	> 100 dec			s H_2O
Aluminum bromide	Aluminum tribromide	$AlBr_3$	$AlBr_3$	7727-15-3	266.694	97.5	255	3.2		reac H_2O; s bz, tol
Aluminum bromide hexahydrate		$AlBr_3H_{12}O_6$	$AlBr_3 \cdot 6H_2O$	7784-11-4	374.785	93		2.54		s H_2O, EtOH, CS_2
Aluminum carbide		C_3Al_4	Al_4C_3	1299-86-1	143.958	2100	> 2200 dec	2.36		reac H_2O
Aluminum chlorate nonahydrate	Mallebrin	$AlCl_3H_{18}O_{18}$	$Al(ClO_3)_3 \cdot 9H_2O$	15477-33-5	439.472					vs H_2O; s EtOH
Aluminum chloride	Aluminum trichloride	$AlCl_3$	$AlCl_3$	7446-70-0	133.34	192.6	180 sp	2.48	45.1^{25}	s bz, ctc, chl
Aluminum chloride hexahydrate	Aluminum trichloride hexahydrate	$AlCl_3H_{12}O_6$	$AlCl_3 \cdot 6H_2O$	7784-13-6	241.431	100 dec		2.398	45.1^{25}	s EtOH, eth
Aluminum diacetate	Aluminum subacetate	$C_4H_7AlO_5$	$Al(OH)(C_2H_3O_2)_2$	142-03-0	162.078					i H_2O
Aluminum diboride		AlB_2	AlB_2	12041-50-8	48.604	> 920 dec		3.19		s dil HCl
Aluminum ethanolate	Aluminum ethoxide	$C_6H_{15}AlO_3$	$Al(C_2H_5O)_3$	555-75-9	162.163	140				reac H_2O; sl xyl
Aluminum fluoride	Aluminum trifluoride	AlF_3	AlF_3	7784-18-1	83.977	≈2250 tp (220 MPa)	1276 sp	3.10	0.50^{25}	
Aluminum fluoride monohydrate	Fluellite	AlF_3H_2O	$AlF_3 \cdot H_2O$	32287-65-3	101.992			2.17	0.50^{25}	
Aluminum fluoride trihydrate		$AlF_3H_6O_3$	$AlF_3 \cdot 3H_2O$	15098-87-0	138.023			1.914	0.50^{25}	
Aluminum hexafluorosilicate nonahydrate		$Al_2F_{18}H_{18}O_9Si_3$	$Al_2(SiF_6)_3 \cdot 9H_2O$	17099-70-6	642.329	> 500 dec				s H_2O
Aluminum hydride		AlH_3	AlH_3	7784-21-6	30.006	> 150 dec				reac H_2O
Aluminum hydroxide	Bayerite	AlH_3O_3	$Al(OH)_3$	21645-51-2	78.004			2.42		i H_2O; s alk, acid
Aluminum hydroxychloride	Aluminum chlorohydroxide	$Al_2ClH_9O_7$	$Al_2(OH)_5Cl \cdot 2H_2O$	1327-41-9	210.483					s H_2O
Aluminum hypophosphite		$AlH_6O_6P_3$	$Al(H_2PO_2)_3$	7784-22-7	221.948	220 dec				i H_2O; s alk, acid
Aluminum iodide	Aluminum triiodide	AlI_3	AlI_3	7784-23-8	407.695	188.28	382	3.98		reac H_2O
Aluminum iodide hexahydrate	Aluminum triiodide hexahydrate	$AlH_{12}I_3O_6$	$AlI_3 \cdot 6H_2O$	10090-53-6	515.786					vs H_2O; s EtOH, eth

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Aluminum lactate	Aluctyl	$C_9H_{15}AlO_9$	$Al(C_3H_5O_3)_3$	18917-91-4	294.192					vs H_2O
Aluminum metaphosphate		AlO_9P_3	$Al(PO_3)_3$	32823-06-6	263.898	≈1525		2.78		i H_2O
Aluminum nitrate		AlN_3O_9	$Al(NO_3)_3$	13473-90-0	212.997	dec			68.9^{25}	vs EtOH; sl ace
Aluminum nitrate nonahydrate		$AlH_{18}N_3O_{18}$	$Al(NO_3)_3 \cdot 9H_2O$	7784-27-2	375.134	73	135 dec	1.72	68.9^{25}	vs EtOH; i pyr
Aluminum nitride		AlN	AlN	24304-00-5	40.989	3000		3.255		reac H_2O
Aluminum oleate	Aluminum trioleate	$C_{54}H_{99}AlO_6$	$Al(C_{18}H_{33}O_2)_3$	688-37-9	871.342					i H_2O; s EtOH, bz
Aluminum oxide	Alumina	Al_2O_3	Al_2O_3	1344-28-1	101.961	2053	≈3000	3.97		i H_2O, os; sl alk
Aluminum oxyhydroxide		$AlHO_2$	AlO(OH)	14457-84-2	59.989			3.44		i H_2O; s acid, alk
Aluminum palmitate	Aluminum hexadecanoate	$C_{48}H_{93}AlO_6$	$Al(C_{15}H_{31}COO)_3$	555-35-1	793.23					i H_2O, EtOH; s peth
Aluminum perchlorate nonahydrate		$AlCl_3H_{18}O_{21}$	$Al(ClO_4)_3 \cdot 9H_2O$	14452-39-2	487.47	82 dec		2.0	182.4^0	
Aluminum phosphate	Aluminum orthophosphate	AlO_4P	$AlPO_4$	7784-30-7	121.953	>1460		2.56		i H_2O; sl acid
Aluminum phosphide	Celphos	AlP	AlP	20859-73-8	57.956	2550		2.40		reac H_2O
Aluminum selenide		Al_2Se_3	Al_2Se_3	1302-82-5	290.84	960		3.437		reac H_2O
Aluminum silicate		Al_2O_5Si	Al_2SiO_5	12183-80-1	162.046			3.145		
Aluminum silicate dihydrate	China clay	$Al_2H_4O_9Si_2$	$Al_2O_3 \cdot 2SiO_2 \cdot 2H_2O$	1332-58-7	258.161			2.59		i H_2O, acid, alk
Aluminum stearate	Aluminum tristearate	$C_{54}H_{105}AlO_6$	$Al(C_{18}H_{35}O_2)_3$	637-12-7	877.39	115		1.070		i H_2O, EtOH, eth; s alk
Aluminum sulfate	Alunogenite	$Al_2O_{12}S_3$	$Al_2(SO_4)_3$	10043-01-3	342.154	1040 dec			38.5^{25}	i EtOH
Aluminum sulfate octadecahydrate		$Al_2H_{36}O_{30}S_3$	$Al_2(SO_4)_3 \cdot 18H_2O$	7784-31-8	666.429	86 dec		1.69	38.5^{25}	
Aluminum sulfide		Al_2S_3	Al_2S_3	1302-81-4	150.161	1100		2.02		
Aluminum telluride		Al_2Te_3	Al_2Te_3	12043-29-7	436.76	≈895		4.5		
Aluminum thiocyanate		$C_3AlN_3S_3$	$Al(SCN)_3$	538-17-0	201.232					s H_2O; i EtOH, eth
Americium		Am	Am	7440-35-9	243	1176	2011	12		s acid
Americium(III) bromide	Americium tribromide	$AmBr_3$	$AmBr_3$	14933-38-1	483			6.85		s H_2O
Americium(III) chloride	Americium trichloride	$AmCl_3$	$AmCl_3$	13464-46-5	349	500		5.87		
Americium(III) fluoride	Americium trifluoride	AmF_3	AmF_3	13708-80-0	300	1393		9.53		
Americium(IV) fluoride	Americium tetrafluoride	AmF_4	AmF_4	15947-41-8	319			7.23		
Americium(III) iodide	Americium triiodide	AmI_3	AmI_3	13813-47-3	624	≈950		6.9		
Americium(III) oxide		Am_2O_3	Am_2O_3	12254-64-7	534			11.77		s acid
Americium(IV) oxide		AmO_2	AmO_2	12005-67-3	275	>1000 dec		11.68		s acid
Ammonia		H_3N	NH_3	7664-41-7	17.031	−77.73	−33.33	0.696 g/L		vs H_2O; s EtOH, eth
Ammonium acetate		$C_2H_7NO_2$	$NH_4C_2H_3O_2$	631-61-8	77.083	114		1.073	148^4	s EtOH; sl ace
Ammonium azide		H_4N_4	NH_4N_3	12164-94-2	60.059	160	exp	1.346	20.2^{30}	
Ammonium benzoate		$C_7H_9NO_2$	$NH_4C_7H_5O_2$	1863-63-4	139.152	198		1.26		s H_2O; sl EtOH
Ammonium borate tetrahydrate	Ammonium tetraborate tetrahydrate	$B_4H_{16}N_2O_{11}$	$(NH_4)_2B_4O_7 \cdot 4H_2O$	12228-87-4	263.377					s H_2O; i EtOH
Ammonium bromate		BrH_4NO_3	NH_4BrO_3	13843-59-9	145.941	exp				vs H_2O

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Ammonium bromide		BrH_4N	NH_4Br	12124-97-9	97.943	542 dec	396 sp	2.429	78.3^{25}	s EtOH, ace; sl eth
Ammonium caprylate	Ammonium octanoate	$C_8H_{19}NO_2$	$NH_4C_8H_{15}O_2$	5972-76-9	161.243	≍75				reac H_2O; s EtOH; i chl, bz
Ammonium carbamate		$CH_6N_2O_2$	NH_2COONH_4	1111-78-0	78.071					vs H_2O; s EtOH
Ammonium carbonate		$CH_8N_2O_3$	$(NH_4)_2CO_3$	506-87-6	96.086	58 dec			100^{15}	
Ammonium cerium(IV) nitrate	Ceric ammonium nitrate	$CeH_8N_8O_{18}$	$(NH_4)_2Ce(NO_3)_6$	16774-21-3	548.223					vs H_2O
Ammonium cerium(III) sulfate tetrahydrate	Cerous ammonium sulfate tetrahydrate	$CeH_{12}NO_{12}S_2$	$NH_4Ce(SO_4)_2 \cdot 4H_2O$	21995-38-0*	422.343					s H_2O
Ammonium chlorate		ClH_4NO_3	NH_4ClO_3	10192-29-7	101.49	102 exp		1.80	28.7^{0}	
Ammonium chloride	Sal ammoniac	ClH_4N	NH_4Cl	12125-02-9	53.492	520 tp (dec)	338 sp	1.519	39.5^{25}	
Ammonium chromate		$CrH_8N_2O_4$	$(NH_4)_2CrO_4$	7788-98-9	152.071	185 dec		1.90	37^{25}	sl ace, MeOH; i EtOH
Ammonium chromic sulfate dodecahydrate	Chrome alum ammonium	$CrH_{28}NO_{20}S_2$	$NH_4Cr(SO_4)_2 \cdot 12H_2O$	10022-47-6	478.345	94 dec		1.72		s H_2O; sl EtOH
Ammonium cobalt(II) phosphate	Cobaltic ammonium phosphate	CoH_4NO_4P	$CoNH_4PO_4$	14590-13-7	171.943					i H_2O; s acid
Ammonium cobalt(II) sulfate hexahydrate	Cobaltic ammonium sulfate hexahydrate	$CoH_{20}N_2O_{14}S_2$	$(NH_4)_2Co(SO_4)_2 \cdot 6H_2O$	13586-38-4	395.229			1.90		s H_2O; i EtOH
Ammonium copper(II) chloride	Cupric ammonium chloride	$Cl_4CuH_8N_2$	$CuCl_2 \cdot 2NH_4Cl$	10060-13-6*	241.434					s H_2O
Ammonium copper(II) chloride dihydrate	Cupric ammonium chloride	$Cl_4CuH_{12}N_2O_2$	$CuCl_2 \cdot 2NH_4Cl \cdot 2H_2O$	10060-13-6	277.464	110 dec		1.993		s H_2O, EtOH
Ammonium cyanide		CH_4N_2	NH_4CN	12211-52-8	44.056	dec		1.10		vs H_2O
Ammonium dichromate	Ammonium bichromate	$Cr_2H_8N_2O_7$	$(NH_4)_2Cr_2O_7$	7789-09-5	252.065	180 dec		2.155	35.6^{20}	
Ammonium dihydrogen arsenate		AsH_6NO_4	$NH_4H_2AsO_4$	13462-93-6	158.975	300 dec		2.311	52.7^{25}	
Ammonium dihydrogen phosphate	ADP	H_6NO_4P	$NH_4H_2PO_4$	7722-76-1	115.026	190		1.80	40.4^{25}	sl EtOH; i ace
Ammonium dithiocarbamate	Ammonium sulfocarbamate	$CH_6N_2S_2$	NH_4NH_2CSS	513-74-6	110.204	99 dec		1.45		s H_2O
Ammonium ferric chromate	Ferric ammonium chromate	$Cr_2FeH_4NO_8$	$NH_4Fe(CrO_4)_2$	7789-08-4	305.871					i H_2O
Ammonium ferric oxalate trihydrate	Ferric ammonium oxalate trihydrate	$C_6H_{18}FeN_3O_{15}$	$(NH_4)_3Fe(C_2O_4)_3 \cdot 3H_2O$	13268-42-3	428.063	≍160 dec		1.780		vs H_2O; i EtOH
Ammonium ferricyanide trihydrate	Ammonium hexacyanoferrate(III) trihydrate	$C_6H_{18}FeN_9O_3$	$(NH_4)_3Fe(CN)_6 \cdot 3H_2O$	14221-48-8*	320.111					s H_2O; i EtOH
Ammonium ferrocyanide trihydrate	Ammonium hexacyanoferrate(II) trihydrate	$C_6H_{22}FeN_{10}O_3$	$(NH_4)_4Fe(CN)_6 \cdot 3H_2O$	14481-29-9*	338.149	dec				s H_2O; i EtOH
Ammonium fluoride		FH_4N	NH_4F	12125-01-8	37.037	dec		1.015	83.5^{25}	sl EtOH
Ammonium fluorosulfonate		FH_4NO_3S	NH_4SO_3F	13446-08-7	117.101	245				s H_2O, EtOH, MeOH
Ammonium formate		CH_5NO_2	NH_4CHO_2	540-69-2	63.057	116		1.27	143^{20}	s EtOH
Ammonium hexabromoplatinate(IV)		$Br_6H_8N_2Pt$	$(NH_4)_2PtBr_6$	17363-02-9	710.58	145 dec			0.59^{20}	
Ammonium hexachloroiridate(IV)		$Cl_6H_8IrN_2$	$(NH_4)_2IrCl_6$	16940-92-4	441.01	dec		2.856	1.09^{25}	
Ammonium hexachloroosmiate(IV)	Ammonium osmium chloride	$Cl_6H_8N_2Os$	$(NH_4)_2OsCl_6$	12125-08-5	439.02		subl	2.93		s H_2O, EtOH
Ammonium hexachloropalladate(IV)		$Cl_6H_8N_2Pd$	$(NH_4)_2PdCl_6$	19168-23-1	355.21	dec		2.418		

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Ammonium hexachloroplatinate(IV)	Ammonium platinic chloride	$Cl_6H_8N_2Pt$	$(NH_4)_2PtCl_6$	16919-58-7	443.87	380 dec		3.065	0.5^{20}	i EtOH
Ammonium hexafluoroaluminate	Ammonium aluminum fluoride	$AlF_6H_{12}N_3$	$(NH_4)_3AlF_6$	7784-19-2	195.087			1.78		s H_2O
Ammonium hexafluorogallate		$F_6GaH_{12}N_3$	$(NH_4)_3GaF_6$	14639-94-2	237.828	> 200 dec		2.10		
Ammonium hexafluorogermanate		$F_6GeH_8N_2$	$(NH_4)_2GeF_6$	16962-47-3	222.68	380	subl	2.564		s H_2O; i EtOH
Ammonium hexafluorophosphate		F_6H_4NP	NH_4PF_6	16941-11-0	163.003	58 dec		2.180		vs H_2O; s ace, EtOH, MeOH
Ammonium hexafluorosilicate	Cryptohalite	$F_6H_8N_2Si$	$(NH_4)_2SiF_6$	16919-19-0	178.153	dec		2.011	22.7^{25}	i EtOH, ace
Ammonium hexafluorozirconate(IV)	Zirconium ammonium fluoride	$F_6H_8N_2Zr$	$(NH_4)_2ZrF_6$	16919-31-6	241.291			1.154		s H_2O
Ammonium hydrogen arsenate		$AsH_9N_2O_4$	$(NH_4)_2HAsO_4$	7784-44-3	176.004			1.99		s H_2O
Ammonium hydrogen borate trihydrate		$B_4H_{11}NO_{10}$	$NH_4HB_4O_7 \cdot 3H_2O$	10135-84-9	228.332			≈2.5		s H_2O
Ammonium hydrogen carbonate	Ammonium bicarbonate	CH_5NO_3	NH_4HCO_3	1066-33-7	79.056	107 dec		1.586	24.8^{25}	i EtOH, bz
Ammonium hydrogen citrate	Diammonium citrate	$C_6H_{14}N_2O_7$	$(NH_4)_2HC_6H_5O_7$	3012-65-5	226.184			1.48		vs H_2O; sl EtOH
Ammonium hydrogen fluoride	Ammonium bifluoride	F_2H_5N	NH_4HF_2	1341-49-7	57.044	125	240 dec	1.50	60.2^{20}	
Ammonium hydrogen malate		$C_4H_9NO_5$	$NH_4C_4H_4O_5$	5972-71-4	151.118	160		1.15		s H_2O; sl EtOH
Ammonium hydrogen oxalate monohydrate	Ammonium binoxalate monohydrate	$C_2H_7NO_5$	$NH_4HC_2O_4 \cdot H_2O$	5972-72-5*	125.081	dec		1.56		sl H_2O, EtOH
Ammonium hydrogen phosphate	Ammonium phosphate, dibasic	$H_9N_2O_4P$	$(NH_4)_2HPO_4$	7783-28-0	132.055	155 dec		1.619	69.5^{25}	i EtOH, ace
Ammonium hydrogen selenate		H_5NO_4S	NH_4HSeO_4	10294-60-7	162.01	dec		2.162		
Ammonium hydrogen sulfate	Ammonium bisulfate	H_5NO_4S	NH_4HSO_4	7803-63-6	115.111	147		1.78	100^{20}	i EtOH, ace, py
Ammonium hydrogen sulfide	Ammonium bisulfide	H_5NS	NH_4HS	12124-99-1	51.113	dec		1.17	128^{0}	sl ace; i bz, eth
Ammonium hydrogen sulfite	Ammonium bisulfite	H_5NO_3S	NH_4HSO_3	10192-30-0	99.111	dec		2.03	71.8^{0}	
Ammonium hydrogen tartrate	Ammonium bitartrate	$C_4H_9NO_6$	$NH_4C_4H_4O_6$	3095-65-6	167.117			1.68		sl H_2O; s alk; i EtOH
Ammonium hydroxide	Ammonia solution	H_5NO	NH_4OH	1336-21-6	35.046					
Ammonium hypophosphite		H_6NO_2P	$NH_4H_2PO_2$	7803-65-8	83.028	dec				vs H_2O; sl EtOH; i ace
Ammonium iodate		H_4INO_3	NH_4IO_3	13446-09-8	192.941	150		3.3	3.84^{25}	
Ammonium iodide		H_4IN	NH_4I	12027-06-4	144.943	551 dec	405 sp	2.514	178^{25}	sl EtOH, MeOH
Ammonium iron(II) sulfate hexahydrate	Ferrous ammonium sulfate hexahydrate	$FeH_{20}N_2O_{14}S_2$	$(NH_4)_2Fe(SO_4)_2 \cdot 6H_2O$	7783-85-9	392.141	≈100 dec		1.86		s H_2O; i EtOH
Ammonium iron(III) sulfate dodecahydrate	Ferric ammonium sulfate dodecahydrate	$FeH_{28}NO_{20}S_2$	$NH_4Fe(SO_4)_2 \cdot 12H_2O$	7783-83-7	482.194	≈37		1.71		vs H_2O; i EtOH
Ammonium lactate		$C_3H_9NO_3$	$NH_4C_3H_5O_3$	52003-58-4	107.108	92				s H_2O, EtOH; sl MeOH; i ace, eth
Ammonium metatungstate hexahydrate		$H_{36}N_6O_{30}W_7$	$(NH_4)_6W_7O_{24} \cdot 6H_2O$	12028-48-7	1887.19					s H_2O; i EtOH
Ammonium metavanadate	Ammonium vanadate	H_4NO_3V	NH_4VO_3	7803-55-6	116.979	200 dec		2.326	4.8^{20}	

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Ammonium molybdate(VI) tetrahydrate	Ammonium heptamolybdate tetrahydrate	$H_{32}Mo_7N_6O_{28}$	$(NH_4)_6Mo_7O_{24}\cdot 4H_2O$	12054-85-2	1235.86	90 dec		2.498	43	i EtOH
Ammonium molybdophosphate		$H_{12}Mo_{12}N_3O_{40}P$	$(NH_4)_3PO_4\cdot 12MoO_3$	54723-94-3*	1876.35	dec			0.02	s alk; i acid
Ammonium nickel chloride hexahydrate	Nickel ammonium chloride	$Cl_3H_{16}NNiO_6$	$NH_4NiCl_3\cdot 6H_2O$	16122-03-5*	291.181			1.65		s H_2O
Ammonium nickel sulfate hexahydrate	Nickel ammonium sulfate	$H_{20}N_2NiO_{14}S_2$	$(NH_4)_2Ni(SO_4)_2\cdot 6H_2O$	7785-20-8	394.989	dec		1.923		sl H_2O; i EtOH
Ammonium nitrate		$H_4N_2O_3$	NH_4NO_3	6484-52-2	80.043	210 dec		1.72	213^{25}	sl MeOH
Ammonium nitrite		$H_4N_2O_2$	NH_4NO_2	13446-48-5	64.044	60 exp		1.69	221^{25}	i eth
Ammonium nitroferricyanide	Ammonium nitroprusside	$C_5H_8FeN_8O$	$(NH_4)_2Fe(CN)_5NO$	14402-70-1	252.016					s H_2O, EtOH
Ammonium oleate	Ammonium soap	$C_{18}H_{37}NO_2$	$NH_4C_{18}H_{33}O_2$	544-60-5	299.493	21				s H_2O; sl ace
Ammonium oxalate		$C_2H_8N_2O_4$	$(NH_4)_2C_2O_4$	1113-38-8	124.096			1.5	5.20^{25}	
Ammonium oxalate monohydrate		$C_2H_{10}N_2O_5$	$(NH_4)_2C_2O_4\cdot H_2O$	6009-70-7	142.11	dec		1.50	5.20^{25}	sl EtOH
Ammonium palmitate	Ammonium hexadecanoate	$C_{16}H_{35}NO_2$	$NH_4C_{15}H_{31}CO_2$	593-26-0	273.455	22				s H_2O; sl bz, xyl; i ace, EtOH, ctc
Ammonium pentaborate tetrahydrate		$B_5H_{12}NO_{12}$	$NH_4B_5O_8\cdot 4H_2O$	12007-89-5	272.15				7.03^{18}	
Ammonium pentachlorozincate		$Cl_5H_{12}N_3Zn$	$(NH_4)_3ZnCl_5$	14639-98-6	296.77			1.81		vs H_2O
Ammonium perchlorate		ClH_4NO_4	NH_4ClO_4	7790-98-9	117.49	dec, exp		1.95	24.5^{25}	s MeOH; sl EtOH, ace; i eth
Ammonium permanganate		H_4MnNO_4	NH_4MnO_4	13446-10-1	136.975	70 dec		2.22	7.9^{15}	
Ammonium peroxydisulfate	Ammonium persulfate	$H_8N_2O_8S_2$	$(NH_4)_2S_2O_8$	7727-54-0	228.204	dec		1.982	83.5^{25}	
Ammonium perrhenate		H_4NO_4Re	NH_4ReO_4	13598-65-7	268.244			3.97	6.23^{20}	
Ammonium phosphate trihydrate		$H_{18}N_3O_7P$	$(NH_4)_3PO_4\cdot 3H_2O$	10361-65-6*	203.133				25.0^{25}	i ace
Ammonium phosphite, dibasic, monohydrate	Diammonium hydrogen phosphite monohydrate	$H_{11}N_2O_4P$	$(NH_4)_2HPO_3\cdot H_2O$	51503-61-8	134.071					s H_2O
Ammonium phosphomolybdate monohydrate	Ammonium molybdophosphate	$H_{14}Mo_{12}N_3O_{41}P$	$(NH_4)_3PO_4\cdot 12MoO_3\cdot H_2O$	54723-94-3	1894.36	dec			0.02	
Ammonium phosphotungstate dihydrate	Ammonium tungstophosphate	$H_{16}N_3O_{42}PW_{12}$	$(NH_4)_3PO_4\cdot 12WO_3\cdot 2H_2O$	1311-90-6	2967.18					sl H_2O
Ammonium picrate	Ammonium carbazoate	$C_6H_6N_4O_7$	$NH_4C_6H_2N_3O_7$	131-74-8	246.135	exp		1.72		sl H_2O
Ammonium salicylate		$C_7H_9NO_3$	$NH_4C_7H_5O_3$	528-94-9	155.151					vs H_2O; s EtOH
Ammonium selenate		$H_8N_2O_4Se$	$(NH_4)_2SeO_4$	7783-21-3	179.04	dec		2.194	117^{25}	i EtOH, ace
Ammonium selenite		$H_8N_2O_3Se$	$(NH_4)_2SeO_3$	7783-19-9	163.04	dec			121^{25}	
Ammonium stearate	Ammonium octadecanoate	$C_{18}H_{39}NO_2$	$NH_4C_{18}H_{35}O_2$	1002-89-7	301.509	22		0.89		sl H_2O, bz; s EtOH, MeOH; i ace
Ammonium sulfamate		$H_6N_2O_3S$	$NH_4NH_2SO_3$	7773-06-0	114.125	131	160 dec			vs H_2O; sl EtOH
Ammonium sulfate	Mascagnite	$H_8N_2O_4S$	$(NH_4)_2SO_4$	7783-20-2	132.141	280 dec		1.77	76.4^{25}	i EtOH, ace
Ammonium sulfide		H_8N_2S	$(NH_4)_2S$	12135-76-1	68.143	$\asymp$0 dec				s H_2O, EtOH, alk
Ammonium sulfite		$H_8N_2O_3S$	$(NH_4)_2SO_3$	17026-44-7	116.141				64.2^{25}	
Ammonium sulfite monohydrate		$H_{10}N_2O_4S$	$(NH_4)_2SO_3\cdot H_2O$	7783-11-1	134.156	dec		1.41	64.2^{25}	i EtOH, ace
Ammonium tartrate		$C_4H_{12}N_2O_6$	$(NH_4)_2C_4H_4O_6$	3164-29-2	184.147	dec		1.601		s H_2O

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Ammonium tellurate		$H_8N_2O_4Te$	$(NH_4)_2TeO_4$	13453-06-0	227.68	dec		3.024		
Ammonium tetrachloroaluminate	Aluminum ammonium chloride	$AlCl_4H_4N$	NH_4AlCl_4	7784-14-7	186.832	304				s H_2O, eth
Ammonium tetrachloroplatinate(II)	Ammonium platinous chloride	$Cl_4H_8N_2Pt$	$(NH_4)_2PtCl_4$	13820-41-2	372.97	dec		2.936		s H_2O; i EtOH
Ammonium tetrachlorozincate	Zinc ammonium chloride	$Cl_4H_8N_2Zn$	$(NH_4)_2ZnCl_4$	14639-97-5	243.28	150 dec		1.879		vs H_2O
Ammonium tetrafluoroborate		BF_4H_4N	NH_4BF_4	13826-83-0	104.844	487 dec		1.871	25^{20}	
Ammonium tetrathiotungstate		$H_8N_2S_4W$	$(NH_4)_2WS_4$	13862-78-7	348.18	dec		2.71		s H_2O
Ammonium thiocyanate	Ammonium rhodanide	CH_4N_2S	NH_4SCN	1762-95-4	76.122	≍149	dec	1.30	181^{25}	vs EtOH; s ace; i chl
Ammonium thiosulfate	Ammonium hyposulfite	$H_8N_2O_3S_2$	$(NH_4)_2S_2O_3$	7783-18-8	148.207	150 dec		1.678		vs H_2O; i EtOH, eth
Ammonium titanium oxalate monohydrate	Titanium ammonium oxalate monohydrate	$C_4H_{10}N_2O_{10}Ti$	$(NH_4)_2TiO(C_2O_4)_2 \cdot H_2O$	10580-03-7	293.996					vs H_2O
Ammonium tungstate(VI)	Ammonium paratungstate	$H_{40}N_{10}O_{41}W_{12}$	$(NH_4)_{10}W_{12}O_{41}$	11120-25-5	3042.44			2.3		s H_2O; i EtOH
Ammonium uranate(-VI)	Ammonium diuranate	$H_8N_2O_7U_2$	$(NH_4)_2U_2O_7$	7783-22-4	624.131					i H_2O, alk; s acid
Ammonium uranium fluoride	Uranyl ammonium fluoride	$F_5H_{12}N_3O_2U$	$UO_2(NH_4)_3F_5$	18433-40-4	419.135					s H_2O; i EtOH
Ammonium valerate		$C_5H_{13}NO_2$	$NH_4C_4H_9CO_2$	42739-38-8	119.163	108				vs H_2O, EtOH; s eth
Ammonium zirconyl carbonate dihydrate	Zirconium ammonium carbonate	$C_3H_{17}N_3O_{11}Zr$	$(NH_4)_3ZrOH(CO_3)_3 \cdot 2H_2O$	12616-24-9*	362.404					s H_2O
Antimony	Stibium	Sb	Sb	7440-36-0	121.76	630.63	1587	6.68		i dil acid
Antimony arsenide	Allemontite	AsSb	SbAs	12322-34-8	196.682	≍680		6.0		
Antimony(III) bromide	Antimony tribromide	Br_3Sb	$SbBr_3$	7789-61-9	361.472	96.6	280	4.35		reac H_2O; s ace, bz, chl
Antimony(III) chloride	Antimony trichloride	Cl_3Sb	$SbCl_3$	10025-91-9	228.118	73.4	220.3	3.14	987^{25}	s acid, EtOH, bz, ace
Antimony(V) chloride	Antimony pentachloride	Cl_5Sb	$SbCl_5$	7647-18-9	299.024	4	140 dec	2.34		reac H_2O; s chl, ctc
Antimony(V) dichlorotrifluoride		Cl_2F_3Sb	$SbCl_2F_3$	7791-16-4	249.66					reac H_2O
Antimony(III) fluoride	Antimony trifluoride	F_3Sb	SbF_3	7783-56-4	178.755	292	≍345	4.38	492^{25}	
Antimony(V) fluoride	Antimony pentafluoride	F_5Sb	SbF_5	7783-70-2	216.752	8.3	141	3.10		reac H_2O
Antimony(III) iodide	Antimony triiodide	I_3Sb	SbI_3	7790-44-5	502.473	168	401	4.92		reac H_2O; s EtOH, ace; i ctc
Antimony(III) oxide (valentinite)	Antimony trioxide	O_3Sb_2	Sb_2O_3	1309-64-4	291.518	655	1425	5.7		sl H_2O; i os
Antimony(III) oxide (senarmontite)	Senarmontite	O_3Sb_2	Sb_2O_3	1309-64-4	291.518	570 trans	1425	5.58		sl H_2O; i os
Antimony(III,V) oxide	Antimony tetroxide	O_4Sb_2	Sb_2O_4	1332-81-6	307.518			6.64		
Antimony(V) oxide	Antimony pentoxide	O_5Sb_2	Sb_2O_5	1314-60-9	323.517	dec		3.78	0.3^{20}	
Antimony(III) oxychloride	Basic antimony chloride	ClOSb	SbOCl	7791-08-4	173.212	170 dec				reac H_2O; i EtOH, eth
Antimony(III) selenide	Antimony triselenide	Sb_2Se_3	Sb_2Se_3	1315-05-5	480.4	611		5.81		sl H_2O
Antimony(III) sulfate	Antimonous sulfate	$O_{12}S_3Sb_2$	$Sb_2(SO_4)_3$	7446-32-4	531.711	dec		3.62		sl H_2O
Antimony(III) sulfide	Antimony trisulfide	S_3Sb_2	Sb_2S_3	1345-04-6	339.718	550		4.562		i H_2O; s conc HCl
Antimony(V) sulfide	Antimony pentasulfide	S_5Sb_2	Sb_2S_5	1315-04-4	403.85	75 dec		4.120		i H_2O; s acid, alk
Antimony(III) teluride		Sb_2Te_3	Sb_2Te_3	1327-50-0	626.32	620		6.5		

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Argon		Ar	Ar	7440-37-1	39.948	−189.36 tp (69 kPa)	−185.85	1.633 g/L		sl H_2O
Arsenic (gray)		As	As	7440-38-2	74.922	817 tp (3.70 MPa)	603 sp	5.75		i H_2O
Arsenic acid	Orthoarsenic acid	AsH_3O_4	H_3AsO_4	7778-39-4	141.944					
Arsenic acid hemihydrate		AsH_3O_4	$H_3AsO_4 \cdot 0.5H_2O$	7778-39-4*	150.951	35.5		≍2		vs H_2O, EtOH
Arsenic(III) bromide	Arsenic tribromide	$AsBr_3$	$AsBr_3$	7784-33-0	314.634	31.1	221	3.40		reac H_2O; s hc, ctc; vs eth, bz
Arsenic(III) chloride	Arsenic trichloride	$AsCl_3$	$AsCl_3$	7784-34-1	181.28	−16	130	2.150		reac H_2O; vs chl, ctc, eth
Arsenic(V) chloride	Arsenic pentachloride	$AsCl_5$	$AsCl_5$	22441-45-8	252.186	≍-50 dec				
Arsenic diiodide		As_2I_4	As_2I_4	13770-56-4	657.461	137				reac H_2O; s os
Arsenic(III) fluoride	Arsenic trifluoride	AsF_3	AsF_3	7784-35-2	131.917	−5.9	57.8	2.7		reac H_2O; s EtOH, eth, bz
Arsenic(V) fluoride	Arsenic pentafluoride	AsF_5	AsF_5	7784-36-3	169.914	−79.8	−52.8	6.945 g/L		reac H_2O; s EtOH, bz, eth
Arsenic hemiselenide		As_2Se	As_2Se	1303-35-1	228.8					i H_2O, os; dec acid, alk
Arsenic(III) iodide	Arsenic triiodide	AsI_3	AsI_3	7784-45-4	455.635	140.9	424	4.73		sl H_2O, EtOH, eth; s bz. tol
Arsenic(III) oxide (arsenolite)	Arsenic trioxide	As_2O_3	As_2O_3	1327-53-3	197.841	274	460	3.86	2.05^{25}	
Arsenic(III) oxide (claudetite)	Claudetite	As_2O_3	As_2O_3	1327-53-3	197.841	313	460	3.74	2.05^{25}	s dil acid, alk; i EtOH
Arsenic(V) oxide	Arsenic pentoxide	As_2O_5	As_2O_5	1303-28-2	229.84	315		4.32	65.8^{20}	vs EtOH
Arsenic(III) selenide	Arsenic triselenide	As_2Se_3	As_2Se_3	1303-36-2	386.72	260		4.75		i H_2O; s alk
Arsenic(V) selenide	Arsenic pentaselenide	As_2Se_5	As_2Se_5	1303-37-3	544.64	dec				i H_2O, EtOH, eth; s alk
Arsenic sulfide		As_4S_4	As_4S_4	12279-90-2	427.95	320	565	3.5		i H_2O; sl bz; s alk
Arsenic(III) sulfide	Arsenic trisulfide	As_2S_3	As_2S_3	1303-33-9	246.041	310	707	3.46		i H_2O; s alk
Arsenic(V) sulfide	Arsenic pentasulfide	As_2S_5	As_2S_5	1303-34-0	310.173	dec				i H_2O; s alk
Arsenic(III) telluride		As_2Te_3	As_2Te_3	12044-54-1	532.64	621		6.50		
Arsenious acid		AsH_3O_3	H_3AsO_3	13464-58-9	125.944					
Arsine	Arsenic hydride	AsH_3	AsH_3	7784-42-1	77.946	−116	−62.5	3.186 g/L		sl H_2O
Astatine		At	At	7440-68-8	210	302				s HNO_3, os
Barium		Ba	Ba	7440-39-3	137.327	727	1897	3.62		reac H_2O; sl EtOH
Barium acetate		$C_4H_6BaO_4$	$Ba(C_2H_3O_2)_2$	543-80-6	255.416			2.47	79.2^{25}	
Barium acetate monohydrate		$C_4H_8BaO_5$	$Ba(C_2H_3O_2)_2 \cdot H_2O$	5908-64-5	273.431	110 dec		2.19	79.2^{25}	sl EtOH
Barium aluminate		Al_2BaO_4	$BaAl_2O_4$	12004-04-5	255.288	1827				
Barium azide		BaN_6	$Ba(N_3)_2$	18810-58-7	221.367	≍120 dec		2.936	17.3^{20}	sl EtOH; i eth
Barium bromate monohydrate		$BaBr_2H_2O_7$	$Ba(BrO_3)_2 \cdot H_2O$	10326-26-8	411.147	260 dec		3.99	0.831^{25}	i EtOH
Barium bromide		$BaBr_2$	$BaBr_2$	10553-31-8	297.135	857	1835	4.781	100^{25}	
Barium bromide dihydrate		$BaBr_2H_4O_2$	$BaBr_2 \cdot 2H_2O$	7791-28-8	333.166	75 dec		3.7	100^{25}	s MeOH; i EtOH, ace, diox
Barium carbide		C_2Ba	BaC_2	50813-65-5	161.348	dec		3.74		reac H_2O
Barium carbonate	Witherite	$CBaO_3$	$BaCO_3$	513-77-9	197.336	1555		4.2865	0.0014^{20}	s acid
Barium chlorate		$BaCl_2O_6$	$Ba(ClO_3)_2$	13477-00-4	304.228	414			37.9^{25}	sl EtOH, ace

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Barium chlorate monohydrate		$BaCl_2H_2O_7$	$Ba(ClO_3)_2 \cdot H_2O$	10294-38-9	322.244	120 dec		3.179	37.9^{25}	s acid; sl EtOH, ace
Barium chloride		$BaCl_2$	$BaCl_2$	10361-37-2	208.232	962	1560	3.9	37.0^{25}	
Barium chloride dihydrate		$BaCl_2H_4O_2$	$BaCl_2 \cdot 2H_2O$	10326-27-9	244.263	≍120 dec		3.097	37.0^{25}	i EtOH
Barium chromate(V)		$Ba_3Cr_2O_8$	$Ba_3(CrO_4)_2$	12345-14-1	643.968			5.25		s H_2O
Barium chromate(VI)		$BaCrO_4$	$BaCrO_4$	10294-40-3	253.321	1380		4.50	0.00026^{20}	reac acid
Barium citrate monohydrate		$C_{12}H_{12}Ba_3O_{15}$	$Ba_3(C_6H_5O_7)_2 \cdot H_2O$	512-25-4*	808.195					s H_2O, acid
Barium copper yttrium oxide	Yttrium barium copper oxide	$BaCuO_5Y_2$	$BaCuY_2O_5$	82642-06-6	458.682					
Barium copper yttrium oxide	Yttrium barium copper oxide	$Ba_2Cu_3O_7Y$	$Ba_2Cu_3YO_7$	109064-29-1	666.194					
Barium copper yttrium oxide	Yttrium barium copper oxide	$Ba_2Cu_4O_8Y$	$Ba_2Cu_4YO_8$	114104-80-2	745.739					
Barium copper yttrium oxide	Yttrium barium copper oxide	$Ba_4Cu_7O_{15}Y_2$	$Ba_4Cu_7Y_2O_{15}$	124365-83-9	1411.933					
Barium cyanide		C_2BaN_2	$Ba(CN)_2$	542-62-1	189.361					vs H_2O; s EtOH
Barium dichromate dihydrate		$BaCr_2H_4O_9$	$BaCr_2O_7 \cdot 2H_2O$	10031-16-0	389.346	dec				reac H_2O
Barium disilicate		BaO_5Si_2	$BaSi_2O_5$	12650-28-1	273.495	1420		3.70		
Barium dithionate dihydrate	Barium hyposulfate dihydrate	$BaH_4O_8S_2$	$BaS_2O_6 \cdot 2H_2O$	13845-17-5	333.486	140 dec		4.54	22.1^{20}	sl EtOH
Barium ferrocyanide hexahydrate		$C_6H_{12}Ba_2FeN_6O_6$	$Ba_2Fe(CN)_6 \cdot 6H_2O$	13821-06-2*	594.694	80 dec				i H_2O, EtOH
Barium fluoride		BaF_2	BaF_2	7787-32-8	175.324	1368	2260	4.893	0.161^{25}	
Barium formate		$C_2H_2BaO_4$	$Ba(CHO_2)_2$	541-43-5	227.362			3.21		s H_2O; i EtOH
Barium hexaboride	Barium boride	B_6Ba	BaB_6	12046-08-1	202.193	2070		4.36		i H_2O; s acid; i EtOH
Barium hexafluorosilicate	Barium silicofluoride	BaF_6Si	$BaSiF_6$	17125-80-3	279.403	300 dec		4.29		i H_2O, EtOH; sl acid
Barium hydride		BaH_2	BaH_2	13477-09-3	139.343	1200		4.16		reac H_2O
Barium hydrogen phosphate	Barium phosphate, dibasic	$BaHO_4P$	$BaHPO_4$	10048-98-3	233.306	400 dec		4.16	0.015^{20}	s dil acid
Barium hydrosulfide		BaH_2S_2	$Ba(HS)_2$	25417-81-6	203.475					s H_2O
Barium hydrosulfide tetrahydrate		$BaH_{10}O_4S_2$	$Ba(HS)_2 \cdot 4H_2O$	12230-74-9	275.536	50 dec				s H_2O
Barium hydroxide	Caustic baryta	BaH_2O_2	$Ba(OH)_2$	17194-00-2	171.342	408			4.91^{25}	
Barium hydroxide monohydrate		BaH_4O_3	$Ba(OH)_2 \cdot H_2O$	22326-55-2	189.357			3.743	4.91^{25}	s acid
Barium hydroxide octahydrate		$BaH_{18}O_{10}$	$Ba(OH)_2 \cdot 8H_2O$	12230-71-6	315.464	78 dec		2.18	4.91^{25}	
Barium hypophosphite monohydrate		$BaH_6O_5P_2$	$Ba(H_2PO_2)_2 \cdot H_2O$	14871-79-5*	285.32			2.90		s H_2O; i EtOH
Barium iodate		BaI_2O_6	$Ba(IO_3)_2$	10567-69-8	487.132	476 dec		5.23	0.0396^{25}	
Barium iodate monohydrate		$BaH_2I_2O_7$	$Ba(IO_3)_2 \cdot H_2O$	7787-34-0	505.148	130 dec		5.00	0.0396^{25}	s acid; i EtOH
Barium iodide		BaI_2	BaI_2	13718-50-8	391.136	711		5.15	221^{25}	
Barium iodide dihydrate		$BaH_4I_2O_2$	$BaI_2 \cdot 2H_2O$	7787-33-9	427.167	740 dec		5.0	221^{25}	s EtOH, ace
Barium manganate(VI)	Manganese green	$BaMnO_4$	$BaMnO_4$	7787-35-1	256.263			4.85	0.00041^{20}	
Barium metaborate monohydrate		$B_2BaH_2O_5$	$Ba(BO_2)_2 \cdot H_2O$	26124-86-7	240.962	> 900		3.3		sl H_2O

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Barium metaphosphate		BaO_6P_2	$Ba(PO_3)_2$	13466-20-1	295.271	1560				i H_2O; sl acid
Barium metasilicate		BaO_3Si	$BaSiO_3$	13255-26-0	213.411	1605		4.40		i H_2O; s acid
Barium molybdate		$BaMoO_4$	$BaMoO_4$	7787-37-3	297.27	1450		4.975	0.0021^{20}	
Barium niobate		$BaNb_2O_6$	$Ba(NbO_3)_2$	12009-14-2	419.136	1455		5.44		i H_2O
Barium nitrate	Nitrobarite	BaN_2O_6	$Ba(NO_3)_2$	10022-31-8	261.336	590		3.24	10.3^{25}	sl EtOH, ace
Barium nitride		Ba_3N_2	Ba_3N_2	12047-79-9	439.994	> 500 dec		4.78		reac H_2O
Barium nitrite		BaN_2O_4	$Ba(NO_2)_2$	13465-94-6	229.338	267		3.234	79.5^{25}	
Barium nitrite monohydrate		$BaH_2N_2O_5$	$Ba(NO_2)_2 \cdot H_2O$	7787-38-4	247.353	217 dec		3.18	79.5^{25}	i EtOH
Barium orthovanadate		$Ba_3O_8V_2$	$Ba_3(VO_4)_2$	39416-30-3	641.859	707		5.14		
Barium oxalate		C_2BaO_4	BaC_2O_4	516-02-9	225.346	400 dec		2.658	0.0075	
Barium oxalate monohydrate		$C_2H_2BaO_5$	$BaC_2O_4 \cdot H_2O$	13463-22-4	243.361			2.66	0.0075^{20}	s acid
Barium oxide	Barium monoxide	BaO	BaO	1304-28-5	153.326	1972		5.72(cub)	1.5^{20}	s dil acid, EtOH; i ace
Barium perchlorate		$BaCl_2O_8$	$Ba(ClO_4)_2$	13465-95-7	336.227	505		3.20	312^{25}	vs EtOH
Barium perchlorate trihydrate		$BaCl_2H_6O_{11}$	$Ba(ClO_4)_2 \cdot 3H_2O$	10294-39-0	390.273			2.74	312^{25}	s MeOH; sl EtOH, ace; i eth
Barium permanganate		$BaMn_2O_8$	$Ba(MnO_4)_2$	7787-36-2	375.198	200 dec		3.77	62.5^{20}	reac EtOH
Barium peroxide		BaO_2	BaO_2	1304-29-6	169.326	450 dec		4.96	0.091^{20}	reac dil acid
Barium potassium chromate	Pigment E	$BaCr_2K_2O_8$	$BaK_2(CrO_4)_2$	27133-66-0	447.511			3.63		vs H_2O
Barium pyrophosphate	Barium diphosphate	$Ba_2O_7P_2$	$Ba_2P_2O_7$	13466-21-2	448.597	1430		3.9	0.0088^{20}	s acid
Barium selenate		BaO_4Se	$BaSeO_4$	7787-41-9	280.29	dec		4.75	0.015^{20}	
Barium selenide		BaSe	BaSe	1304-39-8	216.29	1780		5.02		reac H_2O
Barium selenite		BaO_3Se	$BaSeO_3$	13718-59-7	264.29					i H_2O
Barium silicide		$BaSi_2$	$BaSi_2$	1304-40-1	193.498	1180				reac H_2O
Barium sodium niobate		$Ba_2NaNb_5O_{15}$	$Ba_2Na(NbO_3)_5$	12323-03-4	1002.167	1437		5.40		i H_2O
Barium stannate		BaO_3Sn	$BaSnO_3$	12009-18-6	304.035			7.24		sl H_2O
Barium stannate trihydrate		BaH_6O_6Sn	$BaSnO_3 \cdot 3H_2O$	12009-18-6*	358.081					sl H_2O; s acid
Barium stearate		$C_{36}H_{70}BaO_4$	$Ba(C_{18}H_{35}O_2)_2$	6865-35-6	704.266	160		1.145		i H_2O, EtOH
Barium sulfate	Barite	BaO_4S	$BaSO_4$	7727-43-7	233.391	1580		4.49	0.00031^{20}	i EtOH
Barium sulfide		BaS	BaS	21109-95-5	169.393	2229		4.3	8.94^{25}	
Barium sulfite		BaO_3S	$BaSO_3$	7787-39-5	217.391	dec		4.44	0.0011^{25}	i EtOH
Barium tartrate		$C_4H_4BaO_6$	$BaC_4H_4O_6$	5908-81-6	285.398			2.98		s H_2O; i EtOH
Barium tetracyanoplatinate(II) tetrahydrate	Barium platinous cyanide tetrahydrate	$C_4H_8BaN_4O_4Pt$	$BaPt(CN)_4 \cdot 4H_2O$	13755-32-3	508.54			2.076		sl H_2O; i EtOH
Barium tetraiodomercurate(II)	Barium mercuric iodide	$BaHgI_4$	$BaHgI_4$	10048-99-4	845.54					vs H_2O, EtOH
Barium thiocyanate		$C_2BaN_2S_2$	$Ba(SCN)_2$	2092-17-3	253.493				167^{25}	s ace, MeOH, EtOH
Barium thiocyanate dihydrate		$C_2H_4BaN_2O_2S_2$	$Ba(SCN)_2 \cdot 2H_2O$	2092-17-3*	289.524				167^{25}	s EtOH
Barium thiocyanate trihydrate		$C_2H_6BaN_2O_3S_2$	$Ba(SCN)_2 \cdot 3H_2O$	68016-36-4	307.539			2.286	167^{25}	s EtOH

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Barium thiosulfate	Barium hyposulfite	BaO_3S_2	BaS_2O_3	35112-53-9	249.457	220 dec			0.2^{20}	i EtOH
Barium thiosulfate monohydrate	Barium hyposulfite monohydrate	$BaH_2O_4S_2$	$BaS_2O_3 \cdot H_2O$	7787-40-8	267.473	dec		3.5	0.2	i EtOH
Barium titanate	Barium metatitanate	BaO_3Ti	$BaTiO_3$	12047-27-7	233.192	1625		6.02		i H_2O
Barium tungstate	Barium tungsten oxide	BaO_4W	$BaWO_4$	7787-42-0	385.17	1475	1730	5.04	0.0016^{20}	
Barium uranium oxide		BaO_7U_2	BaU_2O_7	10380-31-1	725.381					i H_2O; s acid
Barium zirconate	Barium zirconium oxide	BaO_3Zr	$BaZrO_3$	12009-21-1	276.549	2500		5.52		i H_2O, alk; sl acid
Berkelium (α form)		Bk	Bk	7440-40-6	247	1050		14.78		
Berkelium (β form)		Bk	Bk	7440-40-6	247	986		13.25		
Beryllium	Glucinium	Be	Be	7440-41-7	9.012	1287	2471	1.85		s acid, alk
Beryllium acetate		$C_4H_6BeO_4$	$Be(C_2H_3O_2)_2$	543-81-7	127.101	60 dec				i H_2O, EtOH
Beryllium aluminate	Chrysoberyl	Al_2BeO_4	$BeAl_2O_4$	12004-06-7	126.973			3.65		
Beryllium aluminum metasilicate		$Al_2Be_3O_{18}Si_6$	$Be_3Al_2(SiO_3)_6$	1302-52-9	537.502			2.64		
Beryllium basic acetate		$C_{12}H_{18}Be_4O_{13}$	$Be_4O(C_2H_3O_2)_6$	1332-52-1	406.312	285	330	1.25		i H_2O; s eth, os
Beryllium boride		B_2Be	BeB_2	12228-40-9	30.634	> 1970				
Beryllium borohydride		B_2BeH_6	$Be(BH_4)_2$	17440-85-6	36.682	125 dec	subl			reac H_2O
Beryllium bromide		$BeBr_2$	$BeBr_2$	7787-46-4	168.82	508	520	3.465		vs H_2O; s EtOH, pyr
Beryllium carbide		CBe_2	Be_2C	506-66-1	30.035	> 2100 dec		1.90		reac H_2O
Beryllium carbonate, basic	Beryllium, bis[carbonato(2-)]dihydroxytri-	$C_2H_2Be_3O_8$	$Be_3(OH)_2(CO_3)_2$	66104-24-3	181.069					i H_2O; s acid, alk
Beryllium carbonate tetrahydrate		CH_8BeO_4	$BeCO_3 \cdot 4H_2O$	60883-64-9	93.085	100 dec			0.36^{0}	
Beryllium chloride		$BeCl_2$	$BeCl_2$	7787-47-5	79.917	415	482	1.90	71.5^{25}	s EtOH, eth, py; i bz, tol
Beryllium fluoride		BeF_2	BeF_2	7787-49-7	47.009	552	1169	2.1		vs H_2O; sl EtOH
Beryllium formate		$C_2H_2BeO_4$	$Be(CHO_2)_2$	1111-71-3	99.047	> 250 dec				reac H_2O; i os
Beryllium hydride		BeH_2	BeH_2	7787-52-2	11.028	250 dec		0.65		reac H_2O; i eth, tol
Beryllium hydrogen phosphate		$BeHO_4P$	$BeHPO_4$	13598-15-7	104.991					i H_2O
Beryllium hydroxide		BeH_2O_2	$Be(OH)_2$	13327-32-7	43.027	≈200 dec		1.92		sl H_2O, alk; s acid
Beryllium iodide		BeI_2	BeI_2	7787-53-3	262.821	470	487	4.32		reac H_2O; s EtOH
Beryllium nitrate trihydrate		$BeH_6N_2O_9$	$Be(NO_3)_2 \cdot 3H_2O$	13597-99-4	187.068	≈30	dec		107^{20}	s EtOH
Beryllium nitride		Be_3N_2	Be_3N_2	1304-54-7	55.05	2200		2.71		reac acid, alk
Beryllium oxide	Beryllia	BeO	BeO	1304-56-9	25.011	2577		3.01		i H_2O; sl acid, alk
Beryllium 2,4-pentanedioate	Beryllium acetylacetonate	$C_{10}H_{14}BeO_4$	$Be(CH_3COCHCOCH_3)_2$	10210-64-7	207.228	108	270	1.168		i H_2O; vs EtOH, eth
Beryllium perchlorate tetrahydrate		$BeCl_2H_8O_{12}$	$Be(ClO_4)_2 \cdot 4H_2O$	7787-48-6	279.974	250 dec			198^{25}	
Beryllium selenate tetrahydrate		BeH_8O_8Se	$BeSeO_4 \cdot 4H_2O$	10039-31-3	224.03	100 dec		2.03		vs H_2O
Beryllium sulfate		BeO_4S	$BeSO_4$	13510-49-1	105.076	1127		2.5	41.3^{25}	
Beryllium sulfate tetrahydrate		BeH_8O_8S	$BeSO_4 \cdot 4H_2O$	7787-56-6	177.137	≈100 dec		1.71	41.3^{25}	i EtOH

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Beryllium sulfide		BeS	BeS	13598-22-6	41.078	dec		2.36		reac hot H_2O
Bismuth		Bi	Bi	7440-69-9	208.98	271.40	1564	9.79		s acid
Bismuth arsenate		$AsBiO_4$	$BiAsO_4$	13702-38-0	347.9			7.14		i H_2O; sl conc HNO_3
Bismuth basic carbonate	Bismuth subcarbonate	CBi_2O_5	$(BiO)_2CO_3$	5892-10-4	509.969			6.86		i H_2O; s acid
Bismuth citrate		$C_6H_5BiO_7$	$BiC_6H_5O_7$	813-93-4	398.08			3.458		i H_2O; sl EtOH
Bismuth hexafluoro-2,4-pentanedioate		$C_{15}H_3BiF_{18}O_6$	$Bi(CF_3COCH-COCF_3)_3$	142617-56-9	830.132	96				
Bismuth hydride	Bismuthine	BiH_3	BiH_3	18288-22-7	212.004	−67	≍17	8.665 g/L		
Bismuth hydroxide		BiH_3O_3	$Bi(OH)_3$	10361-43-0	260.002			4.962		i H_2O; s acid
Bismuth molybdate		$Bi_2Mo_3O_{12}$	$Bi_2(MoO_4)_3$	51898-99-8	897.77			5.95		
Bismuth nitrate pentahydrate		$BiH_{10}N_3O_{14}$	$Bi(NO_3)_3·5H_2O$	10035-06-0	485.071	≍75 dec		2.83		reac H_2O; s ace; i EtOH
Bismuth oleate		$C_{54}H_{99}BiO_6$	$Bi(C_{18}H_{33}O_2)_3$	52951-38-9	1053.34					i H_2O; s eth; sl bz
Bismuth oxalate		$C_6Bi_2O_{12}$	$Bi_2(C_2O_4)_3$	6591-55-5	682.018					i H_2O, EtOH; s dil acid
Bismuth oxide	Bismite	Bi_2O_3	Bi_2O_3	1304-76-3	465.959	817	1890	8.9		i H_2O; s acid
Bismuth oxybromide	Bismuth bromine oxide	BiBrO	BiOBr	7787-57-7	304.883			8.08		i H_2O, EtOH; s acid
Bismuth oxychloride		BiClO	BiOCl	7787-59-9	260.432			7.72		i H_2O
Bismuth oxyiodide	Bismuth iodide oxide	BiIO	BiOI	7787-63-5	351.883	> 300 dec		7.92		i H_2O, EtOH, chl; s HCl
Bismuth oxynitrate		$BiNO_4$	$BiONO_3$	10361-46-3	286.985	260 dec		4.93		i H_2O, EtOH; s acid
Bismuth pentafluoride		BiF_5	BiF_5	7787-62-4	303.972	154	230	5.55		reac H_2O
Bismuth phosphate		BiO_4P	$BiPO_4$	10049-01-1	303.951			6.32		sl H_2O, dil acid; i EtOH
Bismuth potassium iodide		BiI_7K_4	K_4BiI_7	41944-01-8	1253.704					reac H_2O; s alk iodide soln
Bismuth selenide	Guanajuatite	Bi_2Se_3	Bi_2Se_3	12068-69-8	654.84	710 dec		7.5		i H_2O
Bismuth stannate pentahydrate		$Bi_2H_{10}O_{14}Sn_3$	$Bi_2(SnO_3)_3·5H_2O$	12777-45-6	1008.162					i H_2O
Bismuth subnitrate		$Bi_5H_9N_4O_{22}$	$Bi_5O(OH)_9(-NO_3)_4$	1304-85-4	1461.987	260 dec		4.928		i H_2O, EtOH; s dil acid
Bismuth sulfate		$Bi_2O_{12}S_3$	$Bi_2(SO_4)_3$	7787-68-0	706.152	405 dec		5.08		reac H_2O, EtOH
Bismuth sulfide	Bismuthinite	Bi_2S_3	Bi_2S_3	1345-07-9	514.159	850		6.78		i H_2O; s acid
Bismuth telluride	Tetradymite	Bi_2Te_3	Bi_2Te_3	1304-82-1	800.76	580		7.74		i H_2O; s EtOH
Bismuth tetroxide	Bismuth peroxide	Bi_2O_4	Bi_2O_4	12048-50-9	481.959	305		5.6		reac H_2O
Bismuth titanate	Bismuth titanium oxide	$Bi_4O_{12}Ti_3$	$Bi_4(TiO_4)_3$	12048-51-0	1171.516			7.85		
Bismuth tribromide		$BiBr_3$	$BiBr_3$	7787-58-8	448.692	218	453	5.72		reac H_2O; s dil acid, ace; i EtOH
Bismuth trichloride		$BiCl_3$	$BiCl_3$	7787-60-2	315.338	230	447	4.75		reac H_2O; s acid, EtOH, ace
Bismuth trifluoride	Bismuth fluoride	BiF_3	BiF_3	7787-61-3	265.975	725	900	8.3		i H_2O
Bismuth triiodide		BiI_3	BiI_3	7787-64-6	589.693	408.6	542	5.778	0.00078^{20}	s EtOH
Bismuth tungstate	Bismuth tungsten oxide	$Bi_2O_{12}W_3$	$Bi_2(WO_4)_3$	13595-87-4	1161.47					
Bismuth vanadate	Pucherite	BiO_4V	$BiVO_4$	14059-33-7	323.92	trans 500		6.25		i H_2O; s acid
Borane carbonyl		CH_3BO	BH_3CO	13205-44-2	41.845	−137	−64	1.710 g/L		reac H_2O
Borazine	Borazole	$B_3H_6N_3$	$B_3N_3H_6$	6569-51-3	80.501	−58	53	0.824		reac H_2O

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Boric acid	Orthoboric acid	BH_3O_3	H_3BO_3	10043-35-3	61.833	170.9		1.5	5.80^{25}	sl EtOH
Boron		B	B	7440-42-8	10.811	2075	4000	2.34		i H_2O
Boron arsenide		AsB	BAs	12005-69-5	85.733	920 dec		5.22		
Boron carbide	Norbide	CB_4	B_4C	12069-32-8	55.255	2350	> 3500	2.50		i H_2O, acid
Boron nitride		BN	BN	10043-11-5	24.818	2966		2.18		i H_2O, acid
Boron oxide	Boric oxide	B_2O_3	B_2O_3	1303-86-2	69.62	450		2.55	2.2^{20}	s EtOH
Boron phosphide		BP	BP	20205-91-8	41.785	1125 dec				reac H_2O, acid
Boron sulfide		B_2S_3	B_2S_3	12007-33-9	117.82	softens ≈320		≈1.7		
Boron tribromide	Tribromoborane	BBr_3	BBr_3	10294-33-4	250.523	−45	91	2.6		reac H_2O, EtOH
Boron trichloride	Trichloroborane	BCl_3	BCl_3	10294-34-5	117.169	−107	12.65	4.789 g/L		reac H_2O, EtOH
Boron trifluoride	Trifluoroborane	BF_3	BF_3	7637-07-2	67.806	−126.8	−101	2.772 g/L		s H_2O
Boron triiodide	Triiodoborane	BI_3	BI_3	13517-10-7	391.524	49.7	209.5	3.35		i H_2O
Bromic acid		$BrHO_3$	$HBrO_3$	7789-31-3	128.91					s H_2O
Bromine		Br_2	Br_2	7726-95-6	159.808	−7.2	58.8	3.1028		sl H_2O
Bromine azide		BrN_3	BrN_3	13973-87-0	121.924	≈45	exp			
Bromine chloride		BrCl	BrCl	13863-41-7	115.357	≈-66	≈5 dec	4.715 g/L		reac H_2O; s eth, CS_2
Bromine dioxide		BrO_2	BrO_2	21255-83-4	111.903	≈0 dec				
Bromine fluoride		BrF	BrF	13863-59-7	98.902	≈-33	≈20 dec	4.043 g/L		
Bromine oxide		Br_2O	Br_2O	21308-80-5	175.807	−17.5 dec				
Bromine pentafluoride		BrF_5	BrF_5	7789-30-2	174.896	−60.5	40.76	2.460		reac H_2O (exp)
Bromine trifluoride		BrF_3	BrF_3	7787-71-5	136.899	8.77	125.8	2.803		reac H_2O
Bromoauric acid pentahydrate	Hydrogen tetrabromoaurate pentahydrate	$AuBr_4H_{11}O_5$	$HAuBr_4 \cdot 5H_2O$	17083-68-0	607.667	27				s H_2O, EtOH
Bromogermane		$BrGeH_3$	GeH_3Br	13569-43-2	155.54	−32	52	2.34		reac H_2O
Bromosilane		BrH_3Si	SiH_3Br	13465-73-1	111.014	−94	1.9	4.538 g/L		
Bromotrichlorosilane		$BrCl_3Si$	$SiCl_3Br$	13465-74-2	214.348	−62	80.3	1.826		reac H_2O
Bromyl fluoride		$BrFO_2$	BrO_2F	22585-64-4	130.901	−9	50 dec			reac H_2O
Cadmium		Cd	Cd	7440-43-9	112.411	321.07	767	8.69		i H_2O; reac acid
Cadmium acetate		$C_4H_6CdO_4$	$Cd(C_2H_3O_2)_2$	543-90-8	230.5	255		2.34		s H_2O, EtOH
Cadmium acetate dihydrate		$C_4H_{10}CdO_6$	$Cd(C_2H_3O_2)_2 \cdot 2H_2O$	5743-04-4	266.529	130 dec		2.01		vs H_2O; s EtOH
Cadmium antimonide		CdSb	CdSb	12014-29-8	234.171	456		6.92		
Cadmium arsenide		As_2Cd_3	Cd_3As_2	12006-15-4	487.076	721		6.25		
Cadmium azide		CdN_6	$Cd(N_3)_2$	14215-29-3	196.451	exp		3.24		
Cadmium bromide	Cadmium dibromide	Br_2Cd	$CdBr_2$	7789-42-6	272.219	568	844	5.19	115^{25}	sl ace, eth
Cadmium bromide tetrahydrate		$Br_2CdH_8O_4$	$CdBr_2 \cdot 4H_2O$	13464-92-1	344.281				115^{25}	s ace, EtOH
Cadmium carbonate	Otavite	$CCdO_3$	$CdCO_3$	513-78-0	172.42	500 dec		4.258		i H_2O; s acid
Cadmium chlorate dihydrate		$CdCl_2H_4O_8$	$Cd(ClO_3)_2 \cdot 2H_2O$	22750-54-5*	315.343	80 dec		2.28	2.64^0	
Cadmium chloride	Cadmium dichloride	$CdCl_2$	$CdCl_2$	10108-64-2	183.316	564	960	4.08	120^{25}	s ace; sl EtOH; i eth
Cadmium chloride hemipentahydrate	Cadmium dichloride hemipentahydrate	$CdCl_2H_5O_{2.5}$	$CdCl_2 \cdot 2.5H_2O$	7790-78-5	228.354			3.327	120^{25}	s ace

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Cadmium chloride monohydrate		$CdCl_2H_2O$	$CdCl_2 \cdot H_2O$	34330-64-8	201.331				120^{25}	
Cadmium chromate		$CdCrO_4$	$CdCrO_4$	14312-00-6	228.405			4.5		i H_2O
Cadmium cyanide		C_2CdN_2	$Cd(CN)_2$	542-83-6	164.445			2.23	1.7^{15}	
Cadmium 2-ethylhexanoate		$C_{16}H_{30}CdO_4$	$Cd(C_8H_{15}O_2)_2$	2420-98-6	398.818					
Cadmium fluoride	Cadmium difluoride	CdF_2	CdF_2	7790-79-6	150.408	1110	1748	6.33	4.36^{25}	s acid; i EtOH
Cadmium hydroxide		CdH_2O_2	$Cd(OH)_2$	21041-95-2	146.426	130 dec		4.79	0.00015^{20}	s dil acid
Cadmium iodate		CdI_2O_6	$Cd(IO_3)_2$	7790-81-0	462.216			6.48	0.091^{25}	s HNO_3
Cadmium iodide	Cadmium diiodide	CdI_2	CdI_2	7790-80-9	366.22	387	742	5.64	86.2^{25}	s EtOH, eth, ace
Cadmium metasilicate		CdO_3Si	$CdSiO_3$	13477-19-5	188.495	1252		5.10		
Cadmium molybdate		$CdMoO_4$	$CdMoO_4$	13972-68-4	272.35	≈900 dec		5.4		i H_2O; s acid
Cadmium niobate		$Cd_2Nb_2O_7$	$Cd_2Nb_2O_7$	12187-14-3	522.631	≈1410		6.28		i H_2O
Cadmium nitrate		CdN_2O_6	$Cd(NO_3)_2$	10325-94-7	236.42	350		3.6	156^{25}	s EtOH
Cadmium nitrate tetrahydrate		$CdH_8N_2O_{10}$	$Cd(NO_3)_2 \cdot 4H_2O$	10022-68-1	308.482	59.5		2.45	156^{25}	s EtOH, ace
Cadmium oxalate		C_2CdO_4	CdC_2O_4	814-88-0	200.43			3.32	0.0060^{25}	
Cadmium oxalate trihydrate		$C_2H_6CdO_7$	$CdC_2O_4 \cdot 3H_2O$	20712-42-9	254.476	340 dec			0.0060^{25}	i EtOH; s dil acid
Cadmium oxide		CdO	CdO	1306-19-0	128.41		1559 sp	8.15		i H_2O; s dil acid
Cadmium perchlorate hexahydrate		$CdCl_2H_{12}O_{14}$	$Cd(ClO_4)_2 \cdot 6H_2O$	10326-28-0	419.403			2.37	191.5^{25}	
Cadmium phosphate		$Cd_3O_8P_2$	$Cd_3(PO_4)_2$	13477-17-3	527.176	≈1500				i H_2O
Cadmium phosphide		Cd_3P_2	Cd_3P_2	12014-28-7	399.181	700		5.96		s dil HCl
Cadmium selenate dihydrate		CdH_4O_6Se	$CdSeO_4 \cdot 2H_2O$	10060-09-0	291.4	100 dec		3.62	70.5^{25}	
Cadmium selenide	Cadmoselite	CdSe	CdSe	1306-24-7	191.37	1240		5.81		i H_2O
Cadmium sulfate		CdO_4S	$CdSO_4$	10124-36-4	208.475	1000		4.69	76.7^{25}	i EtOH
Cadmium sulfate monohydrate		CdH_2O_5S	$CdSO_4 \cdot H_2O$	7790-84-3	226.49	105		3.79	76.7^{25}	
Cadmium sulfate octahydrate		$CdH_{16}O_{12}S$	$CdSO_4 \cdot 8H_2O$	15244-35-6	352.597	40 dec		3.08	76.7^{25}	
Cadmium sulfide		CdS	CdS	1306-23-6	144.477	1750		4.83		i H_2O; s acid
Cadmium telluride		CdTe	CdTe	1306-25-8	240.01	1042		6.2		i H_2O, dil acid
Cadmium tetrafluoroborate		B_2CdF_8	$Cd(BF_4)_2$	14486-19-2	286.02			1.6		vs H_2O, EtOH
Cadmium titanate		CdO_3Ti	$CdTiO_3$	12014-14-1	208.276			6.5		
Cadmium tungstate	Wulframite	CdO_4W	$CdWO_4$	7790-85-4	360.25			8.0		i H_2O, acid; s NH_4OH
Calcium		Ca	Ca	7440-70-2	40.078	842	1484	1.54		reac H_2O; i bz
Calcium acetate		$C_4H_6CaO_4$	$Ca(C_2H_3O_2)_2$	62-54-4	158.167	160 dec		1.50		s H_2O; sl EtOH
Calcium acetate monohydrate		$C_4H_8CaO_5$	$Ca(C_2H_3O_2)_2 \cdot H_2O$	5743-26-0	176.182	≈150 dec				s H_2O; sl EtOH
Calcium aluminate		Al_2CaO_4	$CaAl_2O_4$	12042-68-1	158.039	1605		2.98		reac H_2O
Calcium aluminate (β form)		$Al_2Ca_3O_6$	$Ca_3Al_2O_6$	12042-78-3	270.193	1535		3.04		i H_2O
Calcium arsenate	Arsenic acid, calcium salt (2:3)	$As_2Ca_3O_8$	$Ca_3(AsO_4)_2$	7778-44-1	398.072	dec		3.6	0.0036^{20}	s dil acid
Calcium arsenite (1:1)	Arsonic acid, calcium salt (1:1)	$AsCaO_3$	$CaAsO_3$	52740-16-6	162.998					sl H_2O; s acid

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Calcium boride		B_6Ca	CaB_6	12007-99-7	104.944	2235		2.49		
Calcium bromide		Br_2Ca	$CaBr_2$	7789-41-5	199.886	742	1815	3.38	156^{25}	s EtOH, ace
Calcium bromide hexahydrate		$Br_2CaH_{12}O_6$	$CaBr_2 \cdot 6H_2O$	13477-28-6	307.977	38 dec		2.29	156^{25}	
Calcium carbide	Acetylenogen	C_2Ca	CaC_2	75-20-7	64.099	2300		2.22		reac H_2O
Calcium carbonate (calcite)		$CCaO_3$	$CaCO_3$	471-34-1	100.087	1330		2.71	0.00066^{20}	s dil acid
Calcium carbonate (aragonite)		$CCaO_3$	$CaCO_3$	471-34-1	100.087	825 dec		2.83	0.00066^{20}	s dil acid
Calcium chlorate		$CaCl_2O_6$	$Ca(ClO_3)_2$	10137-74-3	206.979	340			197^{25}	
Calcium chlorate dihydrate		$CaCl_2H_4O_8$	$Ca(ClO_3)_2 \cdot 2H_2O$	10035-05-9	243.01	100 dec		2.711	197^{25}	s EtOH
Calcium chloride	Hydrophilite	$CaCl_2$	$CaCl_2$	10043-52-4	110.983	775	1935.5	2.15	81.3^{25}	vs EtOH
Calcium chloride monohydrate		$CaCl_2H_2O$	$CaCl_2 \cdot H_2O$	13477-29-7	128.998	260 dec		2.24	81.3^{25}	s EtOH
Calcium chloride dihydrate	Sinjarite	$CaCl_2H_4O_2$	$CaCl_2 \cdot 2H_2O$	10035-04-8	147.014	175 dec		1.85	81.3^{25}	vs EtOH
Calcium chloride hexahydrate	Antarcticite	$CaCl_2H_{12}O_6$	$CaCl_2 \cdot 6H_2O$	7774-34-7	219.074	30 dec		1.71	81.3^{25}	
Calcium chromate dihydrate		$CaCrH_4O_6$	$CaCrO_4 \cdot 2H_2O$	13765-19-0	192.102			2.50	13.2^{20}	
Calcium cyanamide	Calcium carbimide	$CCaN_2$	$CaCN_2$	156-62-7	80.102	≍1340	subl	2.29		reac H_2O
Calcium cyanide	Cyanogas	C_2CaN_2	$Ca(CN)_2$	592-01-8	92.112					s H_2O, EtOH
Calcium dichromate trihydrate		$CaCr_2H_6O_{10}$	$CaCr_2O_7 \cdot 3H_2O$	14307-33-6*	310.112	100 dec		2.37		vs H_2O; reac EtOH; i eth, ctc
Calcium dihydrogen phosphate monohydrate	Calcium phosphate, monobasic, monohydrate	$CaH_6O_9P_2$	$Ca(H_2PO_4)_2 \cdot H_2O$	10031-30-8	252.068	100 dec		2.220		sl H_2O; s dil acid
Calcium 2-ethylhexanoate		$C_{16}H_{30}CaO_4$	$Ca(C_8H_{15}O_2)_2$	136-51-6	326.485					
Calcium fluoride	Fluorite	CaF_2	CaF_2	7789-75-5	78.075	1418	2533.4	3.18	0.0016^{25}	sl acid
Calcium formate		$C_2H_2CaO_4$	$Ca(CHO_2)_2$	544-17-2	130.113	300 dec		2.02	16.6^{20}	i EtOH
Calcium hexafluoro-2,4-pentanedioate	Calcium hexafluoroacetylacetonate	$C_{10}H_2CaF_{12}O_4$	$Ca(CF_3COCHCOCF_3)_2$	121012-90-6	454.18	135				
Calcium hexafluorosilicate dihydrate		$CaF_6H_4O_2Si$	$CaSiF_6 \cdot 2H_2O$	16925-39-6	218.185			2.25	0.52^{20}	i ace; reac hot H_2O
Calcium hydride		CaH_2	CaH_2	7789-78-8	42.094	1000		1.7		reac H_2O, EtOH
Calcium hydrogen phosphate	Calcium phosphate, dibasic	$CaHO_4P$	$CaHPO_4$	7757-93-9	136.057	dec		2.92	0.02^{25}	i EtOH
Calcium hydrogen phosphate dihydrate	Brushite	CaH_5O_6P	$CaHPO_4 \cdot 2H_2O$	7789-77-7	172.088	≍100 dec		2.31	0.02^{25}	i EtOH; s dil acid
Calcium hydroxide	Portlandite	CaH_2O_2	$Ca(OH)_2$	1305-62-0	74.093			≍2.2	0.160^{20}	s acid
Calcium hypochlorite		$CaCl_2O_2$	$Ca(OCl)_2$	7778-54-3	142.982	100		2.350		
Calcium hypophosphite		$CaH_4O_4P_2$	$Ca(H_2PO_2)_2$	7789-79-9	170.055	300 dec				s H_2O; i EtOH
Calcium iodate	Lautarite	CaI_2O_6	$Ca(IO_3)_2$	7789-80-2	389.883			4.52	0.306^{25}	s HNO_3; i EtOH
Calcium iodide		CaI_2	CaI_2	10102-68-8	293.887	783		3.96	215^{25}	s MeOH, EtOH, ace; i eth
Calcium iodide hexahydrate		$CaH_{12}I_2O_6$	$CaI_2 \cdot 6H_2O$	71626-98-7	401.978	42 dec		2.55	215^{25}	vs EtOH
Calcium metaborate		B_2CaO_4	$Ca(BO_2)_2$	13701-64-9	125.698				0.13^{20}	
Calcium metasilicate		CaO_3Si	$CaSiO_3$	1344-95-2	116.162	1540		2.92		i H_2O
Calcium molybdate	Powellite	$CaMoO_4$	$CaMoO_4$	7789-82-4	200.02	965 dec		4.35	0.0011^{20}	i EtOH; s conc acid

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Calcium nitrate		CaN_2O_6	$Ca(NO_3)_2$	10124-37-5	164.087	561		2.5	144^{25}	s EtOH, MeOH, ace
Calcium nitrate tetrahydrate		$CaH_8N_2O_{10}$	$Ca(NO_3)_2 \cdot 4H_2O$	13477-34-4	236.149	≈40 dec		1.82	144^{25}	s EtOH, ace
Calcium nitride		Ca_3N_2	Ca_3N_2	12013-82-0	148.247	1195		2.67		s H_2O, acid; i EtOH
Calcium nitrite		CaN_2O_4	$Ca(NO_2)_2$	13780-06-8	132.089			2.23	94.6^{25}	sl EtOH
Calcium oxalate		C_2CaO_4	CaC_2O_4	563-72-4	128.097			2.2	0.00061^{20}	
Calcium oxalate monohydrate	Whewellite	$C_2H_2CaO_5$	$CaC_2O_4 \cdot H_2O$	5794-28-5	146.112	200 dec		2.2	0.00061^{20}	s dil acid
Calcium oxide	Lime	CaO	CaO	1305-78-8	56.077	2898		3.34		reac H_2O; s acid
Calcium oxide silicate	Tricalcium silicate	Ca_3O_5Si	Ca_3OSiO_4	12168-85-3	228.317	2150				
Calcium 2,4-pentanedioate	Calcium acetylacetonate	$C_{10}H_{14}CaO_4$	$Ca(CH_3COCHCOCH_3)_2$	19372-44-2	238.294	175 dec				
Calcium perchlorate		$CaCl_2O_8$	$Ca(ClO_4)_2$	13477-36-6	238.978	270 dec		2.65	188^{25}	s EtOH
Calcium permanganate		$CaMn_2O_8$	$Ca(MnO_4)_2$	10118-76-0	277.949			2.4	331^{20}	reac EtOH
Calcium peroxide	Calcium dioxide	CaO_2	CaO_2	1305-79-9	72.077	≈200 dec		2.9		sl H_2O; s acid
Calcium phosphate	Whitlockite	$Ca_3O_8P_2$	$Ca_3(PO_4)_2$	7758-87-4	310.177	1670		3.14	0.00012^{20}	i EtOH; s dil acid
Calcium phosphide	Photophor	Ca_3P_2	Ca_3P_2	1305-99-3	182.182	≈1600		2.51		reac H_2O; i EtOH, eth
Calcium propanoate		$C_6H_{10}CaO_4$	$Ca(C_3H_5O_2)_2$	4075-81-4	186.219					s H_2O; sl MeOH, EtOH; i ace, bz
Calcium pyrophosphate	Calcium diphosphate	$Ca_2O_7P_2$	$Ca_2P_2O_7$	7790-76-3	254.099	1353		3.09		i H_2O; s dil acid
Calcium selenate dihydrate		CaH_4O_6Se	$CaSeO_4 \cdot 2H_2O$	7790-74-1	219.07			2.75	8.3^{18}	
Calcium selenide		CaSe	CaSe	1305-84-6	119.04	1400 dec		3.8		reac H_2O
Calcium silicide (CaSi)		CaSi	CaSi	12013-55-7	68.164	1324		2.39		
Calcium silicide ($CaSi_2$)	Calcium disilicide	$CaSi_2$	$CaSi_2$	12013-56-8	96.249	1040		2.50		i cold H_2O; reac hot H_2O; s acid
Calcium stearate		$C_{36}H_{70}CaO_4$	$Ca(C_{18}H_{35}O_2)_2$	1592-23-0	607.017	180				i H_2O, EtOH
Calcium sulfate	Anhydrite	CaO_4S	$CaSO_4$	7778-18-9	136.142	1460		2.96	0.205^{25}	
Calcium sulfate hemihydrate	Plaster of Paris	$CaHO_{4.5}S$	$CaSO_4 \cdot 0.5H_2O$	10034-76-1	145.149				0.205^{25}	
Calcium sulfate dihydrate		CaH_4O_6S	$CaSO_4 \cdot 2H_2O$	10101-41-4	172.172	150 dec		2.32	0.205^{20}	i os
Calcium sulfide	Oldhamite	CaS	CaS	20548-54-3	72.144	2524		2.59		sl H_2O; i EtOH
Calcium sulfite dihydrate		CaH_4O_5S	$CaSO_3 \cdot 2H_2O$	10257-55-3	156.173				0.0070^{25}	sl EtOH; s acid
Calcium telluride		CaTe	CaTe	12013-57-9	167.68	1600 dec		4.87		
Calcium tetrahydroaluminate	Aluminum calcium hydride	Al_2CaH_8	$Ca(AlH_4)_2$	16941-10-9	102.105					reac H_2O; s thf; i eth, bz
Calcium thiocyanate tetrahydrate		$C_2H_8CaN_2O_4S_2$	$Ca(SCN)_2 \cdot 4H_2O$	2092-16-2	228.306	160 dec				vs H_2O; s EtOH, ace
Calcium thiosulfate hexahydrate		$CaH_{12}O_9S_2$	$CaS_2O_3 \cdot 6H_2O$	10124-41-1	260.3	45 dec		1.87		s H_2O; i EtOH
Calcium titanate	Perovskite	CaO_3Ti	$CaTiO_3$	12049-50-2	135.943	1980		3.98		
Calcium tungstate	Scheelite	CaO_4W	$CaWO_4$	7790-75-2	287.92	1620		6.06	0.2^{18}	s hot acid
Calcium zirconate	Calcium zirconium oxide	CaO_3Zr	$CaZrO_3$	12013-47-7	179.3	2550				
Californium		Cf	Cf	7440-71-3	251	900		15.1		
Carbon dioxide	Carbonic anhydride	CO_2	CO_2	124-38-9	44.01	−56.56 tp	−78.4 sp	1.799 g/L		s H_2O

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Carbon diselenide	Carbon selenide	CSe_2	CSe_2	506-80-9	169.93	−43.7	125.5	2.6626		i H_2O; vs ctc, tol
Carbon disulfide	Carbon bisulfide	CS_2	CS_2	75-15-0	76.143	−112.1	46	1.2555		i H_2O; vs EtOH, bz, os
Carbon (fullerene-C_{60})	Buckminsterfullerene-C_{60}	C_{60}	C_{60}	99685-96-8	720.642	> 280				s os
Carbon (fullerene-C_{70})	Buckminsterfullerene-C_{70}	C_{70}	C_{70}	115383-22-7	840.749	> 280				s bz, tol
Carbon monoxide	Carbon oxide	CO	CO	630-08-0	28.01	−205.02	−191.5	1.145 g/L		sl H_2O; s chl, EtOH
Carbon oxyselenide	Carbonyl selenide	COSe	OCSe	1603-84-5	106.97	−124.4	−21.7	4.372 g/L		reac H_2O
Carbon oxysulfide	Carbonyl sulfide	COS	OCS	463-58-1	60.076	−138.8	−50	2.456 g/L		s H_2O, EtOH
Carbon selenide sulfide		CSSe	CSSe	5951-19-9	123.04	−85	84.5	1.99		i H_2O
Carbon suboxide	1,2-Propadiene-1,3-dione	C_3O_2	C_3O_2	504-64-3	68.031	−111.3	6.8	2.781 g/L		reac H_2O
Carbon subsulfide	1,2-Propadiene-1,3-dithione	C_3S_2	C_3S_2	627-34-9	100.164	−1	90 dec	1.27		reac H_2O
Carbon sulfide telluride	Carbon sulfotelluride	CSTe	CSTe	10340-06-4	171.68	−54	20 dec			reac H_2O
Carbonyl bromide	Bromophosgene	CBr_2O	$COBr_2$	593-95-3	187.818		64.5	2.5		reac H_2O
Carbonyl chloride	Phosgene	CCl_2O	$COCl_2$	75-44-5	98.915	−127.78	8	4.043 g/L		sl H_2O; s bz, tol
Carbonyl fluoride		CF_2O	COF_2	353-50-4	66.007	−111.26	−84.57	2.698 g/L		reac H_2O
Cerium		Ce	Ce	7440-45-1	140.116	798	3443	6.770		s dil acid
Cerium boride	Cerium hexaboride	B_6Ce	CeB_6	12008-02-5	204.982	2550		4.87		i H_2O, HCl
Cerium(III) bromide	Cerous bromide	Br_3Ce	$CeBr_3$	14457-87-5	379.828	733	1457			s H_2O
Cerium(III) bromide heptahydrate	Cerous bromide heptahydrate	$Br_3CeH_{14}O_7$	$CeBr_3 \cdot 7H_2O$	7789-56-2	505.935	732				s H_2O, EtOH
Cerium carbide		C_2Ce	CeC_2	12012-32-7	164.137	2250		5.47		reac H_2O
Cerium(III) carbide	Cerous carbide	C_3Ce_2	Ce_2C_3	12115-63-8	316.264	1505		6.9		
Cerium(III) carbonate hydrate	Cerous carbonate hydrate	$C_3H_{10}Ce_2O_{14}$	$Ce_2(CO_3)_3 \cdot 5H_2O$	72520-94-6	550.335					i H_2O; s dil acid
Cerium(III) chloride	Cerous chloride	$CeCl_3$	$CeCl_3$	7790-86-5	246.474	817		3.97		s H_2O, EtOH
Cerium(III) chloride heptahydrate	Cerous chloride heptahydrate	$CeCl_3H_{14}O_7$	$CeCl_3 \cdot 7H_2O$	18618-55-8	372.581	90 dec				vs H_2O, EtOH
Cerium(III) fluoride	Cerous fluoride	CeF_3	CeF_3	7758-88-5	197.111	1430		6.157		i H_2O
Cerium(IV) fluoride	Ceric fluoride	CeF_4	CeF_4	10060-10-3	216.11	≈600 dec		4.77		i H_2O
Cerium(II) hydride		CeH_2	CeH_2	13569-50-1	142.132			5.45		reac H_2O
Cerium(II) iodide		CeI_2	CeI_2	19139-47-0	393.925	808				
Cerium(III) iodide	Cerous iodide	CeI_3	CeI_3	7790-87-6	520.829	766				s H_2O
Cerium(III) iodide nonahydrate	Cerous iodide nonahydrate	$CeH_{18}I_3O_9$	$CeI_3 \cdot 9H_2O$	7790-87-6*	682.967					vs H_2O; s EtOH
Cerium(III) nitrate hexahydrate	Cerous nitrate	$CeH_{12}N_3O_{15}$	$Ce(NO_3)_3 \cdot 6H_2O$	10108-73-3*	434.222	150 dec			176^{25}	s ace
Cerium nitride	Cerous nitride	CeN	CeN	25764-08-3	154.123	2557		7.89		
Cerium(III) oxide	Cerous oxide	Ce_2O_3	Ce_2O_3	1345-13-7	328.23	2210	3730	6.2		i H_2O; s acid
Cerium(IV) oxide	Ceria	CeO_2	CeO_2	1306-38-3	172.115	2400		7.65		i H_2O, dil acid
Cerium silicide		$CeSi_2$	$CeSi_2$	12014-85-6	196.287	1620		5.31		i H_2O
Cerium(III) sulfate octahydrate	Cerous sulfate octahydrate	$Ce_2H_{16}O_{20}S_3$	$Ce_2(SO_4)_3 \cdot 8H_2O$	13454-94-9	712.545	≈250 dec		2.87		s H_2O
Cerium(IV) sulfate tetrahydrate	Ceric sulfate tetrahydrate	$CeH_8O_{12}S_2$	$Ce(SO_4)_2 \cdot 4H_2O$	10294-42-5	404.305	180 dec		3.91	9.66^{20}	

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Cerium(II) sulfide		CeS	CeS	12014-82-3	172.182	2445		5.9		
Cerium(III) sulfide	Cerous sulfide	Ce_2S_3	Ce_2S_3	12014-93-6	376.43	2450		5.02		i H_2O
Cesium		Cs	Cs	7440-46-2	132.905	28.5	671	1.93		reac H_2O
Cesium acetate		$C_2H_3CsO_2$	$CsC_2H_3O_2$	3396-11-0	191.949	194			10^{11}	
Cesium amide		CsH_2N	$CsNH_2$	22205-57-8	148.928			3.70		
Cesium azide		CsN_3	CsN_3	22750-57-8	174.925	326		$\asymp$3.5	22^{40}	
Cesium bromate		$BrCsO_3$	$CsBrO_3$	13454-75-6	260.807			4.11	3.83^{25}	
Cesium bromide		BrCs	CsBr	7787-69-1	212.809	636	$\asymp$1300	4.43	123^{25}	s EtOH; i ace
Cesium carbonate		CCs_2O_3	Cs_2CO_3	534-17-8	325.82	792		4.24	261^{15}	s EtOH, eth
Cesium chlorate		$ClCsO_3$	$CsClO_3$	13763-67-2	216.356			3.57	7.78^{25}	
Cesium chloride		ClCs	CsCl	7647-17-8	168.358	645	1297	3.988	191^{25}	s EtOH
Cesium cyanide		CCsN	CsCN	21159-32-0	158.923	350		3.34		vs H_2O
Cesium fluoride		CsF	CsF	13400-13-0	151.903	703		4.64	573^{25}	s MeOH; i diox, py
Cesium formate		$CHCsO_2$	$CsCHO_2$	3495-36-1	177.923			1.017		vs H_2O
Cesium hydride		CsH	CsH	58724-12-2	133.913	$\asymp$170 dec		3.42		reac H_2O
Cesium hydrogen carbonate		$CHCsO_3$	$CsHCO_3$	15519-28-5	193.922	175 dec			209^{15}	s EtOH
Cesium hydrogen fluoride		CsF_2H	$CsHF_2$	12280-52-3	171.91	170		3.86		
Cesium hydrogen sulfate		$CsHO_4S$	$CsHSO_4$	7789-16-4	229.977	dec		3.352		s H_2O
Cesium hydroxide		CsHO	CsOH	21351-79-1	149.912	342.3		3.68	300^{30}	s EtOH
Cesium iodate		$CsIO_3$	$CsIO_3$	13454-81-4	307.807			4.85	2.6^{25}	
Cesium iodide		CsI	CsI	7789-17-5	259.809	621	$\asymp$1280	4.51	84.8^{25}	s EtOH, MeOH, ace
Cesium metaborate		$BCsO_2$	$CsBO_2$	92141-86-1	175.715	732		$\asymp$3.7		
Cesium nitrate		$CsNO_3$	$CsNO_3$	7789-18-6	194.91	414		3.66	27.9^{25}	s ace; sl EtOH
Cesium oxide		Cs_2O	Cs_2O	20281-00-9	281.81	490		4.65		vs H_2O
Cesium perchlorate		$ClCsO_4$	$CsClO_4$	13454-84-7	232.356	250		3.327	2.00^{25}	
Cesium periodate		$CsIO_4$	$CsIO_4$	13478-04-1	323.807			4.26	2.2^{15}	
Cesium sulfate		Cs_2O_4S	Cs_2SO_4	10294-54-9	361.875	1005		4.24	182^{25}	i EtOH, ace, py
Cesium sulfide tetrahydrate		$Cs_2H_8O_4S$	$Cs_2S \cdot 4H_2O$	12214-16-3	369.939					vs H_2O
Cesium superoxide		CsO_2	CsO_2	12018-61-0	164.904	432		3.77		reac H_2O
Chloramine		ClH_2N	NH_2Cl	10599-90-3	51.476	−66				s H_2O, EtOH, eth; sl bz, CCl_4
Chlorinated trisodium phosphate		$ClNa_4O_5P$	$Na_3PO_4 \cdot NaOCl$	56802-99-4	238.383				25^{25}	
Chlorine		Cl_2	Cl_2	7782-50-5	70.905	−101.5	−34.04	2.898 g/L		sl H_2O
Chlorine dioxide		ClO_2	ClO_2	10049-04-4	67.452	−59	11	2.757 g/L		sl H_2O
Chlorine fluoride	Chlorine monofluoride	ClF	ClF	7790-89-8	54.451	−155.6	−101.1	2.226 g/L		reac H_2O
Chlorine heptoxide	Perchloric anhydride	Cl_2O_7	Cl_2O_7	10294-48-1	182.901	−91.5	82	1.9		reac H_2O
Chlorine hexoxide	Dichlorine hexoxide	Cl_2O_6	Cl_2O_6	12442-63-6	166.901	3.5	$\asymp$200			reac H_2O
Chlorine monoxide		Cl_2O	Cl_2O	7791-21-1	86.904	−120.6	2.2	3.552 g/L		vs H_2O
Chlorine pentafluoride		ClF_5	ClF_5	13637-63-3	130.445	−103	−13.1	5.332 g/L		
Chlorine perchlorate		Cl_2O_4	$ClOClO_3$	27218-16-2	134.903	−117	$\asymp$25 dec	1.81^0		

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Chlorine trifluoride		ClF_3	ClF_3	7790-91-2	92.448	−76.34	11.75	3.779 g/L		reac H_2O
Chlorine trifluoride oxide		ClF_3O	$ClOF_3$	30708-80-6	108.447	−42	29			reac H_2O
Chlorine trioxide	Dichlorine trioxide	Cl_2O_3	Cl_2O_3	17496-59-2	118.903	exp < 25				
Chloroauric(III) acid tetrahydrate	Gold chloride, acid, tetrahydrate	$AuCl_4H_9O_4$	$HAuCl_4 \cdot 4H_2O$	16903-35-8	411.847			≈3.9		vs H_2O, EtOH; s eth
Chlorogermane		$ClGeH_3$	GeH_3Cl	13637-65-5	111.09	−52	28	1.75		reac H_2O
Chlorosilane		ClH_3Si	SiH_3Cl	13465-78-6	66.563	−118	−30.4	2.721 g/L		
Chlorosulfonic acid	Chlorosulfuric acid	$ClHO_3S$	$SO_2(OH)Cl$	7790-94-5	116.525	−80	152	1.75		reac H_2O; s py
Chlorotrifluorogermane		ClF_3Ge	GeF_3Cl	14188-40-0	165.06	−66.2	−20.3	6.747 g/L		
Chlorotrifluorosilane	Silicon chloride trifluoride	ClF_3Si	SiF_3Cl	14049-36-6	120.534	−138	−70.0	4.927 g/L		reac H_2O
Chloryl fluoride		$ClFO_2$	ClO_2F	13637-83-7	86.45	−15	−6	3.534 g/L		reac H_2O
Chloryl trifluoride		ClF_3O_2	ClO_2F_3	38680-84-1	124.447	−81	−22	5.087 g/L		reac H_2O
Chromic acid		CrH_2O_4	H_2CrO_4	7738-94-5	118.01					s H_2O
Chromium		Cr	Cr	7440-47-3	51.996	1907	2671	7.15		reac dil acid
Chromium(III) acetate		$C_6H_9CrO_6$	$Cr(C_2H_3O_2)_3$	1066-30-4	229.127					sl H_2O
Chromium(III) acetate hexahydrate	Chromic acetate hexahydrate	$C_6H_{21}CrO_{12}$	$Cr(C_2H_3O_2)_3 \cdot 6H_2O$	1066-30-4*	337.22					s H_2O
Chromium(II) acetate monohydrate	Chromous acetate monohydrate	$C_4H_8CrO_5$	$Cr(C_2H_3O_2)_2 \cdot H_2O$	628-52-4*	188.1			1.79		sl H_2O
Chromium antimonide		CrSb	CrSb	12053-12-2	173.756	1110		7.11		
Chromium arsenide		$AsCr_2$	Cr_2As	12254-85-2	178.914			7.04		
Chromium boride		BCr	CrB	12006-79-0	62.807	2100		6.1		
Chromium boride (CrB_2)		B_2Cr	CrB_2	12007-16-8	73.618	2200		5.22		
Chromium boride (Cr_5B_3)		B_3Cr_5	Cr_5B_3	12007-38-4	292.414	1900		6.10		
Chromium(III) bromide	Chromic bromide	Br_3Cr	$CrBr_3$	10031-25-1	291.708	1130		4.68		s hot H_2O
Chromium(II) bromide	Chromous bromide	Br_2Cr	$CrBr_2$	10049-25-9	211.804	842		4.236		s H_2O, EtOH
Chromium(III) bromide hexahydrate (α)	Chromic bromide hexahydrate (α)	$Br_3CrH_{12}O_6$	$CrBr_3(H_2O)_4 \cdot 2H_2O$	18721-05-6	399.799					s H_2O, EtOH
Chromium(III) bromide hexahydrate (β)	Chromic bromide hexahydrate (β)	$Br_3CrH_{12}O_6$	$Cr(H_2O)_6Br_3$	10031-25-1*	399.799					s H_2O; i EtOH, eth
Chromium carbide		C_2Cr_3	Cr_3C_2	12012-35-0	180.009	1895		6.68		
Chromium carbonyl		C_6CrO_6	$Cr(CO)_6$	13007-92-6	220.056	130 dec	subl	1.77		i H_2O, EtOH; s eth, chl
Chromium(II) chloride	Chromous chloride	Cl_2Cr	$CrCl_2$	10049-05-5	122.901	814	1300	2.88		s H_2O
Chromium(III) chloride	Chromic chloride	Cl_3Cr	$CrCl_3$	10025-73-7	158.354	1152	1300 dec	2.87		sl H_2O
Chromium(IV) chloride		Cl_4Cr	$CrCl_4$	15597-88-3	193.807		> 600 dec	7.922 g/L		
Chromium(III) chloride hexahydrate	Chromic chloride hexahydrate	$Cl_3CrH_{12}O_6$	$[CrCl_2(H_2O)_4]Cl \cdot 2H_2O$	10060-12-5	266.445					s H_2O, EtOH; sl ace; i eth
Chromium(II) chloride tetrahydrate	Chromous chloride tetrahydrate	$Cl_2CrH_{16}O_8$	$Cr(H_2O)_4Cl_2 \cdot 4H_2O$	13931-94-7	267.023	51 dec				s H_2O
Chromium(II) fluoride	Chromous fluoride	CrF_2	CrF_2	10049-10-2	89.993	894		3.79		sl H_2O; i EtOH
Chromium(III) fluoride	Chromic fluoride	CrF_3	CrF_3	7788-97-8	108.991	1400		3.8		i H_2O, EtOH

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Chromium(IV) fluoride		CrF_4	CrF_4	10049-11-3	127.99	277				
Chromium(V) fluoride		CrF_5	CrF_5	14884-42-5	146.988	34	117			
Chromium(VI) fluoride		CrF_6	CrF_6	13843-28-2	165.986	−100 dec				
Chromium(III) fluoride trihydrate	Chromic fluoride trihydrate	$CrF_3H_6O_3$	$CrF_3 \cdot 3H_2O$	16671-27-5	163.037			2.2		sl H_2O
Chromium(III) hydroxide trihydrate	Chromic hydroxide trihydrate	CrH_9O_6	$Cr(OH)_3 \cdot 3H_2O$	1308-14-1	157.063					i H_2O; s acid
Chromium(II) iodide		CrI_2	CrI_2	13478-28-9	305.805	868		5.1		
Chromium(III) iodide	Chromic iodide	CrI_3	CrI_3	13569-75-0	432.709	500 dec		5.32		sl H_2O
Chromium(III) nitrate	Chromic nitrate	CrN_3O_9	$Cr(NO_3)_3$	13548-38-4	238.011	> 60 dec				vs H_2O
Chromium(III) nitrate nonahydrate	Chromic nitrate nonahydrate	$CrH_{18}N_3O_{18}$	$Cr(NO_3)_3 \cdot 9H_2O$	7789-02-8	400.148	66.3	> 100 dec	1.80		vs H_2O
Chromium nitride (CrN)		CrN	CrN	24094-93-7	66.003	1080 dec		5.9		
Chromium nitride (Cr_2N)		Cr_2N	Cr_2N	12053-27-9	117.999	1650		6.8		
Chromium(II) oxalate monohydrate	Chromous oxalate monohydrate	$C_2H_2CrO_5$	$CrC_2O_4 \cdot H_2O$	814-90-4*	158.03			2.468		sl H_2O
Chromium(II,III) oxide		Cr_3O_4	Cr_3O_4	12018-34-7	219.986			6.1		
Chromium(III) oxide	Chromic oxide	Cr_2O_3	Cr_2O_3	1308-38-9	151.99	2329	≈3000	5.22		i H_2O, EtOH; sl acid, alk
Chromium(IV) oxide	Chromium dioxide	CrO_2	CrO_2	12018-01-8	83.995	≈400 dec		4.89		i H_2O; s acid
Chromium(VI) oxide	Chromium trioxide	CrO_3	CrO_3	1333-82-0	99.994	197	≈250 dec	2.7	169^{25}	
Chromium(III) 2,4-pentanedioate	Chromium acetylacetonate	$C_{15}H_{21}CrO_6$	$Cr(CH_3COCH\text{-}COCH_3)_3$	21679-31-2	349.32	208	345	1.34		i H_2O; s bz
Chromium(III) phosphate	Chromic phosphate	CrO_4P	$CrPO_4$	7789-04-0	146.967	> 1800		4.6		i H_2O, acid, aqua regia
Chromium(III) phosphate hemiheptahydrate	Arnaudon's green	$CrH_7O_{7.5}P$	$CrPO_4 \cdot 3.5H_2O$	84359-31-9	210.021			2.15		i H_2O; s acid
Chromium(III) phosphate hexahydrate	Chromic phosphate hexahydrate	$CrH_{12}O_{10}P$	$CrPO_4 \cdot 6H_2O$	84359-31-9	255.059	> 500 dec		2.121		i H_2O; s acid, alk
Chromium phosphide		CrP	CrP	26342-61-0	82.97			5.25		
Chromium(III) potassium sulfate dodecahydrate	Chrome alum	$CrH_{24}KO_{20}S_2$	$CrK(SO_4)_2 \cdot 12H_2O$	7788-99-0	499.405	89 dec		1.83		s H_2O; i EtOH
Chromium selenide		CrSe	CrSe	12053-13-3	130.96	≈1500		6.1		
Chromium silicide ($CrSi_2$)	Chromium disilicide	$CrSi_2$	$CrSi_2$	12018-09-6	108.167	1490		4.91		
Chromium silicide (Cr_3Si)		Cr_3Si	Cr_3Si	12018-36-9	184.074	1770		6.4		
Chromium(III) sulfate	Chromic sulfate	$Cr_2O_{12}S_3$	$Cr_2(SO_4)_3$	10101-53-8	392.183			3.1	64^{25}	vs acid
Chromium(II) sulfate pentahydrate	Chromous sulfate pentahydrate	$CrH_{10}O_9S$	$CrSO_4 \cdot 5H_2O$	13825-86-0	238.136				21^0	s dil acid; sl EtOH; i ace
Chromium(III) sulfide	Chromic sulfide	Cr_2S_3	Cr_2S_3	12018-22-3	200.19			3.8		
Chromium(III) telluride	Chromic telluride	Cr_2Te_3	Cr_2Te_3	12053-39-3	486.79	≈1300		7.0		
Chromyl chloride	Chromium(VI) oxychloride	Cl_2CrO_2	CrO_2Cl_2	14977-61-8	154.9	−96.5	117	1.91		reac H_2O; s ctc, chl, bz
Cobalt		Co	Co	7440-48-4	58.933	1495	2927	8.86		s dil acid
Cobalt(II) acetate	Cobaltous acetate	$C_4H_6CoO_4$	$Co(C_2H_3O_2)_2$	71-48-7	177.022					vs H_2O; s EtOH
Cobalt(III) acetate	Cobaltic acetate	$C_6H_9CoO_6$	$Co(C_2H_3O_2)_3$	917-69-1	236.064	100 dec				s H_2O, EtOH

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Cobalt(II) acetate tetrahydrate	Cobaltous acetate tetrahydrate	$C_4H_{14}CoO_8$	$Co(C_2H_3O_2)_2 \cdot 4H_2O$	6147-53-1	249.082			1.705		s H_2O, EtOH, dil acid
Cobalt(II) aluminate	Thenard's blue	Al_2CoO_4	$CoAl_2O_4$	13820-62-7	176.894			4.37		i H_2O
Cobalt(III) ammonium tetranitrodiammine	Erdmann's salt	$CoH_{10}N_7O_8$	$NH_4[Co(NH_3)_2(NO_2)_4]$	13600-89-0	295.054			1.97		s H_2O
Cobalt antimonide		CoSb	CoSb	12052-42-5	180.693	1202		8.8		
Cobalt(II) arsenate octahydrate	Cobaltous arsenate octahydrate	$As_2Co_3H_{16}O_{16}$	$Co_3(AsO_4)_2 \cdot 8H_2O$	24719-19-5	598.76	400 dec	1000 dec	3.0		i H_2O; s dil acid
Cobalt arsenic sulfide	Cobaltite	AsCoS	CoAsS	12254-82-9	165.921			$\asymp$6.1		
Cobalt arsenide (CoAs)		AsCo	CoAs	27016-73-5	133.855	1180		8.22		
Cobalt arsenide ($CoAs_2$)	Smaltite	As_2Co	$CoAs_2$	12044-42-7	208.776			7.2		
Cobalt arsenide ($CoAs_3$)	Skutterudite	As_3Co	$CoAs_3$	12256-04-1	283.698	942		6.84		
Cobalt boride		BCo	CoB	12006-77-8	69.744	1460		7.25		reac H_2O, HNO_3
Cobalt diboride (Co_2B)		BCo_2	Co_2B	12045-01-1	128.677	1280		8.1		
Cobalt(II) bromate hexahydrate	Cobaltous bromate hexahydrate	$Br_2CoH_{12}O_{12}$	$Co(BrO_3)_2 \cdot 6H_2O$	13476-01-2	422.829			$\asymp$2.5		vs H_2O
Cobalt(II) bromide	Cobaltous bromide	Br_2Co	$CoBr_2$	7789-43-7	218.741	678		4.91	113.2^{20}	s MeOH, EtOH, ace
Cobalt(II) bromide hexahydrate	Cobaltous bromide hexahydrate	$Br_2CoH_{12}O_6$	$CoBr_2 \cdot 6H_2O$	13762-12-4	326.832	47 dec	100 dec	2.46	113.2	
Cobalt(II) carbonate	Spherocobaltite	$CCoO_3$	$CoCO_3$	513-79-1	118.942			4.2	0.00014^{20}	i EtOH
Cobalt carbonyl	Dicobalt octacarbonyl	$C_8Co_2O_8$	$Co_2(CO)_8$	10210-68-1	341.947	51 dec		1.78		i H_2O; s EtOH, eth, CS_2
Cobalt(II) chloride	Cobaltous chloride	Cl_2Co	$CoCl_2$	7646-79-9	129.838	740	1049	3.36	56.2^{25}	s EtOH, eth, ace, py
Cobalt(II) chloride dihydrate	Cobaltous chloride dihydrate	$Cl_2CoH_4O_2$	$CoCl_2 \cdot 2H_2O$	16544-92-6	165.869			2.477	56.2^{25}	
Cobalt(II) chloride hexahydrate	Cobaltous chloride hexahydrate	$Cl_2CoH_{12}O_6$	$CoCl_2 \cdot 6H_2O$	7791-13-1	237.929	87 dec		1.924	56.2^{25}	s EtOH, ace, eth
Cobalt(II) chromate	Cobaltous chromate	$CoCrO_4$	$CoCrO_4$	24613-38-5	174.927			$\asymp$4.0		i H_2O; s acid
Cobalt(II) chromite	Cobaltous chromate(III)	$CoCr_2O_4$	$CoCr_2O_4$	13455-25-9	226.923			5.14		i H_2O, conc acid
Cobalt(II) cyanide	Cobaltous cyanide	C_2CoN_2	$Co(CN)_2$	542-84-7	110.967			1.872		i H_2O
Cobalt(II) cyanide dihydrate	Cobaltous cyanide dihydrate	$C_2H_4CoN_2O_2$	$Co(CN)_2 \cdot 2H_2O$	20427-11-6	146.998					i H_2O, acid
Cobalt disulfide		CoS_2	CoS_2	12013-10-4	123.065			4.3		
Cobalt dodecacarbonyl	Tetracobalt dodecacarbonyl	$C_{12}Co_4O_{12}$	$Co_4(CO)_{12}$	17786-31-1	571.854	60 dec		2.09		
Cobalt(II) ferricyanide	Cobaltous ferricyanide	$C_{12}Co_3Fe_2N_{12}$	$Co_3[Fe(CN)_6]_2$	14049-81-1	600.699					i H_2O, HCl; s NH_4OH
Cobalt(II) fluoride	Cobaltous fluoride	CoF_2	CoF_2	10026-17-2	96.93	1127	$\asymp$1400	4.46	1.4^{25}	s acid
Cobalt(III) fluoride	Cobaltic fluoride	CoF_3	CoF_3	10026-18-3	115.928	927		3.88		reac H_2O
Cobalt(II) fluoride tetrahydrate	Cobaltous fluoride tetrahydrate	$CoF_2H_8O_4$	$CoF_2 \cdot 4H_2O$	13817-37-3	168.992	dec		2.22	1.4^{25}	
Cobalt(II) formate dihydrate	Cobaltous formate dihydrate	$C_2H_6CoO_6$	$Co(CHO_2)_2 \cdot 2H_2O$	6424-20-0	184.998	140 dec		2.13	5.03^{20}	i EtOH
Cobalt(II) hexafluoro-2,4-pentanedioate	Cobalt(II) hexafluoroacetylacetonate	$C_{10}H_2CoF_{12}O_4$	$Co(CF_3COCHCOCF_3)_2$	19648-83-0	473.035	197				
Cobalt(II) hexafluorosilicate hexahydrate	Cobaltic hexafluorosilicate hexahydrate	$CoF_6H_{12}O_6Si$	$CoSiF_6 \cdot 6H_2O$	12021-68-0	309.1			2.087	76.8^{22}	
Cobalt(III) hexammine chloride	Hexaaminecobalt trichloride	$Cl_3CoH_{18}N_6$	$Co(NH_3)_6Cl_3$	10534-89-1	267.474			1.71		s H_2O; i EtOH

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Cobalt(II) hydroxide	Cobaltous hydroxide	CoH_2O_2	$Co(OH)_2$	21041-93-0	92.948	≈160 dec		3.60		sl H_2O; s acid
Cobalt(III) hydroxide	Cobaltic hydroxide	CoH_3O_3	$Co(OH)_3$	1307-86-4	109.955	dec		≈4		i H_2O; s acid
Cobalt(II) iodate	Cobaltous iodate	CoI_2O_6	$Co(IO_3)_2$	13455-28-2	408.738	200 dec		5.09	0.46^{20}	
Cobalt(II) iodide	Cobaltous iodide	CoI_2	CoI_2	15238-00-3	312.742	520		5.60	203^{25}	
Cobalt(II) iodide hexahydrate	Cobaltous iodide hexahydrate	$CoH_{12}I_2O_6$	$CoI_2 \cdot 6H_2O$	15238-00-3*	420.833	130 dec		2.90	203^{25}	s EtOH, eth, ace
Cobalt(II) molybdate	Cobaltous molybdate	$CoMoO_4$	$CoMoO_4$	13762-14-6	218.87	1040		4.7		
Cobalt(II) nitrate	Cobaltous nitrate	CoN_2O_6	$Co(NO_3)_2$	10141-05-6	182.942	100 dec		2.49	103^{25}	
Cobalt(III) nitrate	Cobaltic nitrate	CoN_3O_9	$Co(NO_3)_3$	15520-84-0	244.948			≈3.0		s H_2O; reac os
Cobalt(II) nitrate hexahydrate	Cobaltous nitrate hexahydrate	$CoH_{12}N_2O_{12}$	$Co(NO_3)_2 \cdot 6H_2O$	10026-22-9	291.034	≈55		1.88	103^{25}	s EtOH
Cobalt(II) orthosilicate	Cobaltous orthosilicate	Co_2O_4Si	Co_2SiO_4	12017-08-2	209.95	1345		4.63		i H_2O; s dil HCl
Cobalt(II) oxalate	Cobaltous oxalate	C_2CoO_4	CoC_2O_4	814-89-1	146.952	250 dec		3.02	0.0037^{20}	s acid, NH_4OH
Cobalt(II) oxalate dihydrate	Cobaltous oxalate dihydrate	$C_2H_4CoO_6$	$CoC_2O_4 \cdot 2H_2O$	5965-38-8	182.982	dec			0.0037	sl acid; s NH_4OH
Cobalt(II) oxide	Cobaltous oxide	CoO	CoO	1307-96-6	74.932	1830		6.44		i H_2O; s acid
Cobalt(II,III) oxide	Cobaltic-cobaltous oxide	Co_3O_4	Co_3O_4	1308-06-1	240.798	900 dec		6.11		i H_2O; s acid, alk
Cobalt(III) oxide	Cobalt black	Co_2O_3	Co_2O_3	1308-04-9	165.864	895 dec		5.18		i H_2O; s conc acid
Cobalt(III) oxide monohydrate	Cobalt hydroxide oxide	$Co_2H_2O_4$	$Co_2O_3 \cdot H_2O$	12016-80-7	183.88	150 dec				i H_2O; s acid
Cobalt(II) perchlorate	Cobaltous perchlorate	Cl_2CoO_8	$Co(ClO_4)_2$	13455-31-7	257.833			3.33	113^{25}	i EtOH, ace
Cobalt(II) phosphate octahydrate	Cobaltous phosphate octahydrate	$Co_3H_{16}O_{16}P_2$	$Co_3(PO_4)_2 \cdot 8H_2O$	10294-50-5	510.865			2.77		i H_2O; s acid
Cobalt phosphide		Co_2P	Co_2P	12134-02-0	148.84	1386		6.4		i H_2O; s HNO_3
Cobalt(III) potassium nitrite sesquihydrate	Cobalt yellow	$CoH_3K_3N_6O_{13.5}$	$CoK_3(NO_2)_6 \cdot 1.5H_2O$	13782-01-9*	479.284			2.6		sl H_2O; reac acid; i EtOH
Cobalt(II) potassium sulfate hexahydrate	Cobaltous dipotassium sulfate hexahydrate	$CoH_{12}K_2O_{14}S_2$	$CoK_2(SO_4)_2 \cdot 6H_2O$	10026-20-7	437.349	75 dec		2.22		vs H_2O
Cobalt(II) selenate pentahydrate	Cobaltous selenate pentahydrate	$CoH_{10}O_9Se$	$CoSeO_4 \cdot 5H_2O$	14590-19-3	291.97	dec		2.51	55^{15}	
Cobalt(II) selenide	Cobaltous selenide	CoSe	CoSe	1307-99-9	137.89	1055		7.65		i H_2O, alk; s aqua regia
Cobalt(II) selenite dihydrate	Cobaltous selenite dihydrate	CoH_4O_5Se	$CoSeO_3 \cdot 2H_2O$	19034-13-0	221.92					i H_2O
Cobalt silicide		$CoSi_2$	$CoSi_2$	12017-12-8	115.104	1326		4.9		s hot HCl
Cobalt(II) stannate	Cobaltous stannate	Co_2O_4Sn	Co_2SnO_4	12139-93-4	300.574			6.30		i H_2O; s alk
Cobalt(II) sulfate	Cobaltous sulfate	CoO_4S	$CoSO_4$	10124-43-3	154.997	>700		3.71	38.3^{25}	
Cobalt(II) sulfate heptahydrate	Bieberite	$CoH_{14}O_{11}S$	$CoSO_4 \cdot 7H_2O$	10026-24-1	281.103	41 dec		2.03	38.3^{25}	sl EtOH, MeOH
Cobalt(II) sulfate monohydrate	Cobaltous sulfate monohydrate	CoH_2O_5S	$CoSO_4 \cdot H_2O$	13455-34-0	173.012			3.08	38.3^{25}	
Cobalt(II) sulfide	Cobaltous sulfide	CoS	CoS	1317-42-6	90.999	1182		5.45		i H_2O; s acid
Cobalt(III) sulfide	Cobaltic sulfide	Co_2S_3	Co_2S_3	1332-71-4	214.064			4.8		reac acid
Cobalt(II) telluride	Cobaltous telluride	CoTe	CoTe	12017-13-9	186.53			≈8.8		
Cobalt(II) thiocyanate		$C_2CoN_2S_2$	$Co(SCN)_2$	3017-60-5	175.099				103^{25}	s EtOH, MeOH, ace, eth
Cobalt(II) thiocyanate trihydrate	Cobaltous thiocyanate trihydrate	$C_2H_6CoN_2O_3S_2$	$Co(SCN)_2 \cdot 3H_2O$	97126-35-7	229.145				103^{25}	s EtOH, eth, ace

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Cobalt(II) titanate	Cobaltous metatitanate	CoO_3Ti	$CoTiO_3$	12017-01-5	154.798			5.0		
Cobalt(III) titanate	Cobaltic orthotitanate	Co_2O_4Ti	Co_2TiO_4	12017-38-8	229.731			5.1		s conc HCl
Cobalt(II) tungstate	Cobaltous tungstate	CoO_4W	$CoWO_4$	12640-47-0	306.77			$\asymp$7.8		i H_2O; s hot conc acid
Copper		Cu	Cu	7440-50-8	63.546	1084.62	2562	8.96		sl dil acid
Copper(I) acetate	Cuprous acetate	$C_2H_3CuO_2$	$CuC_2H_3O_2$	598-54-9	122.59	dec	subl			reac H_2O
Copper(II) acetate	Cupric acetate	$C_4H_6CuO_4$	$Cu(C_2H_3O_2)_2$	142-71-2	181.635					
Copper(II) acetate metaarsenite	Cupric acetoarsenite	$C_4H_6As_6Cu_4O_{16}$	$Cu(C_2H_3O_2)_2 \cdot 3Cu(AsO_2)_2$	12002-03-8	1013.795					i H_2O; reac acid
Copper(II) acetate monohydrate	Cupric acetate monohydrate	$C_4H_8CuO_5$	$Cu(C_2H_3O_2)_2 \cdot H_2O$	6046-93-1	199.65	115	240 dec	1.88		s H_2O, EtOH; sl eth
Copper(I) acetylide	Cuprous acetylide	C_2Cu_2	Cu_2C_2	1117-94-8	151.113					
Copper(II) acetylide	Cupric acetylide	C_2Cu	CuC_2	12540-13-5	87.567	exp 100				
Copper(II) arsenate	Cupric arsenate	$As_2Cu_3O_8$	$Cu_3(AsO_4)_2$	10103-61-4	468.476					i H_2O, EtOH; s dil acid
Copper(II) arsenite	Scheele's green	$AsCuHO_3$	$CuHAsO_3$	10290-12-7	187.474					i H_2O, EtOH; s acid
Copper(I) azide	Cuprous azide	CuN_3	CuN_3	14336-80-2	105.566					
Copper(II) azide	Cupric azide	CuN_6	$Cu(N_3)_2$	14215-30-6	147.586			$\asymp$2.6		
Copper(II) basic acetate	Blue verdigris	$C_4H_{18}Cu_2O_{11}$	$Cu(C_2H_3O_2)_2 \cdot CuO \cdot 6H_2O$	52503-64-7	369.271					sl H_2O, EtOH; s dil acid, NH_4OH
Copper(II) borate	Cupric borate	B_2CuO_4	$Cu(BO_2)_2$	39290-85-2	149.166			3.859		i H_2O; s acid
Copper(I) bromide	Cuprous bromide	BrCu	CuBr	7787-70-4	143.45	497	1345	4.98	0.0012^{20}	i ace
Copper(II) bromide	Cupric bromide	Br_2Cu	$CuBr_2$	7789-45-9	223.354	498	900	4.710	126^{25}	s EtOH, ace; i bz, eth
Copper(II) butanoate monohydrate	Cupric butyrate monohydrate	$C_8H_{16}CuO_5$	$Cu(C_4H_7O_2)_2 \cdot H_2O$	540-16-9	255.756					s H_2O, diox, bz; sl EtOH
Copper(II) carbonate hydroxide	Bremen green	$CH_2Cu_2O_5$	$CuCO_3 \cdot Cu(OH)_2$	12069-69-1	221.116	200 dec		4.0		i H_2O, EtOH; s dil acid
Copper(II) chlorate hexahydrate	Cupric chlorate hexahydrate	$Cl_2CuH_{12}O_{12}$	$Cu(ClO_3)_2 \cdot 6H_2O$	14721-21-2	338.539	65	100 dec		164^{18}	vs EtOH
Copper(I) chloride	Cuprous chloride	ClCu	CuCl	7758-89-6	98.999	430	$\asymp$1400	4.14	0.0047^{20}	i EtOH, ace
Copper(II) chloride	Cupric chloride	Cl_2Cu	$CuCl_2$	7447-39-4	134.451	630 dec		3.4	75.7^{25}	s EtOH, ace
Copper(II) chloride dihydrate	Cupric chloride dihydrate	$Cl_2CuH_4O_2$	$CuCl_2 \cdot 2H_2O$	10125-13-0	170.482	100 dec		2.51	75.7^{20}	vs EtOH, MeOH; s ace; i eth
Copper(II) chloride hydroxide	Cupric chloride hydroxide	$ClCu_2H_3O_3$	$Cu_2(OH)_3Cl$	1332-65-6	213.567					i H_2O; s acid
Copper(II) chromate	Cupric chromate	$CrCuO_4$	$CuCrO_4$	13548-42-0	179.54					i H_2O; s EtOH
Copper(II) chromite	Cupric chromite	Cr_2CuO_4	$CuCr_2O_4$	12018-10-9	231.536			5.4		i H_2O, dil acid
Copper(II) citrate hemipentahydrate	Cupric citrate hemipentahydrate	$C_6Cu_2H_9O_{9.5}$	$Cu_2C_6H_4O_7 \cdot 2.5H_2O$	10402-15-0	360.221	100 dec				sl H_2O; s dil acid
Copper(I) cyanide	Cuprous cyanide	CCuN	CuCN	544-92-3	89.564	474	dec	2.9		i H_2O, EtOH; s KCN soln
Copper(II) cyanide	Cupric cyanide	C_2CuN_2	$Cu(CN)_2$	14763-77-0	115.58					i H_2O; s acid, alk
Copper(II) cyclohexanebutanoate	Cupric cyclohexanebutanoate	$C_{20}H_{34}CuO_4$	$Cu(C_{10}H_{17}O_2)_2$	2218-80-6	402.028	126 dec				
Copper(II) dichromate dihydrate	Cupric dichromate dihydrate	$Cr_2CuH_4O_9$	$CuCr_2O_7 \cdot 2H_2O$	13675-47-3	315.565			2.286		vs H_2O
Copper(II) ethanolate	Copper(II) ethoxide	$C_4H_{10}CuO_2$	$Cu(C_2H_5O)_2$	2850-65-9	153.667	120 dec				i os
Copper(II) ethylacetoacetate	Bis(ethylacetoacetato)copper	$C_{12}H_{18}CuO_6$	$Cu(C_2H_5\text{-}CO_2CH\text{-}COCH_3)_2$	14284-06-1	321.813	192				s EtOH
Copper(II) 2-ethylhexanoate	Cupric 2-ethylhexanoate	$C_{16}H_{30}CuO_4$	$Cu(C_8H_{15}O_2)_2$	149-11-1	349.953	252 dec				

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Copper(II) ferrocyanide	Cupric ferrocyanide	$C_6Cu_2FeN_6$	$Cu_2Fe(CN)_6$	13601-13-3	339.041			2.2		i H_2O, acid, os
Copper(II) ferrous sulfide	Chalcopyrite	$CuFeS_2$	$CuFeS_2$	1308-56-1	183.523	950		4.2		i H_2O, HCl; s HNO_3
Copper(I) fluoride	Cuprous fluoride	CuF	CuF	13478-41-6	82.544			7.1		
Copper(II) fluoride	Cupric fluoride	CuF_2	CuF_2	7789-19-7	101.543	836	1676	4.23	0.075^{25}	
Copper(II) fluoride dihydrate	Cupric fluoride dihydrate	$CuF_2H_4O_2$	$CuF_2 \cdot 2H_2O$	13454-88-1	137.574	130 dec		2.934	0.075^{25}	
Copper(II) formate	Cupric formate	$C_2H_2CuO_4$	$Cu(CHO_2)_2$	544-19-4	153.581				12.5^{20}	i os
Copper(II) formate tetrahydrate	Cupric formate tetrahydrate	$C_2H_{10}CuO_8$	$Cu(CHO_2)_2 \cdot 4H_2O$	5893-61-8	225.641				12.5	sl EtOH; i os
Copper(II) hexafluoro-2,4-pentanedioate	Copper(II) hexafluoroacetylacetonate	$C_{10}H_2CuF_{12}O_4$	$Cu(CF_3COCHCOCF_3)_2$	14781-45-4	477.648	98	220 dec			s MeOH, ace, tol
Copper(II) hexafluorosilicate tetrahydrate	Cupric hexafluorosilicate tetrahydrate	$CuF_6H_8O_4Si$	$CuSiF_6 \cdot 4H_2O$	12062-24-7	277.684	dec		2.56	99.7^{17}	sl EtOH
Copper(I) hydride	Cuprous hydride	CuH	CuH	13517-00-5	64.554	60 dec				
Copper(II) hydroxide	Cupric hydroxide	CuH_2O_2	$Cu(OH)_2$	20427-59-2	97.561			3.37		i H_2O; s acid, conc alk
Copper(II) iodate	Cupric iodate	CuI_2O_6	$Cu(IO_3)_2$	13454-89-2	413.351	dec		5.241	0.15^{20}	s dil acid
Copper(II) iodate monohydrate	Cupric iodate monohydrate	$CuH_2I_2O_7$	$Cu(IO_3)_2 \cdot H_2O$	13454-90-5	431.367	248 dec		4.872	0.15^{20}	s dil H_2SO_4
Copper(I) iodide	Cuprous iodide	CuI	CuI	7681-65-4	190.45	606	≈1290	5.67	0.000020^{20}	i dil acid
Copper(I) mercury iodide	Cuprous tetraiodomercurate	Cu_2HgI_4	Cu_2HgI_4	13876-85-2	835.3	trans ≈60 (brn)				i H_2O, EtOH
Copper(II) molybdate	Cupric molybdate	$CuMoO_4$	$CuMoO_4$	13767-34-5	223.48	≈500		3.4	0.038	
Copper(II) nitrate	Cupric nitrate	CuN_2O_6	$Cu(NO_3)_2$	3251-23-8	187.555	255	subl		145^{25}	s diox; reac eth
Copper(II) nitrate hexahydrate	Cupric nitrate hexahydrate	$CuH_{12}N_2O_{12}$	$Cu(NO_3)_2 \cdot 6H_2O$	13478-38-1	295.647			2.07	145^{25}	s EtOH
Copper(II) nitrate trihydrate	Cupric nitrate trihydrate	$CuH_6N_2O_9$	$Cu(NO_3)_2 \cdot 3H_2O$	10031-43-3	241.602	114	170 dec	2.32	145^{25}	vs EtOH
Copper nitride		Cu_3N	Cu_3N	1308-80-1	204.645	300 dec		5.84		
Copper(II) oleate	Cupric oleate	$C_{36}H_{66}CuO_4$	$Cu(C_{18}H_{33}O_2)_2$	1120-44-1	626.453					i H_2O; sl EtOH; s eth
Copper(II) oxalate	Cupric oxalate	C_2CuO_4	CuC_2O_4	814-91-5	151.565	310 dec			0.0026^{20}	i EtOH, eth; s NH_4OH
Copper(II) oxalate hemihydrate	Cupric oxalate hemihydrate	$C_2HCuO_{4.5}$	$CuC_2O_4 \cdot 0.5H_2O$	814-91-5*	144.573	200 dec			0.0026^{20}	s NH_4OH
Copper(I) oxide	Cuprite	Cu_2O	Cu_2O	1317-39-1	143.091	1235	1800 dec	6.0		i H_2O
Copper(II) oxide	Cupric oxide	CuO	CuO	1317-38-0	79.545	1446		6.31		i H_2O, EtOH; s dil acid
Copper(II) 2,4-pentanedioate	Copper(II) acetylacetonate	$C_{10}H_{14}CuO_4$	$Cu(CH_3COCHCOCH_3)_2$	13395-16-9	261.762	284 dec	subl			sl H_2O; s chl
Copper(II) perchlorate	Cupric perchlorate	Cl_2CuO_8	$Cu(ClO_4)_2$	13770-18-8	262.446	130 dec			146^{30}	s eth, diox; i bz, ctc
Copper(II) perchlorate hexahydrate	Cupric perchlorate hexahydrate	$Cl_2CuH_{12}O_{14}$	$Cu(ClO_4)_2 \cdot 6H_2O$	10294-46-9	370.538	82	120 dec	2.22	146^{30}	vs EtOH, HOAc, ace; sl eth
Copper(II) phosphate	Cupric phosphate	$Cu_3O_8P_2$	$Cu_3(PO_4)_2$	7798-23-4	380.581					i H_2O; s acid, NH_4OH
Copper(II) phosphate trihydrate	Cupric phosphate trihydrate	$Cu_3H_6O_{11}P_2$	$Cu_3(PO_4)_2 \cdot 3H_2O$	10031-48-8	434.627					i H_2O; s acid, NH_4OH
Copper phosphide		CuP_2	CuP_2	12019-11-3	125.494	≈900		4.20		
Copper(II) selenate pentahydrate	Cupric selenate pentahydrate	$CuH_{10}O_9Se$	$CuSeO_4 \cdot 5H_2O$	10031-45-5	296.58	80 dec		2.56	27.4^{25}	s acid, NH_4OH; sl ace; i EtOH
Copper(I) selenide	Berzelianite	Cu_2Se	Cu_2Se	20405-64-5	206.05	1113		6.84		i H_2O; s acid
Copper(II) selenide	Cupric selenide	CuSe	CuSe	1317-41-5	142.51	550 dec		5.99		reac acid

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Copper(II) selenite dihydrate	Cupric selenite dihydrate	CuH_4O_5Se	$CuSeO_3 \cdot 2H_2O$	15168-20-4	226.54			3.31		i H_2O; s acid, NH_4OH
Copper silicide		Cu_5Si	Cu_5Si	12159-07-8	345.816	825				
Copper(II) stearate	Cupric stearate	$C_{36}H_{70}CuO_4$	$Cu(C_{18}H_{35}O_2)_2$	660-60-6	630.485	$\asymp$250				i H_2O, EtOH, eth; s py
Copper(II) sulfate	Chalcocyanite	CuO_4S	$CuSO_4$	7758-98-7	159.61	560 dec		3.60	22.0^{25}	i EtOH
Copper(II) sulfate pentahydrate	Blue vitriol	$CuH_{10}O_9S$	$CuSO_4 \cdot 5H_2O$	7758-99-8	249.686	110 dec		2.286	22.0^{25}	s MeOH; sl EtOH
Copper(II) sulfate, basic	Antlerite	$Cu_3H_4O_8S$	$Cu_3(OH)_4SO_4$	1332-14-5	354.731			3.88		i H_2O
Copper(I) sulfide	Cuprous sulfide	Cu_2S	Cu_2S	22205-45-4	159.158	$\asymp$1100		5.6		i H_2O; sl acid
Copper(II) sulfide	Covellite	CuS	CuS	1317-40-4	95.612	trans 507		4.76		i H_2O, EtOH, dil acid, alk
Copper(I) sulfite hemihydrate	Cuprous sulfite hemihydrate	$Cu_2HO_{3.5}S$	$Cu_2SO_3 \cdot 0.5H_2O$	13982-53-1*	216.164					sl H_2O; s acid, alk; i EtOH, eth
Copper(I) sulfite monohydrate	Cuprous sulfite monohydrate	$Cu_2H_2O_4S$	$Cu_2SO_3 \cdot H_2O$		225.172			3.83		sl H_2O; s HCl
Copper(I,II) sulfite dihydrate	Chereul's salt	$Cu_3H_4O_8S_2$	$Cu_2SO_3 \cdot CuSO_3 \cdot 2H_2O$	13814-81-8	386.797					i H_2O, EtOH; s HCl
Copper(II) tartrate trihydrate	Cupric tartrate trihydrate	$C_4H_{10}CuO_9$	$CuC_4H_4O_6 \cdot 3H_2O$	815-82-7	265.663					sl H_2O; s acid, alk
Copper(I) telluride	Cuprous telluride	Cu_2Te	Cu_2Te	12019-52-2	254.69	1127		4.6		
Copper(II) telluride	Vulcanite	CuTe	CuTe	12019-23-7	191.15	trans $\asymp$400		7.09		
Copper(II) tetrafluoroborate	Cupric tetrafluoroborate	B_2CuF_8	$Cu(BF_4)_2$	14735-84-3	237.155					s H_2O
Copper(I) thiocyanate	Cuprous thiocyanate	CCuNS	CuSCN	1111-67-7	121.63	1084		2.85		i H_2O, dil acid, EtOH, ace; s eth
Copper(II) tungstate	Cupric tungstate	CuO_4W	$CuWO_4$	13587-35-4	311.38			7.5		
Copper(II) tungstate dihydrate	Cupric tungstate dihydrate	CuH_4O_6W	$CuWO_4 \cdot 2H_2O$	13587-35-4*	347.41					i H_2O; sl HOAc; reac conc acid
Copper(II) vanadate	Copper(II) vanadium oxide	CuO_6V_2	$Cu(VO_3)_2$	12789-09-2	261.425					
Curium		Cm	Cm	7440-51-9	247	1345	$\asymp$3100	13.51		
Cyanogen		C_2N_2	C_2N_2	460-19-5	52.034	−27.83	−21.1	2.127 g/L		sl H_2O, eth; s EtOH
Cyanogen bromide	Bromine cyanide	CBrN	BrCN	506-68-3	105.922	52	61.5	2.005		s H_2O, EtOH, eth
Cyanogen chloride	Chlorine cyanide	CClN	ClCN	506-77-4	61.47	−6.55	13	2.513 g/L		s H_2O, EtOH, eth
Cyanogen fluoride	Fluorine cyanide	CFN	FCN	1495-50-7	45.016	−82	−46	1.840 g/L		
Cyanogen iodide	Iodine cyanide	CIN	ICN	506-78-5	152.922	146.7		1.84		s H_2O, EtOH, eth
Cyclohexasilane		$H_{12}Si_6$	Si_6H_{12}	291-59-8	180.608	16.5	226			reac H_2O
Cyclopentasilane		$H_{10}Si_5$	Si_5H_{10}	289-22-5	150.507	−10.5	194.3	0.963		reac H_2O
Decaborane(14)		$B_{10}H_{14}$	$B_{10}H_{14}$	17702-41-9	122.221	99.6	$\asymp$213	0.94		sl H_2O; s EtOH, bz, CS_2, ctc
cis-Diamminedichloroplatinum	Cisplatin	$Cl_2H_6N_2Pt$	$Pt(NH_3)_2Cl_2$	15663-27-1	300.04	270 dec			0.253^{25}	
trans-Diamminedichloroplatinum		$Cl_2H_6N_2Pt$	$Pt(NH_3)_2Cl_2$	14913-33-8	300.04	270 dec			0.036^{25}	s DMF, DMSO
Diamond	Diamond	C	C	7782-40-3	12.011	4440 (12.4 GPa)		3.513		i H_2O
Diarsine	Diarsane	As_2H_4	As_2H_4	15942-63-9	153.875		$\asymp$100			
Diborane		B_2H_6	B_2H_6	19287-45-7	27.67	−165.5	−92.4	1.131 g/L		reac H_2O
Dibromodichlorosilane		Br_2Cl_2Si	$SiBr_2Cl_2$	13465-75-3	258.799	−45.5	104	2.172		reac H_2O

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Dibromogermane		Br_2GeH_2	GeH_2Br_2	13769-36-3	234.43	−15	89	2.80		reac H_2O
Dibromosilane		Br_2H_2Si	SiH_2Br_2	13768-94-0	189.91	−70.1	66			
Dichlorodifluorogermane		Cl_2F_2Ge	GeF_2Cl_2	24422-21-7	181.51	−51.8	−2.8	7.419 g/L		
Dichlorodifluorosilane		Cl_2F_2Si	$SiCl_2F_2$	18356-71-3	136.988	−44	−32	5.599 g/L		reac H_2O
Dichlorogermane		Cl_2GeH_2	GeH_2Cl_2	15230-48-5	145.53	−68	69.5	1.90		reac H_2O
Dichlorosilane		Cl_2H_2Si	SiH_2Cl_2	4109-96-0	101.007	−122	8.3	4.129 g/L		reac H_2O
Difluoramine	Difluoroazane	F_2HN	NHF_2	10405-27-3	53.012	−116	−23	2.167 g/L		
cis-Difluorodiazine		F_2N_2	N_2F_2	13812-43-6	66.01	< -195	−105.75	2.698 g/L		
trans-Difluorodiazine		F_2N_2	N_2F_2	13776-62-0	66.01	−172	−111.45	2.698 g/L		
Difluorophosphoric acid	Difluorophosphinic acid	F_2HO_2P	HPO_2F_2	13779-41-4	101.978	≍-94	110 dec	1.583		reac H_2O
Difluorosilane		F_2H_2Si	SiH_2F_2	13824-36-7	68.099	−122	−77.8	2.783 g/L		
Digermane		Ge_2H_6	Ge_2H_6	13818-89-8	151.27	−109	29	1.98^{-109}		
Diiodosilane		H_2I_2Si	SiH_2I_2	13760-02-6	283.911	−1	150			
Diphosphine		H_4P_2	P_2H_4	13445-50-6	65.98	−99	63.5 dec			reac H_2O
Diphosphoric acid	Pyrophosphoric acid	$H_4O_7P_2$	$H_4P_2O_7$	2466-09-3	177.975	71.5			709^{23}	
Diphosphorus tetrachloride		Cl_4P_2	P_2Cl_4	13497-91-1	203.759	−28	≍180 dec			
Diphosphorus tetrafluoride		F_4P_2	P_2F_4	13824-74-3	137.942	−86.5	−6.2	5.638 g/L		
Diphosphorus tetraiodide		I_4P_2	P_2I_4	13455-00-0	569.566	125.5	dec	3.89		
Disilane		H_6Si_2	Si_2H_6	1590-87-0	62.219	−132.5	−14.3	2.543 g/L		reac H_2O, ctc, chl; s EtOH, bz
Disiloxane		H_6OSi_2	$(SiH_3)_2O$	13597-73-4	78.218	−144	−15.2	3.197 g/L		
2,2-Disilyltrisilane		$H_{12}Si_5$	Si_5H_{12}	15947-57-6	152.523	−57.8	134.3	0.815		reac H_2O
Dysprosium		Dy	Dy	7429-91-6	162.5	1412	2567	8.55		s dil acid
Dysprosium boride		B_4Dy	DyB_4	12310-43-9	205.74	2500		6.98		
Dysprosium(III) bromide		Br_3Dy	$DyBr_3$	14456-48-5	402.21	879				s H_2O
Dysprosium(II) chloride		Cl_2Dy	$DyCl_2$	13767-31-2	233.41	721 dec				reac H_2O
Dysprosium(III) chloride		Cl_3Dy	$DyCl_3$	10025-74-8	268.86	680		3.67		s H_2O
Dysprosium(III) fluoride		DyF_3	DyF_3	13569-80-7	219.5	1154				
Dysprosium(III) hydride		DyH_3	DyH_3	13537-09-2	165.52			7.1		
Dysprosium(II) iodide		DyI_2	DyI_2	36377-94-3	416.31	659				reac H_2O
Dysprosium(III) iodide		DyI_3	DyI_3	15474-63-2	543.21	978				
Dysprosium(III) nitrate pentahydrate		$DyH_{10}N_3O_{14}$	$Dy(NO_3)_3 \cdot 5H_2O$	10143-38-1*	438.59	88.6			208.4^{25}	
Dysprosium nitride		DyN	DyN	12019-88-4	176.51			9.93		
Dysprosium(III) oxide	Dysprosia	Dy_2O_3	Dy_2O_3	1308-87-8	373	2228	3900	7.81		s acid
Dysprosium silicide		$DySi_2$	$DySi_2$	12133-07-2	218.67			5.2		
Dysprosium(III) sulfide		Dy_2S_3	Dy_2S_3	12133-10-7	421.2			6.08		
Einsteinium		Es	Es	7429-92-7	252	860				

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Erbium		Er	Er	7440-52-0	167.26	1529	2868	9.07		i H_2O; s acid
Erbium boride		B_4Er	ErB_4	12310-44-0	210.5	2450		7.0		
Erbium bromide		Br_3Er	$ErBr_3$	13536-73-7	406.97	923				s H_2O
Erbium chloride		Cl_3Er	$ErCl_3$	10138-41-7	273.62	776		4.1		s H_2O
Erbium chloride hexahydrate		$Cl_3ErH_{12}O_6$	$ErCl_3 \cdot 6H_2O$	10025-75-9	381.71	dec				s H_2O; sl EtOH
Erbium fluoride		ErF_3	ErF_3	13760-83-3	224.26	1147		7.8		i H_2O
Erbium hydride		ErH_3	ErH_3	13550-53-3	170.28			≈7.6		
Erbium iodide		ErI_3	ErI_3	13813-42-8	547.97	1014		≈5.5		s H_2O
Erbium nitrate pentahydrate		$ErH_{10}N_3O_{14}$	$Er(NO_3)_3 \cdot 5H_2O$	10168-80-6*	443.35	130 dec			240.8^{25}	s EtOH, ace
Erbium nitride		ErN	ErN	12020-21-2	181.27			10.6		
Erbium oxide	Erbia	Er_2O_3	Er_2O_3	12061-16-4	382.52	2344	3920	8.64		i H_2O; s acid
Erbium silicide		$ErSi_2$	$ErSi_2$	12020-28-9	223.43			7.26		
Erbium sulfate		$Er_2O_{12}S_3$	$Er_2(SO_4)_3$	13478-49-4	622.71	dec		3.68	13^{20}	
Erbium sulfate octahydrate		$Er_2H_{16}O_{20}S_3$	$Er_2(SO_4)_3 \cdot 8H_2O$	10031-52-4	766.83	dec		3.20	13^{20}	
Erbium sulfide		Er_2S_3	Er_2S_3	12159-66-9	430.72	1730		6.07		
Erbium telluride		Er_2Te_3	Er_2Te_3	12020-39-2	717.32	1213		7.11		
Europium		Eu	Eu	7440-53-1	151.964	822	1529	5.24		reac H_2O
Europium boride		B_6Eu	EuB_6	12008-05-8	216.83	≈2600		4.91		
Europium(II) bromide	Europous bromide	Br_2Eu	$EuBr_2$	13780-48-8	311.772	683				s H_2O
Europium(III) bromide	Europic bromide	Br_3Eu	$EuBr_3$	13759-88-1	391.676	dec				s H_2O
Europium(II) chloride	Europous chloride	Cl_2Eu	$EuCl_2$	13769-20-5	222.869	731		4.9		s H_2O
Europium(III) chloride	Europic chloride	Cl_3Eu	$EuCl_3$	10025-76-0	258.322	623		4.89		
Europium(III) chloride hexahydrate	Europic chloride hexahydrate	$Cl_3EuH_{12}O_6$	$EuCl_3 \cdot 6H_2O$	13759-92-7	366.413	850		4.89		s H_2O
Europium(II) fluoride	Europous fluoride	EuF_2	EuF_2	14077-39-5	189.961	≈1380		6.5		
Europium(III) fluoride	Europic fluoride	EuF_3	EuF_3	13765-25-8	208.959	1276				i H_2O
Europium(II) iodide	Europous iodide	EuI_2	EuI_2	22015-35-6	405.773	580				s H_2O
Europium(III) nitrate hexahydrate	Europic nitrate hexahydrate	$EuH_{12}N_3O_{15}$	$Eu(NO_3)_3 \cdot 6H_2O$	10031-53-5	446.07	85 dec			193^{25}	
Europium nitride		EuN	EuN	12020-58-5	165.971			8.7		
Europium(III) oxide	Europia	Eu_2O_3	Eu_2O_3	1308-96-9	351.926	2291	3790	7.42		i H_2O; s acid
Europium(II) selenide		EuSe	EuSe	12020-66-5	230.92			6.45		
Europium silicide		$EuSi_2$	$EuSi_2$	12434-24-1	208.135	1500		5.46		
Europium(II) sulfate		EuO_4S	$EuSO_4$	10031-54-6	248.028			4.99		i H_2O
Europium(III) sulfate	Europic sulfate	$Eu_2O_{12}S_3$	$Eu_2(SO_4)_3$	13537-15-0	592.119			4.99	2.1^{20}	
Europium(III) sulfate octahydrate	Europic sulfate octahydrate	$Eu_2H_{16}O_{20}S_3$	$Eu_2(SO_4)_3 \cdot 8H_2O$	10031-52-4	736.241	375 dec			2.1^{20}	
Europium(II) sulfide		EuS	EuS	12020-65-4	184.03			5.7		
Europium(II) telluride		EuTe	EuTe	12020-69-8	279.56	1526		6.48		
Fermium		Fm	Fm	7440-72-4	257	1527				
Ferrocene	Dicyclopentadienyl iron	$C_{10}H_{10}Fe$	$Fe(C_5H_5)_2$	102-54-5	186.031	172.5	249			i H_2O; s EtOH, eth, bz, dil HNO_3
Fluoramine		FH_2N	NH_2F	15861-05-9	35.021			1.431 g/L		

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Fluorine		F_2	F_2	7782-41-4	37.997	−219.67 tp	−188.12	1.553 g/L		reac H_2O
Fluorine dioxide	Dioxygen difluoride	F_2O_2	F_2O_2	7783-44-0	69.996	−154	−57	2.861 g/L		
Fluorine monoxide	Oxygen difluoride	F_2O	F_2O	7783-41-7	53.996	−223.8	−144.75	2.207 g/L		sl H_2O
Fluorine nitrate	Nitroxy fluoride	FNO_3	FNO_3	7789-26-6	81.003	−175	−46	3.311 g/L		reac H_2O, EtOH, eth; s ace
Fluorine perchlorate	Chlorine tetroxyfluoride	$ClFO_4$	$FOClO_3$	10049-03-3	118.449	−167.3	−16	4.841 g/L		reac H_2O
Fluorogermane		$FGeH_3$	GeH_3F	13537-30-9	94.63			3.868 g/L		reac H_2O
Fluorophosphonic acid	Fluorophosphoric acid	FH_2O_3P	H_2PFO_3	13537-32-1	99.986	< -70		1.82		vs H_2O
Fluorosilane		FH_3Si	SiH_3F	13537-33-2	50.108		−98.6	2.048 g/L		
Fluorosilicic acid	Hydrogen hexafluorosilicate	F_6H_2Si	H_2SiF_6	16961-83-4	144.092					s H_2O
Fluorosulfonic acid	Fluorosulfuric acid	FHO_3S	$SO_2(OH)F$	7789-21-1	100.07	−89	163	1.726		reac H_2O
Francium		Fr	Fr	7440-73-5	223	27				
Fullerene fluoride	Buckminsterfullerene fluoride	$C_{60}F_{60}$	$C_{60}F_{60}$	134929-59-2	1860.546	287				vs ace; s thf; i chl
Gadolinium		Gd	Gd	7440-54-2	157.25	1313	3273	7.90		s dil acid
Gadolinium boride		B_6Gd	GdB_6	12008-06-9	222.12	2510		5.31		
Gadolinium(III) bromide		Br_3Gd	$GdBr_3$	13818-75-2	396.96	770		4.56		
Gadolinium(III) chloride		Cl_3Gd	$GdCl_3$	10138-52-0	263.61	609		4.52		s H_2O
Gadolinium(III) chloride hexahydrate		$Cl_3GdH_{12}O_6$	$GdCl_3 \cdot 6H_2O$	19423-81-5	371.7			2.424		s H_2O
Gadolinium(III) fluoride		F_3Gd	GdF_3	13765-26-9	214.25	1231				
Gadolinium(II) iodide		GdI_2	GdI_2	13814-72-7	411.06	831				
Gadolinium(III) iodide		GdI_3	GdI_3	13572-98-0	537.96	925				
Gadolinium(III) nitrate hexahydrate		$GdH_{12}N_3O_{15}$	$Gd(NO_3)_3 \cdot 6H_2O$	19598-90-4	451.36	91 dec		2.33	190^{25}	s EtOH
Gadolinium(III) nitrate pentahydrate		$GdH_{10}N_3O_{14}$	$Gd(NO_3)_3 \cdot 5H_2O$	52788-53-1	433.34	92 dec		2.41	190^{25}	
Gadolinium nitride		GdN	GdN	25764-15-2	171.26			9.10		
Gadolinium(III) oxide	Gadolinia	Gd_2O_3	Gd_2O_3	12064-62-9	362.5	2339	3900	7.07		i H_2O; s acid
Gadolinium(II) selenide		GdSe	GdSe	12024-81-6	236.21	2170		8.1		
Gadolinium silicide		$GdSi_2$	$GdSi_2$	12134-75-7	213.42			5.9		
Gadolinium(III) sulfate octahydrate		$Gd_2H_{16}O_{20}S_3$	$Gd_2(SO_4)_3 \cdot 8H_2O$	13450-87-8	746.81	400 dec		4.14	2.3^{20}	
Gadolinium(III) sulfide		Gd_2S_3	Gd_2S_3	12134-77-9	410.7			6.1		
Gadolinium(III) telluride		Gd_2Te_3	Gd_2Te_3	12160-99-5	697.3	1255		7.7		
Gallium		Ga	Ga	7440-55-3	69.723	29.771 tp	2204	5.91		reac alk
Gallium antimonide		GaSb	GaSb	12064-03-8	191.483	712		5.6137		
Gallium arsenide		AsGa	GaAs	1303-00-0	144.645	1238		5.3176		
Gallium(III) bromide	Gallium tribromide	Br_3Ga	$GaBr_3$	13450-88-9	309.435	121.5	279	3.69		
Gallium(II) chloride	Gallium dichloride	Cl_2Ga	$GaCl_2$	24597-12-4	140.628	172.4	535	2.74		
Gallium(III) chloride	Gallium trichloride	Cl_3Ga	$GaCl_3$	13450-90-3	176.081	77.9	201	2.47		

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Gallium(III) fluoride	Gallium trifluoride	F_3Ga	GaF_3	7783-51-9	126.718	> 1000		4.47		i H_2O
Gallium(III) fluoride trihydrate	Gallium trifluoride trihydrate	$F_3GaH_6O_3$	$GaF_3 \cdot 3H_2O$	22886-66-4	180.764	> 140 dec				sl H_2O
Gallium(III) hydride	Gallane	GaH_3	GaH_3	13572-93-5	72.747	−15	≈0 dec			
Gallium(III) hydroxide		GaH_3O_3	$Ga(OH)_3$	12023-99-3	120.745					
Gallium(III) iodide	Gallium triiodide	GaI_3	GaI_3	13450-91-4	450.436	212	340	4.5		
Gallium(III) nitrate		GaN_3O_9	$Ga(NO_3)_3$	13494-90-1	255.738					s H_2O, EtOH, eth
Gallium nitride		GaN	GaN	25617-97-4	83.73	> 2500		6.1		
Gallium(III) oxide		Ga_2O_3	Ga_2O_3	12024-21-4	187.444	1806		≈6.0		s hot acid
Gallium(III) oxide hydroxide		$GaHO_2$	GaOOH	20665-52-5	102.73			5.23		
Gallium(III) 2,4-pentanedioate		$C_{15}H_{21}GaO_6$	$Ga(CH_3COCH\text{-}COCH_3)_3$	14405-43-7	367.047	193	subl	1.42		
Gallium phosphide		GaP	GaP	12063-98-8	100.697	1457		4.138		
Gallium(II) selenide		GaSe	GaSe	12024-11-2	148.68	960		5.03		
Gallium(III) selenide		Ga_2Se_3	Ga_2Se_3	12024-24-7	376.33	937		4.92		
Gallium suboxide		Ga_2O	Ga_2O	12024-20-3	155.445	> 660	> 800 dec	4.77		
Gallium(III) sulfate		$Ga_2O_{12}S_3$	$Ga_2(SO_4)_3$	13494-91-2	427.637					
Gallium(III) sulfate octadecahydrate		$Ga_2H_{36}O_{30}S_3$	$Ga_2(SO_4)_3 \cdot 18H_2O$	13780-42-2	751.912					s H_2O, EtOH
Gallium(II) sulfide		GaS	GaS	12024-10-1	101.789	965		3.86		
Gallium(III) sulfide		Ga_2S_3	Ga_2S_3	12024-22-5	235.644	1090		3.7		
Gallium(II) telluride		GaTe	GaTe	12024-14-5	197.32	824		5.44		
Gallium(III) telluride		Ga_2Te_3	Ga_2Te_3	12024-27-0	522.25	790		5.57		
Germane	Germanium tetrahydride	GeH_4	GeH_4	7782-65-2	76.64	−165	−88.1	3.133 g/L		i H_2O
Germanium		Ge	Ge	7440-56-4	72.61	938.25	2833	5.3234		i H_2O, dil acid, alk
Germanium(II) bromide	Germanium dibromide	Br_2Ge	$GeBr_2$	24415-00-7	232.42	122	150 dec			reac H_2O
Germanium(IV) bromide	Germanium tetrabromide	Br_4Ge	$GeBr_4$	13450-92-5	392.23	26.1	186.35	3.132		reac H_2O
Germanium(II) chloride	Germanium dichloride	Cl_2Ge	$GeCl_2$	10060-11-4	143.51	dec				reac H_2O; s eth, bz
Germanium(IV) chloride	Germanium tetrachloride	Cl_4Ge	$GeCl_4$	10038-98-9	214.42	−51.50	86.55	1.88		reac H_2O; s bz, eth, EtOH, ctc
Germanium(II) fluoride	Germanium difluoride	F_2Ge	GeF_2	13940-63-1	110.61	110	130 dec	3.64		reac H_2O
Germanium(IV) fluoride	Germanium tetrafluoride	F_4Ge	GeF_4	7783-58-6	148.6	−15 tp	−36.5 sp	6.074 g/L		reac H_2O
Germanium(II) iodide	Germanium diiodide	GeI_2	GeI_2	13573-08-5	326.42	550 dec		5.4		reac H_2O
Germanium(IV) iodide	Germanium tetraiodide	GeI_4	GeI_4	13450-95-8	580.23	146	377	4.322		reac H_2O
Germanium(IV) nitride		Ge_3N_4	Ge_3N_4	12065-36-0	273.86	900 dec				i H_2O, acid, aqua regia
Germanium(II) oxide	Germanium monoxide	GeO	GeO	20619-16-3	88.61	700 dec				
Germanium(IV) oxide	Germanium dioxide	GeO_2	GeO_2	1310-53-8	104.61	1115		4.25		i H_2O
Germanium(II) selenide		GeSe	GeSe	12065-10-0	151.57	667		5.6		
Germanium(IV) selenide		$GeSe_2$	$GeSe_2$	12065-11-1	230.53	707 dec		4.56		

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Germanium(II) sulfide		GeS	GeS	12025-32-0	104.68	615		4.1		
Germanium(IV) sulfide		GeS_2	GeS_2	12025-34-2	136.74	530		3.01		
Germanium(II) telluride		GeTe	GeTe	12025-39-7	200.21	725		6.16		i H_2O; s conc HNO_3
Gold		Au	Au	7440-57-5	196.967	1064.18	2856	19.3		s aqua regia
Gold(I) bromide	Aurous bromide	AuBr	AuBr	10294-27-6	276.871	165 dec		8.20		i H_2O
Gold(III) bromide	Auric bromide	$AuBr_3$	$AuBr_3$	10294-28-7	436.679	≈160 dec				s H_2O, EtOH
Gold(I) chloride	Aurous chloride	AuCl	AuCl	10294-29-8	232.42	289 dec		7.6	0.000031^{20}	
Gold(III) chloride	Auric chloride	$AuCl_3$	$AuCl_3$	13453-07-1	303.325	>160 dec		4.7	68^{20}	
Gold(I) cyanide	Aurous cyanide	CAuN	AuCN	506-65-0	222.985	dec		7.2		i H_2O, EtOH, eth, dil acid
Gold(III) cyanide trihydrate	Auric cyanide trihydrate	$C_3H_6AuN_3O_3$	$Au(CN)_3 \cdot 3H_2O$	535-37-5*	329.065	50 dec				vs H_2O; sl EtOH
Gold(III) fluoride	Auric fluoride	AuF_3	AuF_3	14720-21-9	253.962	>300	subl	6.75		
Gold(III) hydroxide	Auric hydroxide	AuH_3O_3	$Au(OH)_3$	1303-52-2	247.989	≈100 dec				i H_2O; s acid
Gold(I) iodide	Aurous iodide	AuI	AuI	10294-31-2	323.871	120 dec		8.25		i H_2O; s CN soln
Gold(III) iodide	Auric iodide	AuI_3	AuI_3	31032-13-0	577.68	20 dec				
Gold(III) oxide	Auric oxide	Au_2O_3	Au_2O_3	1303-58-8	441.931	≈150 dec				i H_2O; s acid
Gold(III) selenate	Auric selenate	$Au_2O_{12}Se_3$	$Au_2(SeO_4)_3$	10294-32-3	822.81					i H_2O; s acid
Gold(III) selenide	Auric selenide	Au_2Se_3	Au_2Se_3	1303-62-4	630.81	dec		4.65		s aqua regia
Gold(I) sulfide	Aurous sulfide	Au_2S	Au_2S	1303-60-2	425.999	240 dec		≈11		i H_2O, acid; s aqua regia
Gold(III) sulfide	Auric sulfide	Au_2S_3	Au_2S_3	1303-61-3	490.131	200 dec				
Graphite	Graphite	C	C	7782-42-5	12.011	4489 tp (10.3 MPa)	3825 sp	2.2		i H_2O
Hafnium		Hf	Hf	7440-58-6	178.49	2233	4603	13.3		s HF
Hafnium boride		B_2Hf	HfB_2	12007-23-7	200.11	3100		10.5		
Hafnium(IV) bromide	Hafnium tetrabromide	Br_4Hf	$HfBr_4$	13777-22-5	498.11	424 tp	323 sp	4.90		
Hafnium carbide		CHf	HfC	12069-85-1	190.5	≈3000		12.2		
Hafnium(IV) chloride	Hafnium tetrachloride	Cl_4Hf	$HfCl_4$	13499-05-3	320.3	432 tp	317 sp			reac H_2O
Hafnium fluoride	Hafnium tetrafluoride	F_4Hf	HfF_4	13709-52-9	254.48	>970	970 sp	7.1		
Hafnium hydride		H_2Hf	HfH_2	12770-26-2	180.51			11.4		
Hafnium iodide	Hafnium tetraiodide	HfI_4	HfI_4	13777-23-6	686.11	449 tp	394 sp	5.6		
Hafnium nitride		HfN	HfN	25817-87-2	192.5	3305		13.8		
Hafnium orthosilicate		HfO_4Si	$HfSiO_4$	13870-13-8	270.57			7.0		
Hafnium oxide	Hafnia	HfO_2	HfO_2	12055-23-1	210.49	2774		9.68		i H_2O
Hafnium oxychloride octahydrate		$Cl_2H_{16}HfO_9$	$HfOCl_2 \cdot 8H_2O$	14456-34-9	409.52	dec				s H_2O
Hafnium phosphide		HfP	HfP	12325-59-6	209.46			9.78		
Hafnium selenide		$HfSe_2$	$HfSe_2$	12162-21-9	336.41			7.46		
Hafnium silicide		$HfSi_2$	$HfSi_2$	12401-56-8	234.66	≈1700		7.6		
Hafnium sulfate		HfO_8S_2	$Hf(SO_4)_2$	15823-43-5	370.62	>500 dec				
Hafnium sulfide		HfS_2	HfS_2	18855-94-2	242.62			6.03		

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Helium		He	He	7440-59-7	4.003		−268.93	0.164 g/L		sl H_2O; i EtOH
Heptasilane		$H_{16}Si_7$	Si_7H_{16}	14693-65-3	212.726	−30.1	226.8	0.859		reac H_2O
Hexaborane(10)		B_6H_{10}	B_6H_{10}	23777-80-2	74.945	−62.3	108 dec	0.67		reac hot H_2O
Hexaborane(12)		B_6H_{12}	B_6H_{12}	12008-19-4	76.961	−82.3	≈80			reac H_2O
Hexachloroplatinic acid hexahydrate	Platinic acid hexahydrate	$Cl_6H_{14}O_6Pt$	$H_2PtCl_6 \cdot 6H_2O$	16941-12-1	517.9	60		2.43	140[18]	vs EtOH
Hexafluorophosphoric acid		F_6HP	HPF_6	16940-81-1	145.972	25 dec				reac H_2O
Hexasilane		$H_{14}Si_6$	Si_6H_{14}	14693-61-9	182.624	−44.7	193.6	0.847		reac H_2O
Holmium		Ho	Ho	7440-60-0	164.93	1474	2700	8.80		s dil acid
Holmium bromide		Br_3Ho	$HoBr_3$	13825-76-8	404.642	919	1470			
Holmium chloride		Cl_3Ho	$HoCl_3$	10138-62-2	271.288	718	1500	3.7		s H_2O
Holmium fluoride		F_3Ho	HoF_3	13760-78-6	221.925	1143	> 2200	7.664		s H_2O
Holmium iodide		HoI_3	HoI_3	13813-41-7	545.643	994		5.4		
Holmium nitride		HoN	HoN	12029-81-1	178.937			10.6		
Holmium oxide	Holmia	Ho_2O_3	Ho_2O_3	12055-62-8	377.859	2330	3900	8.41		s acid
Holmium silicide		$HoSi_2$	$HoSi_2$	12136-24-2	221.101			7.1		
Holmium sulfide		Ho_2S_3	Ho_2S_3	12162-59-3	426.059			5.92		
Hydrazine		H_4N_2	N_2H_4	302-01-2	32.045	1.4	113.55	1.0036		vs H_2O, EtOH, MeOH
Hydrazine dihydrochloride		$Cl_2H_6N_2$	$N_2H_4 \cdot 2HCl$	5341-61-7	104.966	198 dec		1.42		s H_2O; sl EtOH
Hydrazine hydrate		H_6N_2O	$N_2H_4 \cdot H_2O$	7803-57-8	50.06	−51.7	119	1.030		vs H_2O, EtOH; i chl, eth
Hydrazine hydrobromide		BrH_5N_2	$N_2H_4 \cdot HBr$	13775-80-9	112.957	84	≈190 dec	2.3		s H_2O, EtOH
Hydrazine hydrochloride		ClH_5N_2	$N_2H_4 \cdot HCl$	2644-70-4	68.506	89	240 dec	1.5		s H_2O; i os
Hydrazine hydroiodide		H_5IN_2	$N_2H_4 \cdot HI$	10039-55-1	159.957	125				s H_2O
Hydrazine nitrate		$H_5N_3O_3$	$N_2H_4 \cdot HNO_3$	13464-97-6	95.058	70				vs H_2O
Hydrazine sulfate		$H_6N_2O_4S$	$N_2H_4 \cdot H_2SO_4$	10034-93-2	130.125	254		1.378		sl H_2O; i EtOH
Hydrazoic acid	Hydrogen azide	HN_3	HN_3	7782-79-8	43.028	−80	35.7			s H_2O
Hydrogen		H_2	H_2	1333-74-0	2.016	−259.34	−252.87	0.082 g/L		sl H_2O
Hydrogen bromide	Hydrobromic acid	BrH	HBr	10035-10-6	80.912	−86.80	−66.38	3.307 g/L		vs H_2O; s EtOH
Hydrogen chloride	Hydrochloric acid	ClH	HCl	7647-01-0	36.461	−114.17	−85	1.490 g/L		vs H_2O
Hydrogen chloride dihydrate		ClH_5O_2	$HCl \cdot 2H_2O$	13465-05-9	72.492	−17.7		1.46		
Hydrogen cyanide	Hydrocyanic acid	CHN	HCN	74-90-8	27.026	−13.29	26	0.684		vs H_2O, EtOH; sl eth
Hydrogen disulfide	Dihydrogen disulfide	H_2S_2	H_2S_2	13465-07-1	66.148		70.7	1.334		
Hydrogen fluoride	Hydrofluoric acid	FH	HF	7664-39-3	20.006	−83.35	20	0.818 g/L		vs H_2O, EtOH; sl eth
Hydrogen iodide	Hydroiodic acid	HI	HI	10034-85-2	127.912	−50.76	−35.55	5.228 g/L		vs H_2O; s os
Hydrogen peroxide		H_2O_2	H_2O_2	7722-84-1	34.015	−0.43	150.2	1.44		vs H_2O
Hydrogen selenide		H_2Se	H_2Se	7783-07-5	80.98	−65.73	−41.25	3.310 g/L		s H_2O
Hydrogen sulfide		H_2S	H_2S	7783-06-4	34.082	−85.5	−59.55	1.393 g/L		s H_2O
Hydrogen telluride		H_2Te	H_2Te	7783-09-7	129.62	−49	−2	5.298 g/L		s H_2O, EtOH, alk
Hydroxylamine		H_3NO	NH_2OH	7803-49-8	33.03	33.1	58	1.21		vs H_2O, MeOH

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Hydroxylamine sulfate		$H_8N_2O_6S$	$(H_2NOH)_2 \cdot H_2SO_4$	10039-54-0	164.139	170				vs H_2O
Hypochlorous acid		ClHO	HOCl	7790-92-3	52.46					s H_2O
Hypophosphoric acid		$H_4O_6P_2$	$H_4P_2O_6$	7803-60-3	161.976	73 dec				vs H_2O
Indium		In	In	7440-74-6	114.818	156.60	2072	7.31		s acid
Indium antimonide		InSb	InSb	1312-41-0	236.578	525		5.7747		
Indium arsenide		AsIn	InAs	1303-11-3	189.74	942		5.67		i acid
Indium(I) bromide		BrIn	InBr	14280-53-6	194.722	290	656	4.96		reac H_2O
Indium(II) bromide	Indium dibromide	Br_2In	$InBr_2$	21264-43-7	274.626			4.22		reac H_2O
Indium(III) bromide	Indium tribromide	Br_3In	$InBr_3$	13465-09-3	354.53	420		4.74	414^{20}	
Indium(I) chloride		ClIn	InCl	13465-10-6	150.271	211	608	4.19		reac H_2O
Indium(II) chloride	Indium dichloride	Cl_2In	$InCl_2$	13465-11-7	185.723	235		3.64		reac H_2O
Indium(III) chloride	Indium trichloride	Cl_3In	$InCl_3$	10025-82-8	221.176	583		4.0	195.1^{22}	s EtOH
Indium(III) fluoride	Indium trifluoride	F_3In	InF_3	7783-52-0	171.813	1170	> 1200	4.39		sl H_2O; s dil acid
Indium(III) fluoride trihydrate	Indium trifluoride trihydrate	$F_3H_6InO_3$	$InF_3 \cdot 3H_2O$	14166-78-0	225.859	100 dec				s H_2O
Indium(III) hydroxide		H_3InO_3	$In(OH)_3$	20661-21-6	165.84			4.4		
Indium(I) iodide		IIn	InI	13966-94-4	241.722	364.4	712	5.32		
Indium(III) iodide	Indium triiodide	I_3In	InI_3	13510-35-5	495.531	207		4.69	1308^{22}	
Indium nitride		InN	InN	25617-98-5	128.825	1100		6.88		
Indium(III) oxide	Indium sesquioxide	In_2O_3	In_2O_3	1312-43-2	277.634	1912		7.18		i H_2O; s hot acid
Indium(III) perchlorate octahydrate		$Cl_3H_{16}InO_{20}$	$In(ClO_4)_3 \cdot 8H_2O$	13465-15-1	557.291	≈80	200 dec			
Indium(III) phosphate		InO_4P	$InPO_4$	14693-82-4	209.789			4.9		i H_2O
Indium phosphide		InP	InP	22398-80-7	145.792	1062		4.81		sl acid
Indium(III) selenide		In_2Se_3	In_2Se_3	1312-42-1	466.52	660		5.8		
Indium(III) sulfate		$In_2O_{12}S_3$	$In_2(SO_4)_3$	13464-82-9	517.827			3.44	117^{20}	
Indium(II) sulfide		InS	InS	12030-14-7	146.884	692		5.2		
Indium(III) sulfide		In_2S_3	In_2S_3	12030-24-9	325.834	1050		4.45		
Indium(III) telluride		In_2Te_3	In_2Te_3	1312-45-4	612.44	667		5.75		
Iodic acid		HIO_3	HIO_3	7782-68-5	175.91	110 dec		4.63	308^{25}	i EtOH, eth
Iodine		I_2	I_2	7553-56-2	253.809	113.7	184.4	4.933	0.03^{20}	s bz, EtOH, eth, ctc, chl
Iodine bromide	Iodine monobromide	BrI	IBr	7789-33-5	206.808	40	116 dec	4.3		s H_2O, EtOH, eth
Iodine chloride	Iodine monochloride	ClI	ICl	7790-99-0	162.357	27.39	100 dec	3.24		reac H_2O; s EtOH
Iodine fluoride	Iodine monofluoride	FI	IF	13873-84-2	145.902					
Iodine heptafluoride		F_7I	IF_7	16921-96-3	259.893	6.5 tp	4.8 sp	10.62 g/L		s H_2O
Iodine nonaoxide	Tetraiodine nonaoxide	I_4O_9	I_4O_9	73560-00-6	651.613	75 dec				
Iodine pentafluoride		F_5I	IF_5	7783-66-6	221.896	9.43	100.5	3.19		reac H_2O
Iodine pentoxide	Diiodine pentoxide	I_2O_5	I_2O_5	12029-98-0	333.806	≈300 dec		4.98	253.4^{20}	i EtOH, eth, CS_2
Iodine tetroxide	Diiodine tetroxide	I_2O_4	I_2O_4	12399-08-5	317.807	85 dec		4.2		sl H_2O
Iodine trichloride		Cl_3I	ICl_3	865-44-1	233.262	101 tp (16 atm)	64 sp dec	3.2		reac H_2O; s EtOH, bz
Iodine trifluoride		F_3I	IF_3	22520-96-3	183.899	−28 dec				
Iodogermane		GeH_3I	GeH_3I	13573-02-9	202.54	−15	≈90			reac H_2O

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Iodosilane		H_3ISi	SiH_3I	13598-42-0	158.014	−57	45.6			
Iridium		Ir	Ir	7439-88-5	192.217	2446	4428	22.5		s aqua regia
Iridium(III) bromide	Iridium tribromide	Br_3Ir	$IrBr_3$	10049-24-8	431.929			6.82		i H_2O, acid, alk
Iridium(III) bromide tetrahydrate	Iridium tribromide tetrahydrate	$Br_3H_8IrO_4$	$IrBr_3 \cdot 4H_2O$	10049-24-8*	503.991					s H_2O; i EtOH
Iridium(III) chloride	Iridium trichloride	Cl_3Ir	$IrCl_3$	10025-83-9	298.575	763 dec		5.30		i H_2O, acid, alk
Iridium(IV) chloride	Iridium tetrachloride	Cl_4Ir	$IrCl_4$	10025-97-5	334.028	≈700 dec				s H_2O, EtOH
Iridium(III) fluoride	Iridium trifluoride	F_3Ir	IrF_3	23370-59-4	249.212	250 dec		≈8.0		i H_2O, dil acid
Iridium(VI) fluoride	Iridium hexafluoride	F_6Ir	IrF_6	7783-75-7	306.207	44	53.6	4.8		reac H_2O
Iridium(III) iodide	Iridium triiodide	I_3Ir	IrI_3	7790-41-2	572.93			≈7.4		i H_2O, acid, bz, chl; s alk
Iridium(III) oxide	Iridium trioxide	Ir_2O_3	Ir_2O_3	1312-46-5	432.432	1000 dec				i H_2O; sl hot HCl
Iridium(IV) oxide		IrO_2	IrO_2	12030-49-8	224.216	1100 dec		11.7		
Iridium(III) sulfide		Ir_2S_3	Ir_2S_3	12136-42-4	480.632			10.2		
Iridium(IV) sulfide		IrS_2	IrS_2	12030-51-2	256.349			9.3		
Iron		Fe	Fe	7439-89-6	55.845	1538	2861	7.87		s dil acid
Iron(III) acetate, basic	Ferric basic acetate	$C_4H_7FeO_5$	$FeOH(-C_2H_3O_2)_2$	10450-55-2	190.941					i H_2O; s EtOH, acid
Iron(II) aluminate	Aluminum iron oxide	Al_2FeO_4	$Fe(AlO_2)_2$	12068-49-4	173.806			4.3		
Iron(II) arsenate	Ferrous arsenate	$As_2Fe_3O_8$	$Fe_3(AsO_4)_2$	10102-50-8	445.373					i H_2O
Iron(III) arsenate dihydrate	Ferric arsenate dihydrate	$AsFeH_4O_6$	$FeAsO_4 \cdot 2H_2O$	10102-49-5	230.795	dec		3.18		i H_2O; s dil acid
Iron(II) arsenate hexahydrate	Ferrous arsenate hexahydrate	$As_2Fe_3H_{12}O_{14}$	$Fe_3(AsO_4)_2 \cdot 6H_2O$	10102-50-8*	553.465	dec				i H_2O; s acid
Iron arsenide		AsFe	FeAs	12044-16-5	130.767	1030		7.85		
Iron boride		BFe	FeB	12006-84-7	66.656	1650		≈7		
Iron boride (Fe_2B)		BFe_2	Fe_2B	12006-86-9	122.501	1389		7.3		
Iron(II) bromide	Ferrous bromide	Br_2Fe	$FeBr_2$	7789-46-0	215.653	691	dec	4.636	120^{25}	vs EtOH
Iron(II) bromide hexahydrate	Ferrous bromide hexahydrate	$Br_2FeH_{12}O_6$	$FeBr_2 \cdot 6H_2O$	13463-12-2	323.744	27 dec		4.64	120^{25}	s EtOH
Iron(III) bromide	Ferric bromide	Br_3Fe	$FeBr_3$	10031-26-2	295.557	dec		4.5	455^{25}	s EtOH, eth
Iron carbide		CFe_3	Fe_3C	12011-67-5	179.546	1227		7.694		
Iron(II) carbonate	Ferrous carbonate	$CFeO_3$	$FeCO_3$	563-71-3	115.854			3.9	0.000062^{20}	
Iron(II) chloride	Ferrous chloride	Cl_2Fe	$FeCl_2$	7758-94-3	126.75	677	1023	3.16	65.0^{25}	vs EtOH, ace; sl bz
Iron(II) chloride dihydrate	Ferrous chloride dihydrate	$Cl_2FeH_4O_2$	$FeCl_2 \cdot 2H_2O$	16399-77-2	162.781	120 dec		2.39	65.0^{25}	
Iron(II) chloride tetrahydrate	Ferrous chloride tetrahydrate	$Cl_2FeH_8O_4$	$FeCl_2 \cdot 4H_2O$	13478-10-9	198.812	105 dec		1.93	65.0^{25}	s EtOH
Iron(III) chloride	Ferric chloride	Cl_3Fe	$FeCl_3$	7705-08-0	162.203	304	≈316	2.90	91.2^{25}	s EtOH, eth, ace
Iron(III) chloride hexahydrate	Ferric chloride hexahydrate	$Cl_3FeH_{12}O_6$	$FeCl_3 \cdot 6H_2O$	10025-77-1	270.294	37 dec		1.82	91.2^{25}	s EtOH, eth, ace
Iron(III) chromate	Ferric chromate	$Cr_3Fe_2O_{12}$	$Fe_2(CrO_4)_3$	10294-52-7	459.671					i H_2O, EtOH; s acid
Iron(II) chromite	Chromite	Cr_2FeO_4	$FeCr_2O_4$	1308-31-2	223.835			5.0		
Iron(III) citrate pentahydrate	Ferric citrate pentahydrate	$C_6H_{15}FeO_{12}$	$FeC_6H_5O_7 \cdot 5H_2O$	3522-50-7	335.021					s H_2O; i EtOH
Iron(III) dichromate	Ferric dichromate	$Cr_6Fe_2O_{21}$	$Fe_2(Cr_2O_7)_3$	10294-53-8	759.654					s H_2O, acid
Iron disilicide		$FeSi_2$	$FeSi_2$	12022-99-0	112.016	1220		4.74		

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Iron disulfide		FeS_2	FeS_2	1317-66-4	119.977	> 600 dec		5.02		i H_2O
Iron dodecacarbonyl	Triiron dodecacarbonyl	$C_{12}Fe_3O_{12}$	$Fe_3(CO)_{12}$	12088-65-2	503.656	140		2.00		
Iron(III) ferrocyanide	Ferric ferrocyanide	$C_{18}Fe_7N_{18}$	$Fe_4[Fe(CN)_6]_3$	14038-43-8	859.229			1.80		i H_2O, dil acid, os
Iron(II) fluoride	Ferrous fluoride	F_2Fe	FeF_2	7789-28-8	93.842	1100		4.09		sl H_2O; s dil HF; i EtOH, eth
Iron(II) fluoride tetrahydrate	Ferrous fluoride tetrahydrate	$F_2FeH_8O_4$	$FeF_2 \cdot 4H_2O$	13940-89-1	165.904			2.20		
Iron(III) fluoride	Ferric fluoride	F_3Fe	FeF_3	7783-50-8	112.84	> 1000		3.87	5.92^{25}	i EtOH, eth, bz
Iron(III) fluoride trihydrate	Ferric fluoride trihydrate	$F_3FeH_6O_3$	$FeF_3 \cdot 3H_2O$	15469-38-2	166.886			2.3	5.92^{25}	
Iron(III) formate	Ferric formate	$C_3H_3FeO_6$	$Fe(CHO_2)_3$	555-76-0	190.897					s H_2O; sl EtOH
Iron hydrocarbonyl	Hydrogen tetracarbonylferrate(II)	$C_4H_2FeO_4$	$FeH_2(CO)_4$	17440-90-3	169.902	−70	dec			s alk
Iron(II) hydroxide	Ferrous hydroxide	FeH_2O_2	$Fe(OH)_2$	18624-44-7	89.86			3.4	0.000052^{20}	
Iron(III) hydroxide	Ferric hydroxide	FeH_3O_3	$Fe(OH)_3$	1309-33-7	106.867			3.12		
Iron(III) hydroxide oxide	Ferric oxide hydroxide	$FeHO_2$	FeO(OH)	20344-49-4	88.852			4.26		i H_2O; s acid
Iron(III) hypophosphite	Ferric hypophosphite	$FeH_6O_6P_3$	$Fe(H_2PO_2)_3$	7783-84-8	250.811					i H_2O
Iron(II) iodide	Ferrous iodide	FeI_2	FeI_2	7783-86-0	309.654	587		5.3		s H_2O, EtOH, eth
Iron(II) iodide tetrahydrate	Ferrous iodide tetrahydrate	FeI_2	$FeI_2 \cdot 4H_2O$	7783-86-0*	381.716	90 dec		2.87		s H_2O, EtOH
Iron(III) metavanadate	Ferric metavanadate	FeO_9V_3	$Fe(VO_3)_3$	65842-03-7	352.665					i H_2O, EtOH; s acid
Iron(II) molybdate	Ferrous molybdate	$FeMoO_4$	$FeMoO_4$	13718-70-2	215.78	1115		5.6		i H_2O
Iron(II) nitrate	Ferrous nitrate	FeN_2O_6	$Fe(NO_3)_2$	14013-86-6	179.854				87.5^{25}	
Iron(III) nitrate	Ferric nitrate	FeN_3O_9	$Fe(NO_3)_3$	10421-48-4	241.86				82.5^{20}	
Iron(II) nitrate hexahydrate	Ferrous nitrate hexahydrate	$FeH_{12}N_2O_{12}$	$Fe(NO_3)_2 \cdot 6H_2O$	14013-86-6*	287.946	60 dec			87.5^{25}	
Iron(III) nitrate hexahydrate	Ferric nitrate hexahydrate	$FeH_{12}N_3O_{15}$	$Fe(NO_3)_3 \cdot 6H_2O$	13476-08-9	349.951	35 dec			82.5^{20}	
Iron(III) nitrate nonahydrate	Ferric nitrate nonahydrate	$FeH_{18}N_3O_{18}$	$Fe(NO_3)_3 \cdot 9H_2O$	7782-61-8	403.997	47 dec		1.68	82.5^{20}	vs EtOH, ace
Iron nonacarbonyl	Diiron nonacarbonyl	$C_9Fe_2O_9$	$Fe_2(CO)_9$	15321-51-4	363.781	100 dec		2.85		
Iron(II) orthosilicate	Fayalite	Fe_2O_4Si	Fe_2SiO_4	10179-73-4	203.774			4.30		
Iron(II) oxalate dihydrate	Ferrous oxalate dihydrate	$C_2H_4FeO_6$	$FeC_2O_4 \cdot 2H_2O$	6047-25-2	179.894	150 dec		2.28	0.078^{25}	s acid
Iron(III) oxalate	Ferric oxalate	$C_6Fe_2O_{12}$	$Fe_2(C_2O_4)_3$	19469-07-9	375.747	100 dec				s H_2O, acid; i alk
Iron(II) oxide	Ferrous oxide	FeO	FeO	1345-25-1	71.844	1377		6.0		i H_2O, alk; s acid
Iron(II,III) oxide	Ferric ferrous oxide	Fe_3O_4	Fe_3O_4	1317-61-9	231.533	1597		5.17		i H_2O; s acid
Iron(III) oxide	Ferric oxide	Fe_2O_3	Fe_2O_3	1309-37-1	159.688	1565		5.25		i H_2O; s acid
Iron pentacarbonyl		C_5FeO_5	$Fe(CO)_5$	13463-40-6	195.896	−20	103	1.490		i H_2O; s eth, bz, ace
Iron(III) 2,4-pentanedioate	Ferric acetylacetonate	$C_{15}H_{21}FeO_6$	$Fe(CH_3COCHCOCH_3)_3$	14024-18-1	353.169	179		5.24		sl H_2O; s os
Iron(II) perchlorate	Ferrous perchlorate	Cl_2FeO_8	$Fe(ClO_4)_2$	13933-23-8	254.745	> 100 dec			210^{25}	
Iron(III) phosphate dihydrate	Ferric phosphate dihydrate	FeH_4O_6P	$FePO_4 \cdot 2H_2O$	10045-86-0	186.847			2.87		i H_2O; s HCl
Iron(II) phosphate octahydrate	Ferrous phosphate octahydrate	$Fe_3H_{16}O_{16}P_2$	$Fe_3(PO_4)_2 \cdot 8H_2O$	14940-41-1	501.6			2.58		i H_2O; s acid
Iron phosphide	Iron monophosphide	FeP	FeP	26508-33-8	86.819			6.07		

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Iron phosphide	Ferrous phosphide	Fe_2P	Fe_2P	1310-43-6	142.664	1370		6.8		i H_2O, dil acid, alk
Iron phosphide		Fe_3P	Fe_3P	12023-53-9	198.509	1100		6.74		i H_2O
Iron(III) pyrophosphate nonahydrate	Ferric pyrophosphate nonahydrate	$Fe_4H_{18}O_{30}P_6$	$Fe_4(P_2O_7)_3 \cdot 9H_2O$	10058-44-3	907.348					i H_2O; s acid
Iron(II) selenide	Ferrous selenide	FeSe	FeSe	1310-32-3	134.81			6.7		i H_2O
Iron silicide		FeSi	FeSi	12022-95-6	83.931	1410		6.1		
Iron(III) sodium pyrophosphate	Ferric sodium pyrophosphate	$FeNaO_7P_2$	$FeNaP_2O_7$	10045-87-1	252.778			1.5		i H_2O; s HCl
Iron(II) sulfate	Ferrous sulfate	FeO_4S	$FeSO_4$	7720-78-7	151.909			3.65	29.5^{25}	
Iron(III) sulfate	Ferric sulfate	$Fe_2O_{12}S_3$	$Fe_2(SO_4)_3$	10028-22-5	399.881			3.10	440^{20}	sl EtOH; i ace
Iron(II) sulfate heptahydrate	Ferrous sulfate heptahydrate	$FeH_{14}O_{11}S$	$FeSO_4 \cdot 7H_2O$	7782-63-0	278.015	≈60 dec		1.895	29.5^{25}	i EtOH
Iron(II) sulfate monohydrate	Ferrous sulfate monohydrate	FeH_2O_5S	$FeSO_4 \cdot H_2O$	17375-41-6	169.924	300 dec		3.0	29.5^{25}	
Iron(III) sulfate nonahydrate	Coquimbite	$Fe_2H_{18}O_{21}S_3$	$Fe_2(SO_4)_3 \cdot 9H_2O$	13520-56-4	562.018	400 dec		2.1	440^{20}	
Iron(II) sulfide	Ferrous sulfide	FeS	FeS	1317-37-9	87.911	1188	dec	4.7		i H_2O; reac acid
Iron(II) tantalate	Iron tantalum oxide	FeO_6Ta_2	$Fe(TaO_3)_2$	12140-41-9	513.737			7.33		
Iron(II) tartrate	Ferrous tartrate	$C_4H_4FeO_6$	$FeC_4H_4O_6$		203.916				0.88	vs acid; s NH_4OH
Iron(II) telluride	Ferrous telluride	FeTe	FeTe	12125-63-2	183.45	914		6.8		
Iron(III) thiocyanate monohydrate	Ferric thiocyanate sesquihydrate	$C_3H_2FeN_3OS_3$	$Fe(SCN)_3 \cdot H_2O$	4119-52-2	248.11	dec				s H_2O, EtOH, ace; i tol, chl
Iron(II) thiocyanate trihydrate	Ferrous thiocyanate trihydrate	$C_2H_6FeN_2O_3S_2$	$Fe(SCN)_2 \cdot 3H_2O$	6010-09-9	226.057					s H_2O, EtOH, eth
Iron(II) titanate	Ferrous titanate	FeO_3Ti	$FeTiO_3$	12168-52-4	151.71	≈1470		4.72		
Iron(II) tungstate	Ferberite	FeO_4W	$FeWO_4$	13870-24-1	303.68			7.51		
Krypton		Kr	Kr	7439-90-9	83.8	−157.38 tp (73.2 kPa)	−153.22	3.425 g/L		sl H_2O
Krypton difluoride		F_2Kr	KrF_2	13773-81-4	121.8	≈25 dec		3.24		reac H_2O
Lanthanum		La	La	7439-91-0	138.906	918	3464	6.15		s dil acid
Lanthanum boride		B_6La	LaB_6	12008-21-8	203.772	2715		4.76		
Lanthanum bromide		Br_3La	$LaBr_3$	13536-79-3	378.618	788		5.1		s H_2O
Lanthanum carbide		C_2La	LaC_2	12071-15-7	162.927	2360		5.29		
Lanthanum carbonate octahydrate		$C_3H_{16}La_2O_{17}$	$La_2(CO_3)_3 \cdot 8H_2O$	6487-39-4	601.96			2.6		i H_2O; s dil acid
Lanthanum chloride		Cl_3La	$LaCl_3$	10099-58-8	245.264	859		3.84	95.7^{25}	
Lanthanum chloride heptahydrate		$Cl_3H_{14}LaO_7$	$LaCl_3 \cdot 7H_2O$	20211-76-1	371.371	91 dec			95.7^{25}	s EtOH
Lanthanum fluoride	Tysonite	F_3La	LaF_3	13709-38-1	195.901	1493		5.9		i H_2O, acid
Lanthanum hydride		H_3La	LaH_3	13864-01-2	141.93			5.36		
Lanthanum hydroxide		H_3LaO_3	$La(OH)_3$	14507-19-8	189.928	dec			0.000020^{20}	
Lanthanum iodate		I_3LaO_9	$La(IO_3)_3$	13870-19-4	663.614				1.7	
Lanthanum iodide		I_3La	LaI_3	13813-22-4	519.619	778		5.6		s H_2O
Lanthanum monosulfide		LaS	LaS	12031-30-0	170.972	2300		5.61		
Lanthanum nitrate hexahydrate		$H_{12}LaN_3O_{15}$	$La(NO_3)_3 \cdot 6H_2O$	10277-43-7	433.012	≈40 dec			200^{25}	vs EtOH; s ace
Lanthanum nitride		LaN	LaN	25764-10-7	152.913			6.73		
Lanthanum oxide		La_2O_3	La_2O_3	1312-81-8	325.809	2304	3620	6.51		i H_2O; s dil acid

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Lanthanum silicide		$LaSi_2$	$LaSi_2$	12056-90-5	195.077			5.0		
Lanthanum sulfate nonahydrate		$H_{18}La_2O_{21}S_3$	$La_2(SO_4)_3 \cdot 9H_2O$	10294-62-9	728.139			2.82	2.7^{20}	i EtOH
Lanthanum sulfide		La_2S_3	La_2S_3	12031-49-1	374.009	2110		4.9		
Lawrencium		Lr	Lr	22537-19-5	262	1627				
Lead		Pb	Pb	7439-92-1	207.2	327.46	1749	11.3		s conc acid
Lead(II) acetate	Lead diacetate	$C_4H_6O_4Pb$	$Pb(C_2H_3O_2)_2$	301-04-2	325.3	280	dec	3.25	44.3^{20}	
Lead(II) acetate trihydrate		$C_4H_{12}O_{10}Pb$	$Pb(C_2H_3O_2)_2 \cdot 3H_2O$	6080-56-4	427.3	75 dec		2.55		vs H_2O; sl EtOH
Lead(II) acetate, basic	Lead subacetate	$C_4H_{10}O_8Pb_3$	$Pb(C_2H_3O_2)_2 \cdot 2PbO \cdot 2H_2O$	1335-32-6	807.7	dec			6.3^{0}	
Lead(IV) acetate	Lead tetraacetate	$C_8H_{12}O_8Pb$	$Pb(C_2H_3O_2)_4$	546-67-8	443.4	≈175		2.23		reac H_2O, EtOH; s bz, chl
Lead(II) antimonate	Naples yellow	$O_8Pb_3Sb_2$	$Pb_3(SbO_4)_2$	13510-89-9	993.1			6.58		i H_2O, dil acid
Lead(II) arsenate		$As_2O_8Pb_3$	$Pb_3(AsO_4)_2$	3687-31-8	899.4	1042 dec		5.8		i H_2O; s HNO_3
Lead(II) arsenite		As_2O_4Pb	$Pb(AsO_2)_2$	10031-13-7	421			5.85		i H_2O; s dil HNO_3
Lead(II) azide		N_6Pb	$Pb(N_3)_2$	13424-46-9	291.2	exp ≈350		4.7	0.023^{18}	vs HOAc
Lead(II) borate monohydrate		$B_2H_2O_5Pb$	$Pb(BO_2)_2 \cdot H_2O$	10214-39-8	310.8	500 dec		5.6		i H_2O; s dil HNO_3
Lead(II) bromate monohydrate		$Br_2H_2O_7Pb$	$Pb(BrO_3)_2 \cdot H_2O$	10031-21-7	481	≈180 dec		5.53	1.33^{20}	
Lead(II) bromide		Br_2Pb	$PbBr_2$	10031-22-8	367	371	892	6.69	0.975^{25}	i EtOH
Lead(IV) bromide	Lead tetrabromide	Br_4Pb	$PbBr_4$	13701-91-2	526.8					
Lead(II) butanoate	Lead butyrate	$C_8H_{14}O_4Pb$	$Pb(C_4H_7O_2)_2$	819-73-8	381.4	≈90				i H_2O; s dil HNO_3
Lead(II) carbonate	Cerussite	CO_3Pb	$PbCO_3$	598-63-0	267.2	≈315 dec		6.6		i H_2O
Lead(II) carbonate, basic	Hydrocerussite	$C_2H_2O_8Pb_3$	$Pb(OH)_2 \cdot 2PbCO_3$	1319-46-6	775.6	400 dec		≈6.5		i H_2O, EtOH; s acid
Lead(II) chlorate		Cl_2O_6Pb	$Pb(ClO_3)_2$	10294-47-0	374.1	230 dec		3.9	144^{18}	vs EtOH
Lead(II) chloride	Cotunnite	Cl_2Pb	$PbCl_2$	7758-95-4	278.1	501	951	5.98	1.08^{25}	s alk
Lead(IV) chloride	Lead tetrachloride	Cl_4Pb	$PbCl_4$	13463-30-4	349	−15	≈50 dec			
Lead(II) chloride fluoride	Matlockite	ClFPb	PbClF	13847-57-9	261.7			7.05	0.035^{20}	
Lead(II) chromate	Chrome yellow	CrO_4Pb	$PbCrO_4$	7758-97-6	323.2	844		6.12	0.000017^{20}	s alk, dil acid
Lead(II) chromate(VI) oxide	Red lead chromate	CrO_5Pb_2	$PbCrO_4 \cdot PbO$	18454-12-1	546.4					i H_2O
Lead(II) citrate trihydrate		$C_{12}H_{16}O_{17}Pb_3$	$Pb_3(C_6H_5O_7)_2 \cdot 3H_2O$	512-26-5	1053.8					s H_2O; sl EtOH
Lead(II) cyanide		C_2N_2Pb	$Pb(CN)_2$	592-05-2	259.2					sl H_2O; reac acid
Lead(II) 2-ethylhexanoate		$C_{16}H_{30}O_4Pb$	$Pb(C_7H_{15}CO_2)_2$	301-08-6	493.6			1.56		
Lead(II) fluoride		F_2Pb	PbF_2	7783-46-2	245.2	830	1293	8.44	0.0670^{25}	
Lead(IV) fluoride	Lead tetrafluoride	F_4Pb	PbF_4	7783-59-7	283.2	≈600		6.7		
Lead(II) fluoroborate		B_2F_8Pb	$Pb(BF_4)_2$	13814-96-5	380.8					s H_2O
Lead(II) formate		$C_2H_2O_4Pb$	$Pb(CHO_2)_2$	811-54-1	297.2	190 dec		4.63	1.6^{16}	i EtOH
Lead(II) hexafluoro-2,4-pentanedioate		$C_{10}H_2F_{12}O_4Pb$	$Pb(CF_3COCHCOCF_3)_2$	19648-88-5	621.3	155	210			
Lead(II) hexafluorosilicate dihydrate		$F_6H_4O_2PbSi$	$PbSiF_6 \cdot 2H_2O$	1310-03-8	385.3	dec				vs H_2O

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Lead(II) hydrogen arsenate	Schultenite	$AsHO_4Pb$	$PbHAsO_4$	7784-40-9	347.1	280 dec		5.943		i H_2O; s HNO_3, alk
Lead(II) hydrogen phosphate	Lead monetite	HO_4PPb	$PbHPO_4$	15845-52-0	303.2	dec		5.66		
Lead(II) hydroxide		H_2O_2Pb	$Pb(OH)_2$	19783-14-3	241.2	145 dec		7.59	0.00012^{20}	s acid
Lead(II) hypophosphite		$H_4O_4P_2Pb$	$Pb(H_2PO_2)_2$	10294-58-3	337.2	dec				sl H_2O; i EtOH
Lead(II) iodate		I_2O_6Pb	$Pb(IO_3)_2$	25659-31-8	557			6.50	0.0025^{25}	
Lead(II) iodide		I_2Pb	PbI_2	10101-63-0	461	410	872 dec	6.16	0.076^{25}	i EtOH
Lead(II) lactate		$C_6H_{10}O_6Pb$	$Pb(C_3H_5O_3)_2$	18917-82-3	385.3					s H_2O, hot EtOH
Lead(II) metasilicate	Alamoisite	O_3PbSi	$PbSiO_3$	10099-76-0	283.3	764		6.49		i H_2O, os
Lead(II) metavanadate	Lead vanadate	O_6PbV_2	$Pb(VO_3)_2$	10099-79-3	405.1					i H_2O; reac HNO_3
Lead(II) molybdate	Wulfenite	MoO_4Pb	$PbMoO_4$	10190-55-3	367.1	≈1060		6.7		i H_2O; s HNO_3, NaOH
Lead(II) niobate		Nb_2O_6Pb	$Pb(NbO_3)_2$	12034-88-7	489	1343		6.6		i H_2O
Lead(II) nitrate		N_2O_6Pb	$Pb(NO_3)_2$	10099-74-8	331.2	470		4.53	59.7^{25}	sl EtOH
Lead(II) oleate		$C_{36}H_{66}O_4Pb$	$Pb(C_{18}H_{33}O_2)_2$	1120-46-3	770.1					i H_2O; s EtOH, bz, eth
Lead(II) orthosilicate	Lead orthosilicate	O_4Pb_2Si	Pb_2SiO_4	13566-17-1	506.5	743		7.60		
Lead(II) oxalate	Lead oxalate	C_2O_4Pb	PbC_2O_4	814-93-7	295.2	300 dec		5.28	0.00025^{20}	s dil HNO_3
Lead(II) oxide (massicot)	Massicot	OPb	PbO	1317-36-8	223.2	897		9.64		i H_2O, EtOH; s dil HNO_3
Lead(II) oxide (litharge)	Litharge	OPb	PbO	1317-36-8	223.2	trans to massicot 489		9.35		i H_2O, EtOH; s dil HNO_3
Lead(II) oxide hydrate	Lead hydroxide	$H_2O_4Pb_3$	$3PbO \cdot H_2O$	1311-11-1	687.6			7.41		i H_2O; s dil acid
Lead(II,IV) oxide	Lead sesquioxide	O_3Pb_2	Pb_2O_3	1314-27-8	462.4	530 dec		10.05		i H_2O; s alk; reac conc HCl
Lead(II,II,IV) oxide	Lead tetroxide	O_4Pb_3	Pb_3O_4	1314-41-6	685.6	830		8.92		i H_2O, EtOH; s hot HCl
Lead(IV) oxide	Lead dioxide	O_2Pb	PbO_2	1309-60-0	239.2	290 dec		9.64		
Lead(II) 2,4-pentanedioate		$C_{10}H_{14}O_4Pb$	$Pb(CH_3COCHCOCH_3)_2$	15282-88-9	405.4	143				
Lead(II) perchlorate		Cl_2O_8Pb	$Pb(ClO_4)_2$	13453-62-8	406.1				441^{25}	
Lead(II) perchlorate trihydrate		$Cl_2H_6O_{11}Pb$	$Pb(ClO_4)_2 \cdot 3H_2O$	13637-76-8	460.1	100 dec		2.6	441^{25}	s EtOH
Lead(II) phosphate		$O_8P_2Pb_3$	$Pb_3(PO_4)_2$	7446-27-7	811.5	1014		7.01		i H_2O, EtOH
Lead(II) selenate		O_4PbSe	$PbSeO_4$	7446-15-3	350.2			6.37	0.013^{25}	s conc acid
Lead(II) selenide	Clausthalite	PbSe	PbSe	12069-00-0	286.2	1078		8.1		i H_2O; s HNO_3
Lead(II) selenite		O_3PbSe	$PbSeO_3$	7488-51-9	334.2	≈500		7.0		i H_2O
Lead(II) sodium thiosulfate		$Na_4O_9PbS_6$	$Na_4Pb(S_2O_3)_3$	10101-94-7	635.6					sl H_2O
Lead(II) stearate		$C_{36}H_{70}O_4Pb$	$Pb(C_{18}H_{35}O_2)_2$	1072-35-1	774.1	≈100		1.4		i H_2O; s hot EtOH
Lead(II) sulfate	Anglesite	O_4PbS	$PbSO_4$	7446-14-2	303.3	1087		6.29	0.0044^{25}	i acid; sl alk
Lead(II) sulfide	Galena	PbS	PbS	1314-87-0	239.3	1113		7.60		i H_2O; s acid
Lead(II) sulfite		O_3PbS	$PbSO_3$	7446-10-8	287.3	dec				i H_2O; s HNO_3
Lead(II) tantalate	Lead metatantalate	O_6PbTa_2	$Pb(TaO_3)_2$	12065-68-8	665.1			7.9		i H_2O
Lead(II) telluride	Altaite	PbTe	PbTe	1314-91-6	334.8	924		8.164		i H_2O, acid
Lead(II) thiocyanate		$C_2N_2PbS_2$	$Pb(SCN)_2$	592-87-0	323.4			3.82	0.05^{20}	
Lead(II) thiosulfate		O_3PbS_2	PbS_2O_3	13478-50-7	319.3	dec		5.18		i H_2O; s acid

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Lead(II) titanate	Lead metatitanate	O_3PbTi	$PbTiO_3$	12060-00-3	303.1			7.9		i H_2O; reac HCl
Lead(II) tungstate (stolzite)	Stolzite	O_4PbW	$PbWO_4$	7759-01-5	455	1130		8.24	0.03^{20}	s alk
Lead(II) tungstate (raspite)	Raspite	O_4PbW	$PbWO_4$	7759-01-5	455	trans 400		8.46	0.03^{20}	s alk
Lead(II) zirconate		O_3PbZr	$PbZrO_3$	12060-01-4	346.4			$\asymp 8$		i H_2O, alk; s acid
Lithium		Li	Li	7439-93-2	6.941	180.50	1342	0.534		reac H_2O
Lithium acetate		$C_2H_3LiO_2$	$LiC_2H_3O_2$	546-89-4	65.985	286			45.0^{25}	vs EtOH
Lithium acetate dihydrate	Quilonorm	$C_2H_7LiO_4$	$LiC_2H_3O_2 \cdot 2H_2O$	6108-17-4	102.016	58 dec		1.3	45.0^{25}	s EtOH
Lithium aluminum hydride		AlH_4Li	$LiAlH_4$	16853-85-3	37.955	>125 dec		0.917		reac H_2O, EtOH; s eth, thf
Lithium amide		H_2LiN	$LiNH_2$	7782-89-0	22.964	380		1.18		reac H_2O
Lithium arsenate		$AsLi_3O_4$	Li_3AsO_4	13478-14-3	159.743			3.07		sl H_2O; s HOAc
Lithium azide		LiN_3	LiN_3	19597-69-4	48.961			1.83		vs H_2O
Lithium borohydride		BH_4Li	$LiBH_4$	16949-15-8	21.784	268	380 dec	0.66		s alk, eth, thf
Lithium bromide		BrLi	LiBr	7550-35-8	86.845	552	$\asymp 1300$	3.464	181^{25}	s EtOH, eth
Lithium carbonate		CLi_2O_3	Li_2CO_3	554-13-2	73.891	723	1300 dec	2.11	1.30^{25}	s acid; i EtOH
Lithium chlorate		$ClLiO_3$	$LiClO_3$	13453-71-9	90.392	127.6	300 dec	1.119	459^{25}	vs EtOH; sl ace
Lithium chloride		ClLi	LiCl	7447-41-8	42.394	610	1383	2.07	84.5^{25}	s EtOH, ace, py
Lithium chromate dihydrate		$CrH_4Li_2O_6$	$Li_2CrO_4 \cdot 2H_2O$	7789-01-7	165.906	75 dec		2.15		vs H_2O; s EtOH
Lithium dichromate dihydrate		$Cr_2H_4Li_2O_9$	$Li_2Cr_2O_7 \cdot 2H_2O$	10022-48-7	265.901	130 dec		2.34		vs H_2O
Lithium dihydrogen phosphate		H_2LiO_4P	LiH_2PO_4	13453-80-0	103.928	>100		2.461	126^{0}	
Lithium ferrosilicon		FeLiSi	LiFeSi	64082-35-5	90.872					reac H_2O
Lithium fluoride		FLi	LiF	7789-24-4	25.939	848.2	1673	2.640	0.134^{25}	s acid
Lithium formate monohydrate		CH_3LiO_3	$LiCHO_2 \cdot H_2O$	6108-23-2	69.974			1.46		s H_2O
Lithium hydride		HLi	LiH	7580-67-8	7.949	688.7		0.78		reac H_2O, EtOH
Lithium hydroxide		HLiO	LiOH	1310-65-2	23.948	471.1	1626	1.45	12.5^{25}	sl EtOH
Lithium hydroxide monohydrate		H_3LiO_2	$LiOH \cdot H_2O$	1310-66-3	41.964			1.51	12.5^{25}	sl EtOH
Lithium iodate		$ILiO_3$	$LiIO_3$	13765-03-2	181.843			4.502	77.9^{25}	i EtOH
Lithium iodide		ILi	LiI	10377-51-2	133.845	469	1171	4.06	165^{25}	
Lithium iodide trihydrate		H_6ILiO_3	$LiI \cdot 3H_2O$	7790-22-9	187.891	73		2.38	165^{25}	vs EtOH, ace
Lithium metaborate		$BLiO_2$	$LiBO_2$	13453-69-5	49.751	849		2.18		vs H_2O; s EtOH
Lithium metasilicate		Li_2O_3Si	Li_2SiO_3	10102-24-6	89.966	1201		2.52		i cold H_2O; reac dil acid
Lithium niobate		$LiNbO_3$	$LiNbO_3$	12031-63-9	147.845	$\asymp 1240$		4.30		
Lithium nitrate		$LiNO_3$	$LiNO_3$	7790-69-4	68.946	253		2.38	102^{25}	s EtOH
Lithium nitride		Li_3N	Li_3N	26134-62-3	34.83	813		1.27		reac H_2O
Lithium nitrite monohydrate		H_2LiNO_3	$LiNO_2 \cdot H_2O$	13568-33-7*	70.962	>100		1.615	139.5^{25}	vs EtOH
Lithium oxide	Lithia	Li_2O	Li_2O	12057-24-8	29.881	1570		2.013		
Lithium perchlorate		$ClLiO_4$	$LiClO_4$	7791-03-9	106.392	236	430 dec	2.428	58.7^{25}	s EtOH, ace, eth
Lithium peroxide		Li_2O_2	Li_2O_2	12031-80-0	45.881			2.31		s H_2O; i EtOH

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Lithium phosphate	Lithiophosphate	Li_3O_4P	Li_3PO_4	10377-52-3	115.794	1205		2.46	0.027^{25}	
Lithium selenate monohydrate		$H_2Li_2O_5Se$	$Li_2SeO_4 \cdot H_2O$	7790-71-8	174.86			2.56		vs H_2O
Lithium sulfate		Li_2O_4S	Li_2SO_4	10377-48-7	109.946	859		2.21	34.2^{25}	
Lithium sulfate monohydrate		$H_2Li_2O_5S$	$Li_2SO_4 \cdot H_2O$	10102-25-7	127.961	130 dec		2.06	34.2^{25}	sl EtOH
Lithium sulfide		Li_2S	Li_2S	12136-58-2	45.948	1372		1.64		
Lithium thiocyanate		CLiNS	LiSCN	556-65-0	65.025				120^{25}	
Lutetium	Cassiopeium	Lu	Lu	7439-94-3	174.967	1663	3402	9.84		s dil acid
Lutetium boride		B_4Lu	LuB_4	12688-52-7	218.211	2600		$\asymp$7.0		
Lutetium bromide		Br_3Lu	$LuBr_3$	14456-53-2	414.679	1025				vs H_2O
Lutetium chloride		Cl_3Lu	$LuCl_3$	10099-66-8	281.325	925		3.98		s H_2O
Lutetium fluoride		F_3Lu	LuF_3	13760-81-1	231.962	1182	2200	8.3		i H_2O
Lutetium iodide	Lutetium triiodide	I_3Lu	LuI_3	13813-45-1	555.68	1050		$\asymp$5.6		vs H_2O
Lutetium nitride		LuN	LuN	12125-25-6	188.974			11.6		
Lutetium oxide		Lu_2O_3	Lu_2O_3	12032-20-1	397.932	2427	3980	9.41		
Lutetium sulfate octahydrate		$H_{16}Lu_2O_{20}S_3$	$Lu_2(SO_4)_3 \cdot 8H_2O$	13473-77-3	782.247					vs H_2O
Lutetium sulfide		Lu_2S_3	Lu_2S_3	12163-20-1	446.132	1750 dec		6.26		
Lutetium telluride		Lu_2Te_3	Lu_2Te_3	12163-22-3	732.73			7.8		
Magnesium		Mg	Mg	7439-95-4	24.305	650	1090	1.74		s dil acid
Magnesium acetate		$C_4H_6MgO_4$	$Mg(C_2H_3O_2)_2$	142-72-3	142.394	323 dec		1.50	65.6^{25}	
Magnesium acetate tetrahydrate		$C_4H_{14}MgO_8$	$Mg(C_2H_3O_2)_2 \cdot 4H_2O$	16674-78-5	214.454	80 dec		1.45	65.6^{25}	vs EtOH
Magnesium amide		H_4MgN_2	$Mg(NH_2)_2$	7803-54-5	56.35	dec		1.39		reac H_2O
Magnesium antimonide		Mg_3Sb_2	Mg_3Sb_2	12057-75-9	316.435	1245		3.99		
Magnesium boride		B_2Mg	MgB_2	12007-25-9	45.927	800 dec		2.57		
Magnesium bromate hexahydrate		$Br_2H_{12}MgO_{12}$	$Mg(BrO_3)_2 \cdot 6H_2O$	7789-36-8	388.201	200 dec		2.29	98^{25}	
Magnesium bromide		Br_2Mg	$MgBr_2$	7789-48-2	184.113	711		3.72	102^{25}	
Magnesium bromide hexahydrate		$Br_2H_{12}MgO_6$	$MgBr_2 \cdot 6H_2O$	13446-53-2	292.204	165 dec		2.0	102^{25}	s EtOH
Magnesium carbonate	Magnesite	$CMgO_3$	$MgCO_3$	546-93-0	84.314	990		3.05	0.18^{20}	i EtOH; s acid
Magnesium chlorate hexahydrate		$Cl_2H_{12}MgO_{12}$	$Mg(ClO_3)_2 \cdot 6H_2O$	13446-19-0	299.298	$\asymp$35 dec		1.80	142^{25}	sl EtOH
Magnesium chloride	Magnogene	Cl_2Mg	$MgCl_2$	7786-30-3	95.21	714	1412	2.325	56.0^{25}	
Magnesium chloride hexahydrate	Bischofite	$Cl_2H_{12}MgO_6$	$MgCl_2 \cdot 6H_2O$	7791-18-6	203.301	$\asymp$100 dec		1.56	56.0^{25}	s EtOH
Magnesium chromate heptahydrate		$CrH_{14}MgO_{11}$	$MgCrO_4 \cdot 7H_2O$	13423-61-5*	266.405			1.695	54.8^{25}	
Magnesium fluoride	Sellaite	F_2Mg	MgF_2	7783-40-6	62.302	1263	2227	3.148	0.013^{25}	
Magnesium formate dihydrate		$C_2H_6MgO_6$	$Mg(CHO_2)_2 \cdot 2H_2O$	6150-82-9	150.37	dec				s H_2O; i EtOH
Magnesium germanide		$GeMg_2$	Mg_2Ge	1310-52-7	121.22	1117		3.09		
Magnesium hexafluorosilicate hexahydrate	Magnesium fluorosilicate hexahydrate	$F_6H_{12}MgO_6Si$	$MgSiF_6 \cdot 6H_2O$	60950-56-3	274.472	120 dec		1.79	39.3^{18}	i EtOH
Magnesium hydride		H_2Mg	MgH_2	7693-27-8	26.321	327		1.45		reac H_2O

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Magnesium hydrogen phosphate trihydrate	Newberyite	H_7MgO_7P	$MgHPO_4 \cdot 3H_2O$	7757-86-0	174.331	550 dec		2.13		sl H_2O; s dil acid
Magnesium hydroxide	Brucite	H_2MgO_2	$Mg(OH)_2$	1309-42-8	58.32	350		2.37	0.00069^{20}	s dil acid
Magnesium iodate tetrahydrate		$H_8I_2MgO_{10}$	$Mg(IO_3)_2 \cdot 4H_2O$	7790-32-1*	446.172	210 dec		3.3	11.1^{25}	
Magnesium iodide		I_2Mg	MgI_2	10377-58-9	278.114	634		4.43	146^{25}	
Magnesium iodide octahydrate		$H_{16}I_2MgO_8$	$MgI_2 \cdot 8H_2O$	7790-31-0	422.236	41 dec		2.10	146^{25}	s EtOH
Magnesium metasilicate		MgO_3Si	$MgSiO_3$	13776-74-4	100.389	≈1550 dec		3.19		i H_2O; sl HF
Magnesium nitrate		MgN_2O_6	$Mg(NO_3)_2$	10377-60-3	148.314			≈2.3	71.2^{25}	
Magnesium nitrate dihydrate		$H_4MgN_2O_8$	$Mg(NO_3)_2 \cdot 2H_2O$	15750-45-5	184.345	≈100 dec		1.45	71.2^{25}	s EtOH
Magnesium nitrate hexahydrate	Nitromagnesite	$H_{12}MgN_2O_{12}$	$Mg(NO_3)_2 \cdot 6H_2O$	13446-18-9	256.406	≈95 dec		1.46	71.2^{25}	s EtOH
Magnesium nitride		Mg_3N_2	Mg_3N_2	12057-71-5	100.928	≈1500 dec		2.71		
Magnesium nitrite trihydrate		$H_6MgN_2O_7$	$Mg(NO_2)_2 \cdot 3H_2O$	15070-34-5	170.362	100 dec			129.9^{25}	s EtOH
Magnesium orthosilicate	Forsterite	Mg_2O_4Si	Mg_2SiO_4	26686-77-1	140.694	1897		3.21		i H_2O
Magnesium oxalate		C_2MgO_4	MgC_2O_4	547-66-0	112.324				0.038^{25}	
Magnesium oxalate dihydrate		$C_2H_4MgO_6$	$MgC_2O_4 \cdot 2H_2O$	6150-88-5	148.354				0.038^{25}	i EtOH; s dil acid
Magnesium oxide	Magnesia	MgO	MgO	1309-48-4	40.304	2825	3600	3.6		sl H_2O; i EtOH
Magnesium perchlorate	Dehydrite	Cl_2MgO_8	$Mg(ClO_4)_2$	10034-81-8	223.205	250 dec		2.2	100^{25}	
Magnesium perchlorate hexahydrate		$Cl_2H_{12}MgO_{14}$	$Mg(ClO_4)_2 \cdot 6H_2O$	13446-19-0	331.297	190 dec		1.98	100^{25}	s EtOH
Magnesium permanganate hexahydrate		$H_{12}MgMn_2O_{14}$	$Mg(MnO_4)_2 \cdot 6H_2O$	10377-62-5	370.268	dec		2.18		s H_2O
Magnesium peroxide	Magnesium dioxide	MgO_2	MgO_2	1335-26-8	56.304	100 dec		≈3.0		i H_2O; s dil acid
Magnesium phosphate octahydrate	Bobierrite	$H_{16}Mg_3O_{16}P_2$	$Mg_3(PO_4)_2 \cdot 8H_2O$	13446-23-6	406.98			2.17	0.00009^{20}	s acid
Magnesium phosphate pentahydrate		$H_{10}Mg_3O_{13}P_2$	$Mg_3(PO_4)_2 \cdot 5H_2O$	7757-87-1*	352.934	400 dec			0.00009^{20}	s dil acid
Magnesium phosphide		Mg_3P_2	Mg_3P_2	12057-74-8	134.863			2.06		reac H_2O
Magnesium pyrophosphate trihydrate		$H_6Mg_2O_{10}P_2$	$Mg_2P_2O_7 \cdot 3H_2O$	10102-34-8	276.6	100 dec		2.56		i H_2O; s acid
Magnesium selenate hexahydrate		$H_{12}MgO_{10}Se$	$MgSeO_4 \cdot 6H_2O$	13446-28-1	275.35			1.928	55.5^{25}	
Magnesium selenide		MgSe	MgSe	1313-04-8	103.27			4.2		reac H_2O
Magnesium selenite hexahydrate		$H_{12}MgO_9Se$	$MgSeO_3 \cdot 6H_2O$	15593-61-0	259.36			2.09		i H_2O; s dil acid
Magnesium silicide		Mg_2Si	Mg_2Si	22831-39-6	76.696	1102		1.99		reac H_2O
Magnesium stannide		Mg_2Sn	Mg_2Sn	1313-08-2	167.32	771		3.60		s H_2O, dil HCl
Magnesium sulfate		MgO_4S	$MgSO_4$	7487-88-9	120.369	1127		2.66	35.7^{25}	
Magnesium sulfate monohydrate	Kieserite	H_2MgO_5S	$MgSO_4 \cdot H_2O$	14168-73-1	138.384	150 dec		2.57	35.7^{25}	
Magnesium sulfate heptahydrate	Epsomite	$H_{14}MgO_{11}S$	$MgSO_4 \cdot 7H_2O$	10034-99-8	246.475	150 dec		1.67	35.7^{25}	sl EtOH
Magnesium sulfide		MgS	MgS	12032-36-9	56.371	2226		2.68		reac H_2O

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Magnesium sulfite trihydrate		H_6MgO_6S	$MgSO_3 \cdot 3H_2O$	19086-20-5	158.415			2.12	0.79^{25}	
Magnesium sulfite hexahydrate		$H_{12}MgO_9S$	$MgSO_3 \cdot 6H_2O$	13446-29-2	212.461	200 dec		1.72	0.79^{25}	i EtOH
Magnesium thiosulfate hexahydrate	Magnesium hyposulfite hexahydrate	$H_{12}MgO_9S_2$	$MgS_2O_3 \cdot 6H_2O$	13446-30-5	244.527	170 dec		1.82	93^{25}	i EtOH
Magnesium titanate	Geikielite	MgO_3Ti	$MgTiO_3$	1312-99-8	120.17	1565		3.85		
Magnesium trisilicate		$Mg_2O_8Si_3$	$Mg_2Si_3O_8$	14987-04-3	260.862					i H_2O, EtOH
Magnesium tungstate		MgO_4W	$MgWO_4$	13573-11-0	272.14			6.89	0.016^{20}	i EtOH
Manganese		Mn	Mn	7439-96-5	54.938	1246	2061	7.3		s dil acids
Manganese(II) acetate tetrahydrate		$C_4H_{14}MnO_8$	$Mn(C_2H_3O_2)_2 \cdot 4H_2O$	6156-78-1	245.087	80		1.59		s H_2O, EtOH
Manganese antimonide		MnSb	MnSb	12032-82-5	176.698	840		6.9		
Manganese antimonide (Mn_2Sb)		Mn_2Sb	Mn_2Sb	12032-97-2	231.636	948		7.0		
Manganese boride (MnB)		BMn	MnB	12045-15-7	65.749	1890		6.45		
Manganese boride (Mn_2B)		BMn_2	Mn_2B	12045-16-8	120.687	1580		7.20		
Manganese boride (MnB_2)	Manganese diboride	B_2Mn	MnB_2	12228-50-1	76.56	1827		5.3		
Manganese(II) bromide	Manganese dibromide	Br_2Mn	$MnBr_2$	13446-03-2	214.746	698		4.385	151^{25}	
Manganese(II) bromide tetrahydrate		$Br_2H_8MnO_4$	$MnBr_2 \cdot 4H_2O$	10031-20-6	286.808	64 dec			151^{25}	
Manganese carbide		CMn_3	Mn_3C	12266-65-8	176.825	1520		6.89		
Manganese(II) carbonate	Manganese dichloride	$CMnO_3$	$MnCO_3$	598-62-9	114.947	> 200 dec		3.70	0.00008^{20}	s dil acid
Manganese carbonyl	Dimanganese decacarbonyl	$C_{10}Mn_2O_{10}$	$Mn_2(CO)_{10}$	10170-69-1	389.977	154		1.75		i H_2O; s os
Manganese(II) chloride	Sacchite	Cl_2Mn	$MnCl_2$	7773-01-5	125.843	650	1190	2.977	77.3^{25}	s py, EtOH; i eth
Manganese(II) chloride tetrahydrate		$Cl_2H_8MnO_4$	$MnCl_2 \cdot 4H_2O$	13446-34-9	197.905	87.5		1.913	77.3^{25}	s EtOH; i eth
Manganese(II) dihydrogen phosphate dihydrate		$H_8MnO_{10}P_2$	$Mn(H_2PO_4)_2 \cdot 2H_2O$	18718-07-5	284.944					s H_2O; i EtOH
Manganese(II) fluoride	Manganese difluoride	F_2Mn	MnF_2	7782-64-1	92.935	930		3.98	1.02^{25}	i EtOH
Manganese(III) fluoride		F_3Mn	MnF_3	7783-53-1	111.933	> 600 dec		3.54		reac H_2O
Manganese(II) hydroxide	Pyrochroite	H_2MnO_2	$Mn(OH)_2$	18933-05-6	88.953	dec		3.26	0.00034^{20}	
Manganese(III) hydroxide	Manganite	$HMnO_2$	MnO(OH)	1332-63-4	87.945	250 dec		≈ 4.3		i H_2O
Manganese(II) iodide	Manganese diiodide	I_2Mn	MnI_2	7790-33-2	308.747	638		5.04		s H_2O, EtOH
Manganese(II) iodide tetrahydrate		$H_8I_2MnO_4$	$MnI_2 \cdot 4H_2O$	7790-33-2*	380.809					vs H_2O; s EtOH
Manganese(II) metasilicate	Manganjustite	MnO_3Si	$MnSiO_3$	7759-00-4	131.022	1291		3.48		i H_2O
Manganese(II) molybdate		$MnMoO_4$	$MnMoO_4$	14013-15-1	214.88			4.05		
Manganese(II) nitrate		MnN_2O_6	$Mn(NO_3)_2$	10377-93-2	178.948			2.2	161^{25}	s diox, thf
Manganese(II) nitrate hexahydrate		$H_{12}MnN_2O_{12}$	$Mn(NO_3)_2 \cdot 6H_2O$	10377-66-9	287.04	28 dec		1.8	161^{25}	vs EtOH

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Manganese(II) nitrate tetrahydrate		$H_8MnN_2O_{10}$	$Mn(NO_3)_2 \cdot 4H_2O$	20694-39-7	251.01	37.1 dec		2.13	161^{25}	s EtOH
Manganese(II) orthosilicate	Tephroite	Mn_2O_4Si	Mn_2SiO_4	13568-32-6	201.96			4.11		i H_2O
Manganese(II) oxalate dihydrate		$C_2H_4MnO_6$	$MnC_2O_4 \cdot 2H_2O$	6556-16-7	178.987	150 dec		2.45	0.032^{20}	s acid
Manganese(II) oxide	Manganosite	MnO	MnO	1344-43-0	70.937	1839		5.37		i H_2O; s acid
Manganese(II,III) oxide	Hausmannite	Mn_3O_4	Mn_3O_4	1317-35-7	228.812	1567		4.84		i H_2O; s HCl
Manganese(III) oxide	Manganese trioxide	Mn_2O_3	Mn_2O_3	1317-34-6	157.874	1080 dec		≈5.0		i H_2O
Manganese(IV) oxide	Manganese dioxide	MnO_2	MnO_2	1313-13-9	86.937	535 dec		5.08		i H_2O, HNO_3
Manganese(VII) oxide	Manganese heptoxide	Mn_2O_7	Mn_2O_7	12057-92-0	221.872	5.9	95 exp	2.40		vs H_2O
Manganese(II) perchlorate hexahydrate		$Cl_2H_{12}MnO_{14}$	$Mn(ClO_4)_2 \cdot 6H_2O$	15364-94-0	361.93			2.10		
Manganese phosphide		MnP	MnP	12032-78-9	85.912	1147		5.49		
Manganese phosphide (Mn_2P)		Mn_2P	Mn_2P	12333-54-9	140.85	1327		6.0		
Manganese(II) pyrophosphate		$Mn_2O_7P_2$	$Mn_2P_2O_7$	53731-35-4	283.819	1196		3.71		i H_2O
Manganese(II) selenide		MnSe	MnSe	1313-22-0	133.9	1460		5.45		i H_2O
Manganese(II) sulfate		MnO_4S	$MnSO_4$	7785-87-7	151.002	700	850 dec	3.25	63.7^{25}	
Manganese(II) sulfate monohydrate	Szmikite	H_2MnO_5S	$MnSO_4 \cdot H_2O$	10034-96-5	169.017			2.95	63.7^{25}	i EtOH
Manganese(II) sulfate tetrahydrate		H_8MnO_8S	$MnSO_4 \cdot 4H_2O$	10101-68-5	223.063	38 dec		2.26	63.7^{25}	i EtOH
Manganese(II) sulfide (α form)	Alabandite	MnS	MnS	18820-29-6	87.004	1610		4.0		i H_2O; s dil acid
Manganese(II) sulfide (β form)		MnS	MnS	18820-29-6	87.004			3.3		i H_2O; s dil acid
Manganese(II) sulfide (γ form)		MnS	MnS	18820-29-6	87.004			≈3.3		i H_2O; s dil acid
Manganese(II) telluride		MnTe	MnTe	12032-88-1	182.54	≈1150		6.0		
Manganese(II) tetraborate octahydrate		$B_4H_{16}MnO_{15}$	$MnB_4O_7 \cdot 8H_2O$	12228-91-0	354.3					i H_2O, EtOH; s dil acid
Manganese(II) titanate	Pyrophenite	MnO_3Ti	$MnTiO_3$	12032-74-5	150.803	1360		4.55		
Manganese(II) tungstate	Huebnerite	MnO_4W	$MnWO_4$	13918-22-4	302.78			7.2	0.0054^{20}	
Mendelevium		Md	Md	7440-11-1	258	827				
Mercury	Quicksilver	Hg	Hg	7439-97-6	200.59	−38.837 tp	356.73	13.5336		i H_2O
Mercury(I) acetate	Mercurous acetate	$C_4H_6Hg_2O_4$	$Hg_2(C_2H_3O_2)_2$	631-60-7	519.27	dec				sl H_2O; i EtOH, eth
Mercury(II) acetate	Mercuric acetate	$C_4H_6HgO_4$	$Hg(C_2H_3O_2)_2$	1600-27-7	318.68	179 dec		3.28	25^{10}	s EtOH
Mercury(II) amide chloride	Aminomercuric chloride	ClH_2HgN	$Hg(NH_2)Cl$	10124-48-8	252.07		subl	5.38		i H_2O, EtOH; s warm acid
Mercury(I) bromate	Mercurous bromate	$Br_2Hg_2O_6$	$Hg_2(BrO_3)_2$	13465-33-3	656.98	dec				i H_2O; sl acid
Mercury(II) bromate	Mercuric bromate	Br_2HgO_6	$Hg(BrO_3)_2$	26522-91-8	456.39	130 dec			0.15	s acid
Mercury(I) bromide	Mercurous bromide	Br_2Hg_2	Hg_2Br_2	15385-58-7	560.99	407		7.307		i H_2O, EtOH, eth
Mercury(II) bromide	Mercuric bromide	Br_2Hg	$HgBr_2$	7789-47-1	360.4	236	322	6.05	0.61^{25}	sl chl; s EtOH, MeOH
Mercury(I) carbonate	Mercurous carbonate	CHg_2O_3	Hg_2CO_3	6824-78-8	461.19	130 dec			0.0000045	i EtOH

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Mercury(I) chlorate	Mercurous chlorate	$Cl_2Hg_2O_6$	$Hg_2(ClO_3)_2$	10294-44-7	568.08	≍250 dec		6.409		sl H_2O; s EtOH
Mercury(II) chlorate	Mercuric chlorate	Cl_2HgO_6	$Hg(ClO_3)_2$		367.49	dec		4.998	25	
Mercury(I) chloride	Calomel	Cl_2Hg_2	Hg_2Cl_2	10112-91-1	472.09	525 tp	383 sp	7.16	0.0004^{25}	i EtOH, eth
Mercury(II) chloride	Mercuric chloride	Cl_2Hg	$HgCl_2$	7487-94-7	271.5	276	304	5.6	7.31^{25}	sl bz; s EtOH, MeOH, ace, eth
Mercury(II) chromate	Mercuric chromate	$CrHgO_4$	$HgCrO_4$	13444-75-2	316.58			6.06		sl H_2O
Mercury(II) cyanide	Cianurina	C_2HgN_2	$Hg(CN)_2$	592-04-1	252.62	320 dec		4.00	11.4^{25}	s EtOH; sl eth
Mercury(II) dichromate	Mercuric dichromate	Cr_2HgO_7	$HgCr_2O_7$	7789-10-8	416.58					i H_2O; s acid
Mercury(I) fluoride	Mercurous fluoride	F_2Hg_2	Hg_2F_2	13967-25-4	439.18	570 dec	subl	8.73		reac H_2O
Mercury(II) fluoride	Mercuric fluoride	F_2Hg	HgF_2	7783-39-3	238.59	645 dec		8.95		reac H_2O
Mercury(II) fulminate	Mercuric fulminate	$C_2HgN_2O_2$	$Hg(CNO)_2$	628-86-4	284.62	exp		4.42		sl H_2O; s EtOH, NH_4OH
Mercury(II) hydrogen arsenate	Mercuric arsenate	$AsHHgO_4$	$HgHAsO_4$	7784-37-4	340.52					i H_2O; s acid
Mercury(II) iodate	Mercuric iodate	HgI_2O_6	$Hg(IO_3)_2$	7783-32-6	550.4	175 dec				i H_2O
Mercury(I) iodide	Mercurous iodide	Hg_2I_2	Hg_2I_2	15385-57-6	654.99	290		7.70		i H_2O, EtOH, eth
Mercury(II) iodide	Coccinite	HgI_2	HgI_2	7774-29-0	454.4	259	354	6.28	0.0055^{25}	sl EtOH, ace, eth
Mercury(I) nitrate	Mercurous nitrate	$Hg_2N_2O_6$	$Hg_2(NO_3)_2$	10415-75-5	525.19					sl H_2O
Mercury(I) nitrate dihydrate	Mercurous nitrate dihydrate	$H_4Hg_2N_2O_8$	$Hg_2(NO_3)_2 \cdot 2H_2O$	14836-60-3	561.22	70 dec		4.8		sl H_2O
Mercury(II) nitrate	Mercuric nitrate	HgN_2O_6	$Hg(NO_3)_2$	10045-94-0	324.6	79		4.3		s H_2O; i EtOH
Mercury(II) nitrate monohydrate	Mercuric nitrate monohydrate	$H_2HgN_2O_7$	$Hg(NO_3)_2 \cdot H_2O$	7783-34-8	342.62			4.3		s H_2O, dil acid
Mercury(II) nitrate dihydrate	Mercuric nitrate dihydrate	$H_4HgN_2O_8$	$Hg(NO_3)_2 \cdot 2H_2O$	22852-67-1	360.63			4.78		s H_2O
Mercury(I) nitrite	Mercurous nitrite	$Hg_2N_2O_4$	$Hg_2(NO_2)_2$	13492-25-6	493.19	100 dec		7.3		reac H_2O
Mercury(I) oxalate	Mercurous oxalate	$C_2Hg_2O_4$	$Hg_2C_2O_4$	2949-11-3	489.2					i H_2O; sl HNO_3
Mercury(II) oxalate	Mercuric oxalate	C_2HgO_4	HgC_2O_4	3444-13-1	288.61	165 dec				i H_2O
Mercury(I) oxide	Mercurous oxide	Hg_2O	Hg_2O	15829-53-5	417.18	100 dec		9.8		i H_2O; s HNO_3
Mercury(II) oxide	Mercuric oxide	HgO	HgO	21908-53-2	216.59	500 dec		11.14		i H_2O, EtOH; s dil acid
Mercury(II) oxide sulfate	Mercuric oxide sulfate	Hg_3O_6S	$(Hg_3O_2)SO_4$	1312-03-4	729.83					i H_2O; s acid
Mercury(II) oxycyanide	Mercuric oxycyanide	$C_2Hg_2N_2O$	$Hg(CN)_2 \cdot HgO$	1335-31-5	469.21	exp		4.44	11.4^{25}	
Mercury(I) perchlorate tetrahydrate	Mercurous perchlorate tetrahydrate	$Cl_2H_8Hg_2O_{12}$	$Hg_2(ClO_4)_2 \cdot 4H_2O$	65202-12-2	672.14	64			442^{25}	
Mercury(II) perchlorate trihydrate	Mercuric perchlorate trihydrate	$Cl_2H_6HgO_{11}$	$Hg(ClO_4)_2 \cdot 3H_2O$	7616-83-3	453.54					
Mercury(II) phosphate	Mercuric phosphate	$Hg_3O_8P_2$	$Hg_3(PO_4)_2$	7782-66-3	791.71					i H_2O, EtOH; s acid
Mercury(II) selenide	Tiemannite	HgSe	HgSe	20601-83-6	279.55		subl	8.21		i H_2O
Mercury(I) sulfate	Mercurous sulfate	Hg_2O_4S	Hg_2SO_4	7783-36-0	497.24			7.56	0.051^{25}	s dil HNO_3
Mercury(II) sulfate	Mercuric sulfate	HgO_4S	$HgSO_4$	7783-35-9	296.65			6.47		reac H_2O
Mercury(II) sulfide (red)	Cinnabar	HgS	HgS	1344-48-5	232.66	trans to blk HgS 344		8.17		i H_2O, acid; s aqua regia
Mercury(II) sulfide (black)	Metacinnabar	HgS	HgS	1344-48-5	232.66	850		7.70		i H_2O; s acid, EtOH
Mercury(II) telluride	Coloradoite	HgTe	HgTe	12068-90-5	328.19	673		8.63		

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Mercury(I) thiocyanate	Mercurous thiocyanate	$C_2Hg_2N_2S_2$	$Hg_2(SCN)_2$		517.35	dec			0.03^{25}	s HCl, KCNS
Mercury(II) thiocyanate	Mercuric thiocyanate	$C_2HgN_2S_2$	$Hg(SCN)_2$	592-85-8	316.76	≍165 dec		3.71	0.070^{25}	s dil HCl
Mercury(I) tungstate	Mercury(I) tungsten oxide	Hg_2O_4W	Hg_2WO_4	38705-19-0	649.02	dec				i H_2O, EtOH
Mercury(II) tungstate	Mercury(II) tungsten oxide	HgO_4W	$HgWO_4$	37913-38-5	448.43	dec				i H_2O, EtOH
Metaboric acid (α form)		BHO_2	HBO_2	13460-50-9	43.818	176		1.784		s H_2O
Metaboric acid (β form)		BHO_2	HBO_2	13460-50-9	43.818	201		2.045		s H_2O
Metaboric acid (γ form)		BHO_2	HBO_2	13460-50-9	43.818	236		2.487		s H_2O
Metaphosphoric acid		HO_3P	HPO_3	37267-86-0	79.98					sl H_2O; s EtOH
Metasilicic acid		H_2O_3Si	H_2SiO_3	7699-41-4	78.1					i H_2O; s HF
Methylgermane		CH_6Ge	GeH_3CH_3	1449-65-6	90.67	−158	−23	3.706 g/L		
Methylstannane		CH_6Sn	SnH_3CH_3	1631-78-3	136.769		0	5.590 g/L		reac H_2O
Molybdenum		Mo	Mo	7439-98-7	95.94	2623	4639	10.2		i H_2O, dil acid, alk
Molybdenum(VI) acid monohydrate	Molybdic acid monohydrate	H_4MoO_5	$H_2MoO_4 \cdot H_2O$	7782-91-4	179.97			3.1		sl H_2O; s alk
Molybdenum boride (Mo_2B)		BMo_2	Mo_2B	12006-99-4	202.69	2000		9.2		
Molybdenum boride (Mo_2B_5)	Molybdenum pentaboride	B_5Mo_2	Mo_2B_5	12007-97-5	245.94	1600		≍7.2		
Molybdenum(II) bromide	Molybdenum dibromide	Br_2Mo	$MoBr_2$	13446-56-5	255.75	900 dec				
Molybdenum(III) bromide	Molybdenum tribromide	Br_3Mo	$MoBr_3$	13446-57-6	335.65	977		4.89		i H_2O
Molybdenum(IV) bromide	Molybdenum tetrabromide	Br_4Mo	$MoBr_4$	13520-59-7	415.56	dec				reac H_2O
Molybdenum carbide		CMo	MoC	12011-97-1	107.95	2577				
Molybdenum carbide (Mo_2C)		CMo_2	Mo_2C	12069-89-5	203.89	2687		9.18		
Molybdenum(II) chloride	Molybdenum dichloride	Cl_2Mo	$MoCl_2$	13478-17-6	166.85	530 dec				
Molybdenum(III) chloride	Molybdenum trichloride	Cl_3Mo	$MoCl_3$	13478-18-7	202.3	1027		3.74		i H_2O
Molybdenum(IV) chloride	Molybdenum tetrachloride	Cl_4Mo	$MoCl_4$	13320-71-3	237.75	> 170 dec				reac H_2O
Molybdenum(V) chloride	Molybdenum pentachloride	Cl_5Mo	$MoCl_5$	10241-05-1	273.2	194	268	2.93		s EtOH, eth
Molybdenum(VI) dioxydichloride	Molybdenum oxychloride	Cl_2MoO_2	MoO_2Cl_2	13637-68-8	198.84	≍175		3.31		reac H_2O
Molybdenum(III) fluoride	Molybdenum trifluoride	F_3Mo	MoF_3	20193-58-2	152.94	> 600		4.64		i H_2O
Molybdenum(IV) fluoride	Molybdenum tetrafluoride	F_4Mo	MoF_4	23412-45-5	171.93	dec				reac H_2O
Molybdenum(V) fluoride	Molybdenum pentafluoride	F_5Mo	MoF_5	13819-84-6	190.93	67	213.6	3.5		
Molybdenum(VI) fluoride	Molybdenum hexafluoride	F_6Mo	MoF_6	7783-77-9	209.93	17.5	34.0	2.54		reac H_2O
Molybdenum hexacarbonyl		C_6MoO_6	$Mo(CO)_6$	13939-06-5	264	148	155 dec	1.96		i H_2O; s bz; sl eth
Molybdenum(II) iodide	Molybdenum diiodide	I_2Mo	MoI_2	14055-74-4	349.75			5.278		

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Molybdenum(III) iodide	Molybdenum triiodide	I_3Mo	MoI_3	14055-75-5	476.65	927				i H_2O
Molybdenum(VI) metaphosphate	Molybdenum metaphosphate	$MoO_{18}P_6$	$Mo(PO_3)_6$	133863-98-6	569.77			3.28		i H_2O, acid
Molybdenum nitride		MoN	MoN	12033-19-1	109.95	1750		9.20		
Molybdenum nitride (Mo_2N)		Mo_2N	Mo_2N	12033-31-7	205.89	790 dec		9.46		
Molybdenum(III) oxide	Molybdenum sesquioxide	Mo_2O_3	Mo_2O_3	1313-29-7	239.88					i H_2O; sl acid
Molybdenum(IV) oxide	Molybdenum dioxide	MoO_2	MoO_2	18868-43-4	127.94	≈1100 dec		6.47		sl H_2O
Molybdenum(VI) oxide	Molybdenum trioxide	MoO_3	MoO_3	1313-27-5	143.94	801	1155	4.70	0.14^{20}	s conc acid
Molybdenum(VI) oxytetrachloride		Cl_4MoO	$MoOCl_4$	13814-75-0	253.75	101				
Molybdenum(VI) oxytetrafluoride		F_4MoO	$MoOF_4$	14459-59-7	187.93	98	186.0			
Molybdenum(V) oxytrichloride	Molybdenum trichloride oxide	Cl_3MoO	$MoOCl_3$	13814-74-9	218.3	297	subl			reac H_2O
Molybdenum phosphide		MoP	MoP	12163-69-8	126.91			7.34		
Molybdenum(IV) selenide	Molybdenum diselenide	$MoSe_2$	$MoSe_2$	12058-18-3	253.86	>1200		6.90		
Molybdenum silicide ($MoSi_2$)	Molybdenum disilicide	$MoSi_2$	$MoSi_2$	12136-78-6	152.11	≈1900		6.2		i H_2O; s HF
Molybdenum(IV) sulfide	Molybdenite	MoS_2	MoS_2	1317-33-5	160.07	1750		5.06		i H_2O; s conc acid
Molybdenum(IV) telluride	Molybdenum ditelluride	$MoTe_2$	$MoTe_2$	12058-20-7	351.14			7.7		
Neodymium		Nd	Nd	7440-00-8	144.24	1021	3074	7.01		
Neodymium boride		B_6Nd	NdB_6	12008-23-0	209.11	2610		4.93		
Neodymium bromide		Br_3Nd	$NdBr_3$	13536-80-6	383.95	682	1540	5.3		s H_2O
Neodymium chloride		Cl_3Nd	$NdCl_3$	10024-93-8	250.6	758	1600	4.13	100^{25}	vs EtOH; i eth, chl
Neodymium chloride hexahydrate		$Cl_3H_{12}NdO_6$	$NdCl_3 \cdot 6H_2O$	13477-89-9	358.69	124 dec		2.3	100^{25}	s EtOH
Neodymium fluoride		F_3Nd	NdF_3	13709-42-7	201.24	1377	2300	6.51		i H_2O
Neodymium iodide		I_3Nd	NdI_3	13813-24-6	524.95	784		5.85		s H_2O
Neodymium nitrate		N_3NdO_9	$Nd(NO_3)_3$	10045-95-1	330.26				152^{25}	s EtOH
Neodymium nitrate hexahydrate		$H_{12}N_3NdO_{15}$	$Nd(NO_3)_3 \cdot 6H_2O$	14517-29-4	438.35				152^{25}	s EtOH, ace
Neodymium nitride		NNd	NdN	25764-11-8	158.25			7.69		
Neodymium oxide	Neodymia	Nd_2O_3	Nd_2O_3	1313-97-9	336.48	2233	3760	7.24		i H_2O; s dil acid
Neodymium sulfate		$Nd_2O_{12}S_3$	$Nd_2(SO_4)_3$	13477-91-3	576.67	≈700 dec			7.1^{20}	
Neodymium sulfide		Nd_2S_3	Nd_2S_3	12035-32-4	384.68	2207		5.46		
Neodymium telluride		Nd_2Te_3	Nd_2Te_3	12035-35-7	671.28	1377		7.0		
Neon		Ne	Ne	7440-01-9	20.18	−248.61 tp (43 kPa)	−246.08	0.825 g/L		sl H_2O
Neptunium		Np	Np	7439-99-8	237	644		20.2		s HCl
Neptunium(IV) oxide	Neptunium dioxide	NpO_2	NpO_2	12035-79-9	269	2547		11.1		
Nickel		Ni	Ni	7440-02-0	58.693	1455	2913	8.90		i H_2O; sl dil acid
Nickel(II) ammonium sulfate hexahydrate		$H_{20}N_2NiO_{14}S_2$	$Ni(NH_4)_2(SO4)_2 \cdot 6H_2O$	15699-18-0	394.989			1.923	6.5^{20}	i EtOH

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Nickel antimonide	Breithauptite	NiSb	NiSb	12035-52-8	180.453	1147		8.74		
Nickel(II) arsenate octahydrate		$As_2H_{16}Ni_3O_{16}$	$Ni_3(AsO_4)_2 \cdot 8H_2O$	7784-48-7	598.04	dec		4.98		i H_2O; s acid
Nickel arsenide	Niccolite	AsNi	NiAs	27016-75-7	133.615	967		7.77		
Nickel boride		BNi	NiB	12007-00-0	69.504	1035		7.13		
Nickel boride (Ni_2B)		BNi_2	Ni_2B	12007-01-1	128.198	1125		7.90		
Nickel boride (Ni_3B)		BNi_3	Ni_3B	12007-02-2	186.891	1156		8.17		
Nickel(II) bromide		Br_2Ni	$NiBr_2$	13462-88-9	218.501	963	subl	5.10	131^{20}	
Nickel(II) bromide trihydrate		Br_2Ni	$NiBr_2 \cdot 3H_2O$	13462-88-9*	272.547	200 dec				vs H_2O; s EtOH, eth
Nickel(II) carbonate		$CNiO_3$	$NiCO_3$	3333-67-3	118.702			4.39	0.0043^{20}	s dil acid
Nickel carbonyl	Nickel tetracarbonyl	C_4NiO_4	$Ni(CO)_4$	13463-39-3	170.734	−19.3	43 (exp ≈60)	1.31		i H_2O; s EtOH, bz, ace, ctc
Nickel(II) chloride		Cl_2Ni	$NiCl_2$	7718-54-9	129.598	1009 tp	985 sp	3.51	67.5^{25}	s EtOH
Nickel(II) chloride hexahydrate		$Cl_2H_{12}NiO_6$	$NiCl_2 \cdot 6H_2O$	7791-20-0	237.689				67.5^{25}	s EtOH
Nickel(II) cyanide tetrahydrate		$C_2H_8N_2NiO_4$	$Ni(CN)_2 \cdot 4H_2O$	13477-95-7	182.789	200 dec				i H_2O; sl dil acid; s NH_4OH
Nickel(II) fluoride		F_2Ni	NiF_2	10028-18-9	96.69	1474		4.7	2.56^{25}	i EtOH, eth
Nickel(II) hydroxide		H_2NiO_2	$Ni(OH)_2$	12054-48-7	92.708	230 dec		4.1	0.00015^{20}	
Nickel(II) hydroxide monohydrate		H_4NiO_3	$Ni(OH)_2 \cdot H_2O$	36897-37-7	110.723				0.00015^{20}	s dil acid
Nickel(II) iodate		I_2NiO_6	$Ni(IO_3)_2$	13477-98-0	408.498			5.07	1.1^{30}	
Nickel(II) iodide		I_2Ni	NiI_2	13462-90-3	312.502	780	subl	5.22	154^{25}	
Nickel(II) iodide hexahydrate		$H_{12}I_2NiO_6$	$NiI_2 \cdot 6H_2O$	7790-34-3	420.593				154^{25}	vs EtOH
Nickel(II) nitrate		N_2NiO_6	$Ni(NO_3)_2$	13138-45-9	182.702				99.2^{25}	s EtOH
Nickel(II) nitrate hexahydrate		$H_{12}N_2NiO_{12}$	$Ni(NO_3)_2 \cdot 6H_2O$	13478-00-7	290.794	56 dec		2.05	99.2^{25}	s EtOH
Nickel(II) oxide	Bunsenite	NiO	NiO	1313-99-1	74.692	1955		6.72		i H_2O; s acid
Nickel(III) oxide	Nickel sesquioxide	Ni_2O_3	Ni_2O_3	1314-06-3	165.385	≈600 dec				i H_2O; s hot acid
Nickel(II) perchlorate hexahydrate		$Cl_2H_{12}NiO_{14}$	$Ni(ClO_4)_2 \cdot 6H_2O$	13637-71-3*	365.685	140			158.8^{25}	s EtOH, ace
Nickel(II) phosphate octahydrate		$H_{16}Ni_3O_{16}P_2$	$Ni_3(PO_4)_2 \cdot 8H_2O$	10381-36-9*	510.145					s acid
Nickel phosphide		Ni_2P	Ni_2P	12035-64-2	148.361	1100		7.33		
Nickel(II) selenate hexahydrate		$H_{12}NiO_{10}Se$	$NiSeO_4 \cdot 6H_2O$	15060-62-5*	309.74			2.314	35.5^{20}	
Nickel(II) selenide	Maekinenite	NiSe	NiSe	1314-05-2	137.65	980		7.2		
Nickel silicide ($NiSi_2$)	Nickel disilicide	$NiSi_2$	$NiSi_2$	12201-89-7	114.864	993		4.83		
Nickel silicide (Ni_2Si)		Ni_2Si	Ni_2Si	12059-14-2	145.473	1255		7.40		
Nickel(II) sulfate		NiO_4S	$NiSO_4$	7786-81-4	154.757	840 dec		4.01	40.4^{25}	
Nickel(II) sulfate heptahydrate		$H_{14}NiO_{11}S$	$NiSO_4 \cdot 7H_2O$	10101-98-1	280.863			1.98	40.4^{25}	s EtOH
Nickel(II) sulfate hexahydrate		$H_{12}NiO_{10}S$	$NiSO_4 \cdot 6H_2O$	10101-97-0	262.848	≈100 dec		2.07	40.4^{25}	sl EtOH
Nickel(II) sulfide	Millerite	NiS	NiS	16812-54-7	90.759	976		5.5		i H_2O
Nickel(II,III) sulfide	Polydymite	Ni_3S_4	Ni_3S_4	12137-12-1	304.344	995		4.77		
Nickel(III) sulfide	Heazlewoodite	Ni_3S_2	Ni_3S_2	12035-72-2	240.212	787		5.87		

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Nickel(II) thiocyanate		$C_2N_2NiS_2$	$Ni(SCN)_2$	13689-92-4	174.859				55.0^{25}	
Nickel(II) titanate		NiO_3Ti	$NiTiO_3$	12035-39-1	154.558			5.0		
Niobium		Nb	Nb	7440-03-1	92.906	2477	4744	8.57		i acid
Niobium boride		BNb	NbB	12045-19-1	103.717	2270		7.5		
Niobium boride (NbB_2)	Niobium diboride	B_2Nb	NbB_2	12007-29-3	114.528	3050		6.97		
Niobium(III) bromide	Niobium tribromide	Br_3Nb	$NbBr_3$	15752-41-7	332.618		subl			
Niobium(V) bromide	Niobium pentabromide	Br_5Nb	$NbBr_5$	13478-45-0	492.426	254	360	4.36		s H_2O, EtOH
Niobium carbide		CNb	NbC	12069-94-2	104.917	3608	4300	7.82		i H_2O, acid
Niobium carbide (Nb_2C)	Diniobium carbide	CNb_2	Nb_2C	12011-99-3	197.824	3080		7.8		i H_2O
Niobium(III) chloride	Niobium trichloride	Cl_3Nb	$NbCl_3$	13569-59-0	199.264					
Niobium(IV) chloride	Niobium tetrachloride	Cl_4Nb	$NbCl_4$	13569-70-5	234.717		275 subl	3.2		
Niobium(V) chloride	Niobium pentachloride	Cl_5Nb	$NbCl_5$	10026-12-7	270.17	204.7	254.0	2.78		reac H_2O; s HCl, ctc
Niobium(V) dioxyfluoride	Niobium fluorodioxide	$FNbO_2$	NbO_2F	15195-33-2	143.903			4.0		
Niobium(III) fluoride	Niobium trifluoride	F_3Nb	NbF_3	15195-53-6	149.901			4.2		
Niobium(IV) fluoride	Niobium tetrafluoride	F_4Nb	NbF_4	13842-88-1	168.9	>350 dec		4.01		
Niobium(V) fluoride	Niobium pentafluoride	F_5Nb	NbF_5	7783-68-8	187.898	80	229	2.70		reac H_2O; sl CS_2, chl
Niobium(IV) iodide	Niobium tetraiodide	I_4Nb	NbI_4	13870-21-8	600.524	503		5.6		
Niobium(V) iodide	Niobium pentaiodide	I_5Nb	NbI_5	13779-92-5	727.428	$\asymp$200 dec		5.32		
Niobium nitride		NNb	NbN	24621-21-4	106.913	2300		8.47		i HCl, acid
Niobium(II) oxide		NbO	NbO	12034-57-0	108.905	1936		7.30		
Niobium(IV) oxide	Niobium dioxide	NbO_2	NbO_2	12034-59-2	124.905	1901		5.9		
Niobium(V) oxide	Niobium pentoxide	Nb_2O_5	Nb_2O_5	1313-96-8	265.81	1512		4.6		i H_2O; s HF
Niobium(V) oxybromide		Br_3NbO	$NbOBr_3$	14459-75-7	348.617	$\asymp$320 dec	subl			
Niobium(V) oxychloride		Cl_3NbO	$NbOCl_3$	13597-20-1	215.263		subl	3.72		
Niobium phosphide		NbP	NbP	12034-66-1	123.88			6.5		
Niobium(IV) selenide		$NbSe_2$	$NbSe_2$	12034-77-4	250.83	>1300		6.3		
Niobium silicide		$NbSi_2$	$NbSi_2$	12034-80-9	149.077	1950		5.7		
Niobium(IV) sulfide		NbS_2	NbS_2	12136-97-9	157.038			4.4		
Niobium(IV) telluride		$NbTe_2$	$NbTe_2$	12034-83-2	348.11			7.6		
Nitramide		$H_2N_2O_2$	NO_2NH_2	7782-94-7	62.028	72 dec				s H_2O, EtOH, ace, eth; i chl
Nitric acid		HNO_3	HNO_3	7697-37-2	63.013	-41.6	83	1.55		vs H_2O
Nitric oxide		NO	NO	10102-43-9	30.006	-163.6	-151.74	1.226 g/L		sl H_2O
Nitrogen		N_2	N_2	7727-37-9	28.013	-210.00	-195.79	1.145 g/L		sl H_2O; i EtOH
Nitrogen chloride difluoride		ClF_2N	$NClF_2$	13637-87-1	87.457	-195	-67	3.575 g/L		
Nitrogen dioxide		NO_2	NO_2	10102-44-0	46.006		see N_2O_4	1.880 g/L		reac H_2O
Nitrogen pentoxide	Dinitrogen pentoxide	N_2O_5	N_2O_5	10102-03-1	108.01		33 sp	2.0		s chl; sl ctc
Nitrogen selenide		N_4Se_4	N_4Se_4	12033-88-4	371.87	exp		4.2		i H_2O, eth, EtOH; sl bz, CS_2

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Nitrogen tetroxide	Dinitrogen tetraoxide	N_2O_4	N_2O_4	10544-72-6	92.011	−9.3	21.15	1.45^{20}		reac H_2O
Nitrogen tribromide		Br_3N	NBr_3	15162-90-0	253.719	exp -100				
Nitrogen trichloride		Cl_3N	NCl_3	10025-85-1	120.365	−40	71	1.653		i H_2O; s CS_2, bz, ctc
Nitrogen trifluoride		F_3N	NF_3	7783-54-2	71.002	−206.79	−128.75	2.902 g/L		i H_2O
Nitrogen triiodide		I_3N	NI_3	13444-85-4	394.72					
Nitrogen trioxide	Dinitrogen trioxide	N_2O_3	N_2O_3	10544-73-7	76.011	−101.1	≍3 dec	1.4^{2}		reac H_2O
Nitrosyl bromide		BrNO	NOBr	13444-87-6	109.91	−56	≍0	4.492 g/L		reac H_2O
Nitrosyl chloride		ClNO	NOCl	2696-92-6	65.459	−59.6	−5.5	2.676 g/L		reac H_2O
Nitrosyl fluoride		FNO	NOF	7789-25-5	49.004	−132.5	−59.9	2.003 g/L		
Nitrosylsulfuric acid		HNO_5S	$HNOSO_4$	7782-78-7	127.078	73 dec				reac H_2O; s H_2SO_4
Nitrous acid		HNO_2	HNO_2	7782-77-6	47.014					
Nitrous oxide		N_2O	N_2O	10024-97-2	44.012	−90.8	−88.48	1.799 g/L		sl H_2O; s EtOH, eth
Nitryl chloride		$ClNO_2$	NO_2Cl	13444-90-1	81.459	−145	−15	3.330 g/L		
Nitryl fluoride		FNO_2	NO_2F	10022-50-1	65.004	−166	−72.4	2.657 g/L		reac H_2O
Nobelium		No	No	10028-14-5	259	827				
Nonaborane(15)	Enneaborane(15)	B_9H_{15}	B_9H_{15}	19465-30-6	112.418	2.6				
Orthosilicic acid		H_4O_4Si	H_4SiO_4	10193-36-9	96.116					
Osmium		Os	Os	7440-04-2	190.23	3033	5012	22.59		s aqua regia
Osmium(III) bromide	Osmium tribromide	Br_3Os	$OsBr_3$	59201-51-3	429.94	340 dec				
Osmium carbonyl	Triosmium dodeca-carbonyl	$C_{12}O_{12}Os_3$	$Os_3(CO)_{12}$	15696-40-9	906.81			3.48		
Osmium(III) chloride	Osmium trichloride	Cl_3Os	$OsCl_3$	13444-93-4	296.59	> 450 dec				i H_2O; s HNO_3
Osmium(IV) chloride	Osmium tetrachloride	Cl_4Os	$OsCl_4$	10026-01-4	332.04		450 sp	4.38		reac H_2O
Osmium(IV) fluoride	Osmium tetrafluoride	F_4Os	OsF_4	54120-05-7	266.22	230				
Osmium(V) fluoride	Osmium pentafluor-ide	F_5Os	OsF_5	31576-40-6	285.22	70	225.9			reac H_2O
Osmium(VI) fluoride	Osmium hexafluoride	F_6Os	OsF_6	13768-38-2	304.22	33.2	47.5	4.1		reac H_2O
Osmium(IV) oxide	Osmium dioxide	O_2Os	OsO_2	12036-02-1	222.23			11.4		i H_2O, acid
Osmium(VIII) oxide	Osmic acid	O_4Os	OsO_4	20816-12-0	254.23	41	135	5.1	6.44^{20}	
Oxygen		O_2	O_2	7782-44-7	31.999	−218.79	−182.95	1.308 g/L		sl H_2O, EtOH, os
Ozone		O_3	O_3	10028-15-6	47.998	−193	−111.35	1.962 g/L		sl H_2O
Palladium		Pd	Pd	7440-05-3	106.42	1554.9	2963	12.0		s aqua regia
Palladium(II) bromide	Palladous bromide	Br_2Pd	$PdBr_2$	13444-94-5	266.23	250 dec		≍5.2		i H_2O
Palladium(II) chloride	Palladous chloride	Cl_2Pd	$PdCl_2$	7647-10-1	177.33	679		4.0		s H_2O, EtOH, ace
Palladium(II) fluoride	Palladous fluoride	F_2Pd	PdF_2	13444-96-7	144.42	952		5.76		reac H_2O
Palladium(II) iodide	Palladous iodide	I_2Pd	PdI_2	7790-38-7	360.23	360 dec		6.0		i H_2O, EtOH, eth
Palladium(II) nitrate	Palladous nitrate	N_2O_6Pd	$Pd(NO_3)_2$	10102-05-3	230.43	dec				sl H_2O; s dil HNO_3
Palladium(II) oxide	Palladium monoxide	OPd	PdO	1314-08-5	122.42	750 dec		8.3		i H_2O, acid; sl aqua regia
Palladium(II) sulfide	Palladous sulfide	PdS	PdS	12125-22-3	138.49			6.7		
Pentaborane(9)		B_5H_9	B_5H_9	19624-22-7	63.126	−46.6	60	0.60		reac hot H_2O
Pentaborane(11)		B_5H_{11}	B_5H_{11}	18433-84-6	65.142	−122	65			reac H_2O
Pentagermane		Ge_5H_{12}	Ge_5H_{12}	15587-39-0	375.15		234			i H_2O
Pentasilane		$H_{12}Si_5$	Si_5H_{12}	14868-53-2	152.523	−72.8	153.2	0.827		reac H_2O

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Perchloric acid		$ClHO_4$	$HClO_4$	7601-90-3	100.459	−112	≈90 dec	1.77		s H_2O
Perchloryl fluoride		$ClFO_3$	ClO_3F	7616-94-6	102.449	−147	−46.75	4.187 g/L		
Periodic acid dihydrate	Orthoperiodic acid	H_5IO_6	$HIO_4 \cdot 2H_2O$	10450-60-9	227.94	122 dec				s H_2O, EtOH; sl eth
Peroxysulfuric acid	Caro's acid	H_2O_5S	H_2SO_5	7722-86-3	114.079	45 dec				vs H_2O
Perrhenic acid		HO_4Re	$HReO_4$	13768-11-1	251.213					vs H_2O, os
Phosphine	Phosphorus hydride	H_3P	PH_3	7803-51-2	33.998	−133.8	−87.75	1.390 g/L		i H_2O; sl EtOH, eth
Phosphinic acid	Hypophosphorous acid	H_3O_2P	HPH_2O_2	6303-21-5	65.997	26.5	130	1.49		vs H_2O, EtOH, eth
Phosphonic acid	Phosphorous acid	H_3O_3P	H_3PO_3	13598-36-2	81.996	74.4	200	1.65	309^0	vs EtOH
Phosphonic difluoride		F_2HOP	POF_2H	14939-34-5	85.978	> -120	≈60 (gas unstab)			
Phosphonitrilic chloride trimer		$Cl_6N_3P_3$	$(PNCl_2)_3$	940-71-6	347.657	128.8		1.98		reac H_2O
Phosphonium chloride		ClH_4P	PH_4Cl	24567-53-1	70.459		−27 sp	2.880 g/L		reac H_2O
Phosphonium iodide		H_4IP	PH_4I	12125-09-6	161.91	18.5	62.5	2.86		reac H_2O, EtOH
Phosphoric acid	Orthophosphoric acid	H_3O_4P	H_3PO_4	7664-38-2	97.995	42.4	407		548^{20}	s EtOH
Phosphoric bromide chloride fluoride		BrClFOP	POBrClF	14518-81-1	181.328		79			
Phosphoric bromide dichloride		$BrCl_2OP$	$POBrCl_2$	13455-03-3	197.782	11	136.5	2.104^{14}		
Phosphoric bromide difluoride		BrF_2OP	$POBrF_2$	14014-18-7	164.874	−84.8	31.6			
Phosphoric chloride difluoride		ClF_2OP	$POClF_2$	13769-75-0	120.423	−96.4	3.1	4.922 g/L		
Phosphoric dibromide chloride		Br_2ClOP	$POBr_2Cl$	13550-31-7	242.234	31	165			
Phosphoric dibromide fluoride		Br_2FOP	$POBr_2F$	14014-19-8	225.779	−117.2	110.1			
Phosphoric dichloride fluoride		Cl_2FOP	$POCl_2F$	13769-76-1	136.876	−80.1	52.9			
Phosphoric tribromide	Phosphoryl bromide	Br_3OP	$POBr_3$	7789-59-5	286.685	55	191.7	2.822		reac H_2O; s bz, eth, chl
Phosphoric trichloride	Phosphoryl chloride	Cl_3OP	$POCl_3$	10025-87-3	153.331	1.18	105.5	1.645		reac H_2O, EtOH
Phosphoric trifluoride	Phosphoryl fluoride	F_3OP	POF_3	13478-20-1	103.968	−39.1 tp	−39.7 sp	4.250 g/L		reac H_2O
Phosphoric triodide	Phosphoryl iodide	I_3OP	POI_3	13455-04-4	427.686	53				
Phosphorothioc bromide difluoride		BrF_2PS	$PSBrF_2$	13706-09-7	180.941	−136.9	35.5			
Phosphorothioc chloride difluoride	Thiophosphoryl chloride difluoride	ClF_2PS	$PSClF_2$	2524-02-9	136.49	−155.2	6.3	5.579 g/L		
Phosphorothioc dibromide fluoride		Br_2FPS	$PSBr_2F$	13706-10-0	241.846	−75.2	125.3			
Phosphorothioc dichloride fluoride		Cl_2FPS	$PSCl_2F$	155698-29-6	152.943	−96.0	64.7			
Phosphorothioc tribromide		Br_3PS	$PSBr_3$	3931-89-3	302.752	37.8	212 dec	2.85		
Phosphorothioc trichloride	Thiophosphoryl trichloride	Cl_3PS	$PSCl_3$	3982-91-0	169.398	−36.2	125	1.635		reac H_2O; s bz, ctc, chl, CS_2
Phosphorothioc trifluoride	Thiophosphoryl trifluoride	F_3PS	PSF_3	2404-52-6	120.035	−148.8	−52.25	4.906 g/L		
Phosphorothioc triiodide		I_3PS	PSI_3	63972-04-3	443.753	48	dec			
Phosphorus (white)	White phosphorus	P	P	7723-14-0	30.974	44.15	280.5	1.823		i H_2O; sl bz, EtOH, chl; s CS_2

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Phosphorus (red)	Red phosphorus	P	P	7723-14-0	30.974	590 tp	431 sp	2.16		i H_2O, os
Phosphorus (black)	Black phosphorus	P	P	7723-14-0	30.974	610		2.69		i os
Phosphorus(III) bromide	Phosphorus tribromide	Br_3P	PBr_3	7789-60-8	270.686	−41.5	173.2	2.8		reac H_2O, EtOH; s ace, CS_2
Phosphorus(V) bromide	Phosphorus pentabromide	Br_5P	PBr_5	7789-69-7	430.494	≈100 dec		3.61		reac H_2O, EtOH; s CS_2, ctc
Phosphorus(III) bromide difluoride		BrF_2P	$PBrF_2$	15597-40-7	148.875	−133.8	−16.1	6.085 g/L		
Phosphorus(III) chloride	Phosphorus trichloride	Cl_3P	PCl_3	7719-12-2	137.332	−93.6	76.1	1.574		reac H_2O, EtOH; s bz, chl, eth
Phosphorus(V) chloride	Phosphorus pentachloride	Cl_5P	PCl_5	10026-13-8	208.238	167 tp	160 sp	2.1		reac H_2O; s CS_2, ctc
Phosphorus(III) chloride difluoride		ClF_2P	$PClF_2$	14335-40-1	104.424	−164.8	−47.3	4.268 g/L		
Phosphorus(V) chloride tetrafluoride	Chlorotetrafluorophosphorane	ClF_4P	$PClF_4$		142.421	−132	−43.4	5.821 g/L		
Phosphorus(III) dibromide fluoride		Br_2FP	PBr_2F	15597-39-4	209.78	−115	78.5			
Phosphorus(V) dibromide trifluoride	Dibromotrifluorophosphorane	Br_2F_3P	PBr_2F_3	13445-58-4	247.777	−20	15 dec			
Phosphorus(III) dichloride fluoride		Cl_2FP	PCl_2F	15597-63-4	120.877	−144	13.85	4.941 g/L		
Phosphorus(V) dichloride trifluoride		Cl_2F_3P	PCl_2F_3	13454-99-4	158.874	−125	7.1	6.494 g/L		
Phosphorus(III) fluoride	Phosphorus trifluoride	F_3P	PF_3	7783-55-3	87.969	−151.5	−101.8	3.596 g/L		reac H_2O
Phosphorus(V) fluoride	Phosphorus pentafluoride	F_5P	PF_5	7647-19-0	125.966	−93.8	−84.6	5.149 g/L		reac H_2O
Phosphorus heptasulfide		P_4S_7	P_4S_7	12037-82-0	348.357	312	523	2.19		sl CS_2
Phosphorus(III) iodide	Phosphorus triiodide	I_3P	PI_3	13455-01-1	411.687	61.2	227 dec	4.18		reac H_2O; s EtOH
Phosphorus nitride (P_3N_5)		N_5P_3	P_3N_5	12136-91-3	162.955	800 dec				i H_2O; s os
Phosphorus(III) oxide	Phosphorus trioxide	O_3P_2	P_2O_3	1314-24-5	109.946	23.8	173	2.13		reac H_2O
Phosphorus(V) oxide	Phosphorus pentoxide	O_5P_2	P_2O_5	1314-56-3	141.945	562	605	2.30		reac H_2O, EtOH
Phosphorus(III) selenide		P_2Se_3	P_2Se_3	1314-86-9	298.83	245	≈380	1.31		reac H_2O; s bz, ctc, CS_2, ace
Phosphorus(V) selenide	Phosphorus pentaselenide	P_2Se_5	P_2Se_5	1314-82-5	456.75					reac hot H_2O, ctc; i CS_2
Phosphorus sesquisulfide		P_4S_3	P_4S_3	1314-85-8	220.093	172.5	407	2.03		i H_2O; s bz; vs CS_2
Phosphorus(III) sulfide	Phosphorus trisulfide	P_2S_3	P_2S_3	12165-69-4	158.146	290	490			reac H_2O; s EtOH, eth, CS_2
Phosphorus(V) sulfide	Phosphorus pentasulfide	P_2S_5	P_2S_5	1314-80-3	222.278	285	515	2.03		reac H_2O; s CS_2
Phosphorus(V) tetrabromide fluoride	Tetrabromofluorophosphorane	Br_4FP	PBr_4F		369.588	87 dec				
Phosphorus(V) tetrachloride fluoride	Tetrachlorofluorophosphorane	Cl_4FP	PCl_4F	13498-11-8	191.783	−59	30 dec			
Phosphorus(V) trichloride difluoride	Trichlorodifluorophosphorane	Cl_3F_2P	PCl_3F_2	13537-23-0	175.329	−63				
Platinum		Pt	Pt	7440-06-4	195.08	1768.4	3825	21.5		i acid; s aqua regia
Platinum(II) bromide	Platinum dibromide	Br_2Pt	$PtBr_2$	13455-12-4	354.89	250 dec		6.65		i H_2O
Platinum(III) bromide	Platinum tribromide	Br_3Pt	$PtBr_3$	25985-07-3	434.79	200 dec				

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Platinum(IV) bromide	Platinum tetrabromide	Br_4Pt	$PtBr_4$	68938-92-1	514.69	180 dec			0.41^{20}	sl EtOH, eth
Platinum(II) chloride	Platinum dichloride	Cl_2Pt	$PtCl_2$	10025-65-7	265.98	581 dec		6.0		i H_2O, EtOH, eth; s HCl
Platinum(III) chloride	Platinum trichloride	Cl_3Pt	$PtCl_3$	25909-39-1	301.44	435 dec		5.26		
Platinum(IV) chloride	Platinum tetrachloride	Cl_4Pt	$PtCl_4$	37773-49-2	336.89	327 dec		4.30	142^{25}	
Platinum(IV) chloride pentahydrate		Cl_4Pt	$PtCl_4 \cdot 5H_2O$	13454-96-1	426.97			2.43		s H_2O, EtOH
Platinum(IV) fluoride	Platinum tetrafluoride	F_4Pt	PtF_4	13455-15-7	271.07	600				
Platinum(VI) fluoride	Platinum hexafluoride	F_6Pt	PtF_6	13693-05-5	309.07	61.3	69.1	$\asymp$4.0		
Platinum(II) iodide	Platinum diiodide	I_2Pt	PtI_2	7790-39-8	448.89	325 dec		6.4		i H_2O
Platinum(IV) iodide	Platinum tetraiodide	I_4Pt	PtI_4	7790-46-7	702.7	130 dec				s H_2O
Platinum(II) oxide	Platinum monoxide	OPt	PtO	12035-82-4	211.08	325 dec		14.1		i H_2O, EtOH; s aqua regia
Platinum(IV) oxide	Adams' catalyst	O_2Pt	PtO_2	1314-15-4	227.08	450		11.8		i H_2O; s conc acid, dil alk
Platinum silicide		PtSi	PtSi	12137-83-6	223.16	1229		12.4		
Platinum(II) sulfide	Braggite	PtS	PtS	12038-20-9	227.14			10.25		
Platinum(IV) sulfide		PtS_2	PtS_2	12038-21-0	259.21			7.85		
Plutonium		Pu	Pu	7440-07-5	244	640	3228	19.7		
Plutonium(III) bromide	Plutonium tribromide	Br_3Pu	$PuBr_3$	15752-46-2	484	681		6.75		s H_2O
Plutonium(III) chloride	Plutonium trichloride	Cl_3Pu	$PuCl_3$	13569-62-5	350	760		5.71		s H_2O
Plutonium(III) fluoride	Plutonium trifluoride	F_3Pu	PuF_3	13842-83-6	301	1396		9.33		i H_2O; sl acid
Plutonium(IV) fluoride	Plutonium tetrafluoride	F_4Pu	PuF_4	13709-56-3	320	1027		7.1		
Plutonium(VI) fluoride	Plutonium hexafluoride	F_6Pu	PuF_6	13693-06-6	358	52		5.08		
Plutonium(III) iodide	Plutonium triiodide	I_3Pu	PuI_3	13813-46-2	625	777		6.92		s H_2O
Plutonium nitride		NPu	PuN	12033-54-4	258	2550		14.4		
Plutonium(II) oxide	Plutonium monoxide	OPu	PuO	12035-83-5	260			14.0		
Plutonium(III) oxide	Plutonium sesquioxide	O_3Pu_2	Pu_2O_3	12036-34-9	536			10.5		
Plutonium(IV) oxide	Plutonium dioxide	O_2Pu	PuO_2	12059-95-9	276	2400		11.5		
Polonium		Po	Po	7440-08-6	209	254	962	9.20		
Polonium(IV) chloride	Polonium tetrachloride	Cl_4Po	$PoCl_4$	10026-02-5	351	$\asymp$300	390			s H_2O, EtOH, ace
Polonium(IV) oxide	Polonium dioxide	O_2Po	PoO_2	7446-06-2	241	500 dec		8.9		
Potassium	Kalium	K	K	7440-09-7	39.098	63.5	759	0.89		reac H_2O
Potassium acetate		$C_2H_3KO_2$	$KC_2H_3O_2$	127-08-2	98.142	309		1.57	269^{25}	s EtOH; i eth
Potassium aluminate trihydrate		$Al_2H_6K_2O_7$	$K_2Al_2O_4 \cdot 3H_2O$	12003-63-3*	250.204			2.13		vs H_2O; i EtOH
Potassium aluminum silicate		$AlKO_8Si_3$	$KAlSi_3O_8$	1327-44-2	278.332			2.56		i H_2O
Potassium aluminum sulfate	Aluminum potassium sulfate	$AlKO_8S_2$	$KAl(SO_4)_2$	10043-67-1	258.207				5.9^{20}	
Potassium aluminum sulfate dodecahydrate	Alum	$AlH_{24}KO_{20}S_2$	$KAl(SO_4)_2 \cdot 12H_2O$	7784-24-9	474.391	$\asymp$100 dec		1.72	5.9^{20}	
Potassium amide		H_2KN	KNH_2	17242-52-3	55.121	335				reac H_2O, EtOH
Potassium arsenate		AsK_3O_4	K_3AsO_4	13464-36-3	256.215			2.8	125^{25}	

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Potassium arsenite		$AsKO_2$	$KAsO_2$	13464-35-2	146.019					s H_2O; sl EtOH
Potassium azide		KN_3	KN_3	20762-60-1	81.118			2.04	49.7^{17}	
Potassium borohydride		BH_4K	KBH_4	13762-51-1	53.941	≍500 dec		1.11		s H_2O
Potassium bromate		$BrKO_3$	$KBrO_3$	7758-01-2	167	434 dec		3.27	8.17^{25}	i EtOH
Potassium bromide		BrK	KBr	7758-02-3	119.002	734	1435	2.74	67.8^{25}	sl EtOH
Potassium carbonate	Pearl ash	CK_2O_3	K_2CO_3	584-08-7	138.206	898	dec	2.29	111^{25}	i EtOH
Potassium carbonate sesquihydrate		$CH_3K_2O_{4.5}$	$K_2CO_3 \cdot 1.5H_2O$	6381-79-9	165.229				111^{20}	
Potassium chlorate	Potcrate	$ClKO_3$	$KClO_3$	3811-04-9	122.549	368	dec	2.32	8.61^{25}	
Potassium chloride	Sylvite	ClK	KCl	7447-40-7	74.551	771		1.988	35.5^{25}	i eth, ace
Potassium chromate	Tarapacaite	CrK_2O_4	K_2CrO_4	7789-00-6	194.191	975		2.73	65.0^{25}	
Potassium cyanate		CKNO	KCNO	590-28-3	81.115	≍700 dec		2.05	75^{25}	sl EtOH
Potassium cyanide		CKN	KCN	151-50-8	65.116	634		1.55	69.9^{20}	sl EtOH
Potassium dichromate	Potassium bichromate	$Cr_2K_2O_7$	$K_2Cr_2O_7$	7778-50-9	294.185	398	≍500 dec	2.68	15.1^{25}	
Potassium dihydrogen arsenate	Macquer's salt	AsH_2KO_4	KH_2AsO_4	7784-41-0	180.034	288		2.87	19^{6}	i EtOH
Potassium dihydrogen phosphate		H_2KO_4P	KH_2PO_4	7778-77-0	136.085	253		2.34	25.0^{25}	sl EtOH
Potassium ferricyanide	Potassium hexacyanoferrate(III)	$C_6FeK_3N_6$	$K_3Fe(CN)_6$	13746-66-2	329.244	dec		1.89	48.8^{25}	
Potassium ferrocyanide trihydrate	Potassium hexacyanoferrate(II) trihydrate	$C_6H_6FeK_4N_6O_3$	$K_4Fe(CN)_6 \cdot 3H_2O$	14459-95-1	422.388	60 dec		1.85	36.0^{25}	i EtOH, eth
Potassium fluoride		FK	KF	7789-23-3	58.096	858	1502	2.48	102^{25}	
Potassium fluoride dihydrate		FH_4KO_2	$KF \cdot 2H_2O$	13455-21-5	94.127	41 dec		2.5	102^{25}	
Potassium fluoroborate	Avogadrite	BF_4K	KBF_4	14075-53-7	125.903	530		2.505	0.55^{25}	sl EtOH
Potassium fluorotantalate		F_7K_2Ta	K_2TaF_7	16924-00-8	392.134	730		5.24	0.5^{0}	
Potassium formate		$CHKO_2$	$KCHO_2$	590-29-4	84.116	167		1.91	331^{18}	
Potassium hexachloroosmate(IV)		Cl_6K_2Os	K_2OsCl_6	16871-60-6	481.14					vs H_2O; sl EtOH
Potassium hexachloroplatinate		Cl_6K_2Pt	K_2PtCl_6	16921-30-5	485.99	250 dec		3.50	0.77^{20}	i EtOH
Potassium hexacyanocobaltate	Potassium cobalticyanide	$C_6CoK_3N_6$	$K_3Co(CN)_6$	13963-58-1	332.332	dec		1.91		vs H_2O; i EtOH
Potassium hexafluoromanganate(IV)		F_6K_2Mn	K_2MnF_6	16962-31-5	247.125					reac H_2O
Potassium hexafluorosilicate	Hieratite	F_6K_2Si	K_2SiF_6	16871-90-2	220.273	dec		2.27	0.084^{20}	i EtOH
Potassium hexafluorozirconate(IV)	Zirconium potassium fluoride	F_6K_2Zr	K_2ZrF_6	16923-95-8	283.411			3.48	0.78^{2}	
Potassium hydride		HK	KH	7693-26-7	40.106			1.43		reac H_2O
Potassium hydrogen arsenate		$AsHK_2O_4$	K_2HAsO_4	21093-83-4	218.125	300 dec			18.7^{6}	i EtOH
Potassium hydrogen arsenite		As_2HKO_4	$KAsO_2 \cdot HAsO_2$	10124-50-2	253.947					s H_2O
Potassium hydrogen carbonate	Potassium bicarbonate	$CHKO_3$	$KHCO_3$	298-14-6	100.115	≍100 dec		2.17	36.2^{25}	i EtOH
Potassium hydrogen fluoride	Potassium bifluoride	F_2HK	KHF_2	7789-29-9	78.103	238.9		2.37	39.2^{20}	i EtOH

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Potassium hydrogen phosphate	Potassium phosphate, dibasic	HK_2O_4P	K_2HPO_4	7758-11-4	174.176	dec			168^{25}	s EtOH
Potassium hydrogen phosphite		HK_2O_3P	K_2HPO_3	13492-26-7	158.177	dec			170^{20}	i EtOH
Potassium hydrogen selenite	Potassium biselenite	HKO_3Se	$KHSeO_3$	7782-70-9	167.06	> 100 dec				s H_2O; sl EtOH
Potassium hydrogen sulfate	Mercallite	HKO_4S	$KHSO_4$	7646-93-7	136.17	≈200		2.32	50.6^{25}	
Potassium hydrogen sulfide	Potassium bisulfide	HKS	KHS	1310-61-8	72.172	≈450		1.69		s H_2O, EtOH
Potassium hydrogen sulfide hemihydrate		$H_2KO_{0.5}S$	$KHS \cdot 0.5H_2O$	1310-61-8*	81.179	≈175		1.7		vs H_2O, EtOH
Potassium hydrogen sulfite	Potassium bisulfite	HKO_3S	$KHSO_3$	7773-03-7	120.17	190 dec			49^{20}	i EtOH
Potassium hydrogen tartrate	Potassium bitartrate	$C_4H_5KO_6$	$KHC_4H_4O_6$	868-14-4	188.177			1.98	0.57^{20}	s acid, alk; i EtOH
Potassium hydroxide		HKO	KOH	1310-58-3	56.105	406	1327	2.044	121^{25}	s EtOH; s MeOH
Potassium hypophosphite		H_2KO_2P	KH_2PO_2	7782-87-8	104.087	dec				vs H_2O; s EtOH
Potassium iodate		IKO_3	KIO_3	7758-05-6	214.001	560 dec		3.89	9.22^{25}	
Potassium iodide		IK	KI	7681-11-0	166.003	681	1323	3.12	148^{25}	sl EtOH
Potassium iron(III) oxalate trihydrate	Ferric potassium oxalate trihydrate	$C_6H_6FeK_3O_{15}$	$K_3Fe(C_2O_4)3 \cdot 3H_2O$		491.243	100	230 dec	2.133	4.7^{0}	i EtOH
Potassium manganate		K_2MnO_4	K_2MnO_4	10294-64-1	197.133	190 dec				s H_2O; reac HCl
Potassium metaarsenate		$AsKO_3$	$KAsO_3$	19197-73-0	162.018	660				
Potassium metabisulfite	Potassium pyrosulfite	$K_2O_5S_2$	$K_2S_2O_5$	16731-55-8	222.326	≈150 dec		2.3	49.5^{25}	reac acid; i EtOH
Potassium metaborate		BKO_2	KBO_2	13709-94-9	81.908			≈2.3		
Potassium molybdate		K_2MoO_4	K_2MoO_4	13446-49-6	238.14	919		2.3	183^{25}	i EtOH
Potassium niobate		$KNbO_3$	$KNbO_3$	12030-85-2	180.002	≈1100		4.64		i H_2O
Potassium nitrate	Saltpeter	KNO_3	KNO_3	7757-79-1	101.103	337	400 dec	2.11	38.3^{25}	i EtOH
Potassium nitrite		KNO_2	KNO_2	7758-09-0	85.104	441	537 exp	1.915	312^{25}	sl EtOH
Potassium oxalate		$C_2K_2O_4$	$K_2C_2O_4$	583-52-8	166.216					sl H_2O
Potassium oxalate monohydrate		$C_2H_2K_2O_5$	$K_2C_2O_4 \cdot H_2O$	6487-48-5	184.231	160 dec		2.13	36.4^{20}	
Potassium oxide	Potassium monoxide	K_2O	K_2O	12136-45-7	94.196	350 dec		2.35		s H_2O, EtOH, eth
Potassium perbromate		$BrKO_4$	$KBrO_4$	22207-96-1	183	275 dec			4.21^{25}	
Potassium perchlorate		$ClKO_4$	$KClO_4$	7778-74-7	138.549	525		2.52	2.08^{25}	
Potassium periodate		IKO_4	KIO_4	7790-21-8	230.001	582	exp	3.618	0.51^{25}	
Potassium permanganate		$KMnO_4$	$KMnO_4$	7722-64-7	158.034	dec		2.7	7.60^{25}	reac EtOH
Potassium peroxide		K_2O_2	K_2O_2	17014-71-0	110.196	490				reac H_2O
Potassium persulfate	Potassium peroxydisulfate	$K_2O_8S_2$	$K_2S_2O_8$	7727-21-1	270.324	≈100 dec		2.48	4.7^{20}	
Potassium phosphate		K_3O_4P	K_3PO_4	7778-53-2	212.266	1340		2.564	106^{25}	i EtOH
Potassium pyrophosphate trihydrate		$H_6K_4O_{10}P_2$	$K_4P_2O_7 \cdot 3H_2O$	7320-34-5*	384.383	1090		2.33		vs H_2O; i EtOH
Potassium pyrosulfate		$K_2O_7S_2$	$K_2S_2O_7$	7790-62-7	254.325	≈325		2.28		s H_2O

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Potassium selenate		K_2O_4Se	K_2SeO_4	7790-59-2	221.16			3.07	114^{25}	
Potassium selenide		K_2Se	K_2Se	1312-74-9	157.16	800		2.29		s H_2O
Potassium selenite		K_2O_3Se	K_2SeO_3	10431-47-7	205.16	875 dec			217^{25}	sl EtOH
Potassium silver cyanide		C_2AgKN_2	$KAg(CN)_2$	506-61-6	199					s H_2O
Potassium sodium tartrate tetrahydrate	Rochelle salt	$C_4H_{12}KNaO_{10}$	$NaKC_4H_4O_6 \cdot 4H_2O$	6381-59-5	282.22	≈70 dec	anh at 130	1.79		vs H_2O; i EtOH
Potassium stannate trihydrate		$H_6K_2O_6Sn$	$K_2SnO_3 \cdot 3H_2O$	12142-33-5*	298.951			3.20		vs H_2O; i EtOH
Potassium sulfate	Arcanite	K_2O_4S	K_2SO_4	7778-80-5	174.261	1069		2.66	12.0^{25}	i EtOH
Potassium sulfide		K_2S	K_2S	1312-73-8	110.263	948		1.74		s H_2O, EtOH; i eth
Potassium sulfide pentahydrate		$H_{10}K_2O_5S$	$K_2S \cdot 5H_2O$	37248-34-3	200.339	60				vs H_2O, EtOH; i eth
Potassium sulfite		K_2O_3S	K_2SO_3	10117-38-1	158.261				106^{25}	sl EtOH
Potassium sulfite dihydrate		$H_4K_2O_5S$	$K_2SO_3 \cdot 2H_2O$	7790-56-9	194.292	dec			107^{20}	sl EtOH; dec dil acid
Potassium superoxide	Potassium dioxide	KO_2	KO_2	12030-88-5	71.097	380		2.16		reac H_2O
Potassium tellurate(-VI) trihydrate		$H_6K_2O_7Te$	$K_2TeO_4 \cdot 3H_2O$	15571-91-2*	323.84					s H_2O
Potassium tellurite		K_2O_3Te	K_2TeO_3	7790-58-1	253.8	≈460 dec				vs H_2O
Potassium tetraborate pentahydrate		$B_4H_{10}K_2O_{12}$	$K_2B_4O_7 \cdot 5H_2O$	1332-77-0	323.513				16.5^{30}	sl EtOH
Potassium tetrachloroaurate dihydrate		$AuCl_4H_4KO_2$	$KAuCl_4 \cdot 2H_2O$	13682-61-6	413.907					s H_2O, EtOH, eth
Potassium tetrachloroplatinate	Potassium chloroplatinate	Cl_4K_2Pt	K_2PtCl_4	10025-99-7	415.09	500 dec		3.38		s H_2O; i EtOH
Potassium tetracyanoplatinate(II) trihydrate		$C_4H_6K_2N_4O_3Pt$	$K_2Pt(CN)_4 \cdot 3H_2O$	562-76-5*	431.39					s H_2O
Potassium tetraiodomercurate(II)	Mercuric potassium iodide	HgI_4K_2	K_2HgI_4	7783-33-7	786.4			4.29		vs H_2O; s EtOH, eth, ace
Potassium thiocarbonate	Potassium trithiocarbonate	CK_2S_3	K_2CS_3	26750-66-3	186.406					vs H_2O
Potassium thiocyanate		CKNS	KSCN	333-20-0	97.182	173	500 dec	1.88	238^{25}	s EtOH
Potassium thiosulfate	Potassium hyposulfite	$K_2O_3S_2$	$K_2S_2O_3$	10294-66-3	190.327				165^{25}	i EtOH
Potassium titanate		K_2O_3Ti	K_2TiO_3	12030-97-6	174.062	1515		3.1		reac H_2O
Potassium triiodide monohydrate		H_2I_3KO	$KI_3 \cdot H_2O$	7790-42-3	437.827	225 dec		3.5		s H_2O; reac EtOH, eth
Potassium tungstate		K_2O_4W	K_2WO_4	7790-60-5	326.04	921		3.12		vs H_2O; i EtOH
Potassium uranate	Potassium orthodiuranate	$K_2O_7U_2$	$K_2U_2O_7$	7790-63-8	666.251			6.12		i H_2O; s acid
Praseodymium		Pr	Pr	7440-10-0	140.908	931	3520	6.77		
Praseodymium boride		B_6Pr	PrB_6	12008-27-4	205.774	2610		4.84		
Praseodymium bromide		Br_3Pr	$PrBr_3$	13536-53-3	380.62	693		5.28		s H_2O
Praseodymium chloride		Cl_3Pr	$PrCl_3$	10361-79-2	247.266	786		4.0	96.1^{25}	s EtOH
Praseodymium chloride heptahydrate		$Cl_3H_{14}O_7Pr$	$PrCl_3 \cdot 7H_2O$	10025-90-8	373.373	110 dec			96.1^{25}	s EtOH
Praseodymium fluoride		F_3Pr	PrF_3	13709-46-1	197.903	1395		6.3		
Praseodymium iodide		I_3Pr	PrI_3	13813-23-5	521.621	737		≈5.8		s H_2O

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Praseodymium nitrate		N_3O_9Pr	$Pr(NO_3)_3$	10361-80-5	326.923				165^{25}	s EtOH
Praseodymium nitrate hexahydrate		$H_{12}N_3O_{15}Pr$	$Pr(NO_3)_3 \cdot 6H_2O$	15878-77-0	435.014				165^{25}	s EtOH, ace
Praseodymium nitride		NPr	PrN	25764-09-4	154.915			7.46		
Praseodymium oxide		O_3Pr_2	Pr_2O_3	12036-32-7	329.813	2183	3760	6.9		
Praseodymium silicide		$PrSi_2$	$PrSi_2$	12066-83-0	197.079	1712		5.46		
Praseodymium sulfide		Pr_2S_3	Pr_2S_3	12038-13-0	378.013	1765		5.1		
Praseodymium telluride		Pr_2Te_3	Pr_2Te_3	12038-12-9	664.62	1500		$\asymp$7.0		
Promethium		Pm	Pm	7440-12-2	145	1042	3000	7.26		
Protactinium		Pa	Pa	7440-13-3	231.036	1572		15.4		
Protactinium(V) chloride		Cl_5Pa	$PaCl_5$	13760-41-3	408.3	306		3.74		
Pyrosulfuryl chloride		$Cl_2O_5S_2$	$S_2O_5Cl_2$	7791-27-7	215.034	−37	151	1.837		reac H_2O
Radium		Ra	Ra	7440-14-4	226	700		5		
Radium bromide		Br_2Ra	$RaBr_2$	10031-23-9	386	728		5.79	70.6^{20}	s EtOH
Radium chloride		Cl_2Ra	$RaCl_2$	10025-66-8	297	1000		4.9	24.5^{20}	s EtOH
Radium fluoride		F_2Ra	RaF_2	20610-49-5	264			6.7		
Radium nitrate		N_2O_6Ra	$Ra(NO_3)_2$	10213-12-4	350				13.9	
Radium sulfate		O_4RaS	$RaSO_4$	7446-16-4	322					i H_2O, acid
Radon		Rn	Rn	10043-92-2	222	−71	−61.7	9.074 g/L		sl H_2O
Rhenium		Re	Re	7440-15-5	186.207	3186	5596	20.8		i HCl
Rhenium(III) bromide	Rhenium tribromide	Br_3Re	$ReBr_3$	13569-49-8	425.919		500 subl	6.10		s ace, MeOH, EtOH
Rhenium(V) bromide	Rhenium pentabromide	Br_5Re	$ReBr_5$	30937-53-2	585.727	110 dec				
Rhenium carbonyl	Dirhenium decacarbonyl	$C_{10}O_{10}Re_2$	$Re_2(CO)_{10}$	14285-68-8	652.515	170 dec		2.87		s os
Rhenium(III) chloride	Rhenium trichloride	Cl_3Re	$ReCl_3$	13569-63-6	292.565	500 dec		4.81		s H_2O
Rhenium(IV) chloride	Rhenium tetrachloride	Cl_4Re	$ReCl_4$	13569-71-6	328.018	300 dec		4.9		
Rhenium(V) chloride	Rhenium pentachloride	Cl_5Re	$ReCl_5$	39368-69-9	363.471	220		4.9		reac H_2O
Rhenium(VI) chloride	Rhenium hexachloride	Cl_6Re	$ReCl_6$	31234-26-1	398.923	29				
Rhenium(VII) dioxytrifluoride		F_3O_2Re	ReO_2F_3	57246-89-6	275.201	90	185.4			reac H_2O
Rhenium(IV) fluoride	Rhenium tetrafluoride	F_4Re	ReF_4	15192-42-4	262.201		> 300 subl	7.49		
Rhenium(V) fluoride	Rhenium pentafluoride	F_5Re	ReF_5	30937-52-1	281.199	48	221.3			
Rhenium(VI) fluoride	Rhenium hexafluoride	F_6Re	ReF_6	10049-17-9	300.197	18.5	33.8	4.06(cry)		s HNO_3
Rhenium(VII) fluoride	Rhenium heptafluoride	F_7Re	ReF_7	17029-21-9	319.196	48.3	73.7	4.32		
Rhenium(III) iodide	Rhenium triiodide	I_3Re	ReI_3	15622-42-1	566.92	dec				
Rhenium(IV) oxide	Rhenium dioxide	O_2Re	ReO_2	12036-09-8	218.206	900 dec		11.4		
Rhenium(V) oxide	Rhenium pentoxide	O_5Re_2	Re_2O_5	12165-05-8	452.411			$\asymp$7		
Rhenium(VI) oxide	Rhenium trioxide	O_3Re	ReO_3	1314-28-9	234.205	400 dec		6.9		i H_2O, acid, alk
Rhenium(VII) oxide	Rhenium heptoxide	O_7Re_2	Re_2O_7	1314-68-7	484.41	297	360	6.10		s H_2O, EtOH, eth, diox, py

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Rhenium(VII) oxypentafluoride		F_5ORe	$ReOF_5$	23377-53-9	297.198	43.8	73.0			
Rhenium(VI) oxytetrachloride		Cl_4ORe	$ReOCl_4$	13814-76-1	344.017	29.3	223			reac H_2O
Rhenium(VI) oxytetrafluoride		F_4ORe	$ReOF_4$	17026-29-8	278.2	108	171.7			
Rhenium(IV) sulfide	Rhenium disulfide	ReS_2	ReS_2	12038-63-0	250.339			7.6		
Rhenium(VII) sulfide	Rhenium heptasulfide	Re_2S_7	Re_2S_7	12038-67-4	596.876			4.87		i H_2O
Rhenium(IV) telluride	Rhenium ditelluride	$ReTe_2$	$ReTe_2$	12067-00-4	441.41			8.50		
Rhenium(VII) trioxychloride		ClO_3Re	ReO_3Cl	7791-09-5	269.658	4.5	128	3.87		reac H_2O
Rhenium(VII) trioxyfluoride		FO_3Re	ReO_3F	42246-24-2	253.203	147	164			
Rhenium(VI) dioxydifluoride		F_2O_2Re	ReO_2F_2	81155-18-2	256.203	156				
Rhodium		Rh	Rh	7440-16-6	102.906	1964	3695	12.4		i acid, sl aqua regia
Rhodium carbonyl chloride	Dirhodium tetracarbonyl dichloride	$C_4Cl_2O_4Rh_2$	$[Rh(CO)_2Cl]_2$	14523-22-9	388.757	124				s os
Rhodium(III) chloride	Rhodium trichloride	Cl_3Rh	$RhCl_3$	10049-07-7	209.264		717	5.38		i H_2O; s alk
Rhodium dodecacarbonyl	Tetrarhodium dodecacarbonyl	$C_{12}O_{12}Rh_4$	$Rh_4(CO)_{12}$	19584-30-6	747.743			2.52		reac H_2O
Rhodium(III) fluoride	Rhodium trifluoride	F_3Rh	RhF_3	60804-25-3	159.901			5.4		
Rhodium(VI) fluoride	Rhodium hexafluoride	F_6Rh	RhF_6	13693-07-7	216.896	$\asymp$70		3.1		
Rhodium(III) iodide	Rhodium triiodide	I_3Rh	RhI_3	15492-38-3	483.619			6.4		
Rhodium(III) oxide	Rhodium trioxide	O_3Rh_2	Rh_2O_3	12036-35-0	253.809	1100 dec		8.2		
Rhodium(IV) oxide	Rhodium dioxide	O_2Rh	RhO_2	12137-27-8	134.905			7.2		
Rhodium(III) sulfate		$O_{12}Rh_2S_3$	$Rh_2(SO_4)_3$	10489-46-0	494.002	$>$500 dec				
Rubidium		Rb	Rb	7440-17-7	85.468	39.30	688	1.53		reac H_2O
Rubidium acetate		$C_2H_3O_2Rb$	$RbC_2H_3O_2$	563-67-7	144.512	246				vs H_2O
Rubidium aluminum sulfate		AlO_8RbS_2	$RbAl(SO_4)_2$	13530-57-9	304.577			$\asymp$3.1	1.60^{20}	i EtOH
Rubidium aluminum sulfate dodecahydrate	Rubidium alum	$AlH_{24}O_{20}RbS_2$	$RbAl(SO_4)_2 \cdot 12H_2O$	7784-29-4	520.761	$\asymp$100 dec		$\asymp$1.9		s H_2O; i EtOH
Rubidium azide		N_3Rb	RbN_3	22756-36-1	127.488	317		2.79	107^{16}	
Rubidium bromate		BrO_3Rb	$RbBrO_3$	13446-70-3	213.37	430		3.68	2.95^{25}	
Rubidium bromide		BrRb	RbBr	7789-39-1	165.372	682	1340	3.35	116^{25}	
Rubidium carbonate		CO_3Rb_2	Rb_2CO_3	584-09-8	230.945	837			223^{20}	
Rubidium chlorate		ClO_3Rb	$RbClO_3$	13446-71-4	168.919			3.19	6.63^{25}	
Rubidium chloride		ClRb	RbCl	7791-11-9	120.921	715	1390	2.76	93.9^{25}	sl EtOH
Rubidium chromate		CrO_4Rb_2	Rb_2CrO_4	13446-72-5	286.93			3.518	76.2^{25}	
Rubidium cyanide		CNRb	RbCN	19073-56-4	111.486			2.3		s H_2O; i EtOH, eth
Rubidium fluoride		FRb	RbF	13446-74-7	104.466	833	1410	3.2	300^{20}	i EtOH
Rubidium formate		CHO_2Rb	$RbCHO_2$	3495-35-0	130.486	dec				
Rubidium hydride		HRb	RbH	13446-75-8	86.476	$\asymp$170 dec		2.60		reac H_2O
Rubidium hydrogen carbonate	Rubidium bicarbonate	CHO_3Rb	$RbHCO_3$	19088-74-5	146.485	175 dec			116^{20}	
Rubidium hydrogen fluoride	Rubidium bifluoride	F_2HRb	$RbHF_2$	12280-64-7	124.473	188		3.3		

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Rubidium hydrogen sulfate	Rubidium bisulfate	HO_4RbS	$RbHSO_4$	15587-72-1	182.54	208		2.9		s H_2O
Rubidium hydroxide		HORb	RbOH	1310-82-3	102.475	382		3.2	173^{30}	s EtOH
Rubidium iodate		IO_3Rb	$RbIO_3$	13446-76-9	260.37	dec		4.33	2.44^{25}	vs HCl
Rubidium iodide		IRb	RbI	7790-29-6	212.372	642	1300	3.55	165^{25}	s EtOH
Rubidium nitrate		NO_3Rb	$RbNO_3$	13126-12-0	147.473	305		3.11	65.0^{25}	
Rubidium oxide	Ruthenium monoxide	ORb_2	Rb_2O	18088-11-4	186.935	400 dec		4.0		reac H_2O
Rubidium perchlorate		ClO_4Rb	$RbClO_4$	13510-42-4	184.919	281	600 dec	2.8	1.5^{25}	
Rubidium peroxide		O_2Rb_2	Rb_2O_2	23611-30-5	202.935			3.8		reac H_2O
Rubidium selenide		Rb_2Se	Rb_2Se	31052-43-4	249.9	733		3.22		reac H_2O
Rubidium sulfate		O_4Rb_2S	Rb_2SO_4	7488-54-2	267	1050		3.6	50.8^{25}	
Rubidium sulfide		Rb_2S	Rb_2S	31083-74-6	203.002	425		2.91		s H_2O
Rubidium superoxide	Rubidium dioxide	O_2Rb	RbO_2	12137-25-6	117.467	412		$\asymp$3.0		
Ruthenium		Ru	Ru	7440-18-8	101.07	2334	4150	12.1		i acid, aqua regia
Ruthenium(III) bromide	Ruthenium tribromide	Br_3Ru	$RuBr_3$	14014-88-1	340.78	$>$ 400 dec		5.3		
Ruthenium(III) chloride	Ruthenium trichloride	Cl_3Ru	$RuCl_3$	10049-08-8	207.43	$>$ 500 dec		3.1		i H_2O; s EtOH
Ruthenium dodecacarbonyl	Triruthenium dodecacarbonyl	$C_{12}O_{12}Ru_3$	$Ru_3(CO)_{12}$	15243-33-1	639.33	150 dec				
Ruthenium(III) fluoride	Ruthenium trifluoride	F_3Ru	RuF_3	51621-05-7	158.07	$>$ 600 dec		5.36		
Ruthenium(IV) fluoride	Ruthenium tetrafluoride	F_4Ru	RuF_4	71500-16-8	177.06					reac H_2O
Ruthenium(V) fluoride	Ruthenium pentafluoride	F_5Ru	RuF_5	14521-18-7	196.06	86.5	227	3.90		
Ruthenium(VI) fluoride	Ruthenium hexafluoride	F_6Ru	RuF_6	13693-08-8	215.06	54		3.54		reac H_2O
Ruthenium(III) iodide	Ruthenium triiodide	I_3Ru	RuI_3	13896-65-6	481.78			6.0		
Ruthenium(IV) oxide	Ruthenium dioxide	O_2Ru	RuO_2	12036-10-1	133.07			7.05		i H_2O, acid
Ruthenium(VIII) oxide	Ruthenium tetroxide	O_4Ru	RuO_4	20427-56-9	165.07	25.4	40	3.29	171^{0}	vs ctc; reac EtOH
Ruthenium(III) 2,4-pentanedioate	Ruthenium(III) acetylacetonate	$C_{15}H_{21}O_6Ru$	$Ru(CH_3COCH\text{-}COCH_3)_3$	14284-93-6	398.39	230				
Samarium		Sm	Sm	7440-19-9	150.36	1074	1794	7.52		
Samarium boride		B_6Sm	SmB_6	12008-29-6	215.23	2580		5.07		
Samarium(II) bromide		Br_2Sm	$SmBr_2$	50801-97-3	310.17	669				reac H_2O
Samarium(III) bromide		Br_3Sm	$SmBr_3$	13759-87-0	390.07	640				reac H_2O
Samarium(II) chloride		Cl_2Sm	$SmCl_2$	13874-75-4	221.27	855		3.69		reac H_2O
Samarium(III) chloride		Cl_3Sm	$SmCl_3$	10361-82-7	256.72	682		4.46	93.8^{25}	
Samarium(III) chloride hexahydrate		$Cl_3H_{12}O_6Sm$	$SmCl_3 \cdot 6H_2O$	13465-55-9	364.81	dec		2.38	93.8^{25}	
Samarium(II) fluoride		F_2Sm	SmF_2	15192-17-3	188.36					reac H_2O
Samarium(III) fluoride		F_3Sm	SmF_3	13765-24-7	207.36	1306				reac H_2O
Samarium(II) iodide		I_2Sm	SmI_2	32248-43-4	404.17	520				reac H_2O
Samarium(III) iodide		I_3Sm	SmI_3	13813-25-7	531.07	850				reac H_2O
Samarium(III) nitrate		N_3O_9Sm	$Sm(NO_3)_3$	10361-83-8	336.38				144^{25}	s EtOH
Samarium(III) nitrate hexahydrate		$H_{12}N_3O_{15}Sm$	$Sm(NO_3)_3 \cdot 6H_2O$	13759-83-6	444.47	78				s H_2O, MeOH, ace

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Samarium(III) oxide	Samaria	O_3Sm_2	Sm_2O_3	12060-58-1	348.72	2269	3780	7.6		
Samarium silicide		Si_2Sm	$SmSi_2$	12300-22-0	206.53			5.14		
Samarium(III) sulfate octahydrate		$H_{16}O_{20}S_3Sm_2$	$Sm_2(SO_4)_3 \cdot 8H_2O$	13465-58-2	733.03			2.93	2.67^{20}	
Samarium(III) sulfide		S_3Sm_2	Sm_2S_3	12067-22-0	396.92	1720		5.87		
Samarium(III) telluride		Sm_2Te_3	Sm_2Te_3	12040-00-5	683.52			7.31		
Scandium		Sc	Sc	7440-20-2	44.956	1541	2836	2.99		
Scandium boride		B_2Sc	ScB_2	12007-34-0	66.578	2250		3.17		
Scandium bromide		Br_3Sc	$ScBr_3$	13465-59-3	284.668	969		9.33		s H_2O
Scandium chloride		Cl_3Sc	$ScCl_3$	10361-84-9	151.314	967		2.4		s H_2O; i EtOH
Scandium fluoride		F_3Sc	ScF_3	13709-47-2	101.951	1515				sl H_2O
Scandium hydroxide		H_3O_3Sc	$Sc(OH)_3$	17674-34-9	95.978					i H_2O; s dil acid
Scandium nitrate		N_3O_9Sc	$Sc(NO_3)_3$	13465-60-6	230.971				169^{25}	s EtOH
Scandium oxide	Scandia	O_3Sc_2	Sc_2O_3	12060-08-1	137.91	2485		3.864		s conc acid
Scandium sulfide		S_3Sc_2	Sc_2S_3	12166-29-9	186.11	1775		2.91		
Scandium telluride		Sc_2Te_3	Sc_2Te_3	12166-44-8	472.71			5.29		
Selenic acid		H_2O_4Se	H_2SeO_4	7783-08-6	144.97	58	260 dec	2.95		vs H_2O; reac EtOH
Selenium (gray)		Se	Se	7782-49-2	78.96	220.5	685	4.81		i H_2O, CS_2
Selenium (α form)		Se	Se	7782-49-2	78.96	221	685	4.39		i H_2O, EtOH; sl eth
Selenium (vitreous)		Se	Se	7782-49-2	78.96	trans to gray Se 180	685	4.28		i H_2O; sl CS_2
Selenium bromide	Diselenium dibromide	Br_2Se_2	Se_2Br_2	7789-52-8	317.73		225 dec	3.60		reac H_2O; s CS_2, chl
Selenium chloride	Diselenium dichloride	Cl_2Se_2	Se_2Cl_2	10025-68-0	228.83	−85	130 dec	2.774		reac H_2O; s CS_2, bz, ctc, chl
Selenium dioxide	Selenium(IV) oxide	O_2Se	SeO_2	7446-08-4	110.96	340 tp	315 sp	3.95	264^{22}	s EtOH, MeOH; sl ace
Selenium dioxydifluoride		F_2O_2Se	SeO_2F_2	14984-81-7	148.96	−99.5	−8.4	6.089 g/L		reac H_2O
Selenium disulfide		S_2Se	SeS_2	7488-56-4	143.09	100				i H_2O; s acid
Selenium hexafluoride		F_6Se	SeF_6	7783-79-1	192.95	−34.6 tp	−46.6 sp	7.887 g/L		i H_2O
Selenium oxybromide		Br_2OSe	$SeOBr_2$	7789-51-7	254.77	41.6	220 dec	3.38		reac H_2O; s CS_2, bz, ctc
Selenium oxychloride		Cl_2OSe	$SeOCl_2$	7791-23-3	165.86	8.5	177	2.44		reac H_2O; s ctc, chl, bz, tol
Selenium oxyfluoride		F_2OSe	$SeOF_2$	7783-43-9	132.96	15	125	2.8		reac H_2O
Selenium sulfide (Se_4S_4)	Selenium tetrasulfide	S_4Se_4	Se_4S_4	75926-28-2	444.1	113 dec		3.29		s bz; sl CS_2
Selenium sulfide (Se_2S_6)	Selenium hexasulfide	S_6Se_2	Se_2S_6	75926-26-0	350.32	121.5		2.44		s CS_2; sl bz
Selenium sulfide		S_2Se_6	Se_6S_2	75926-30-6	537.89	121.5				s CS_2
Selenium tetrabromide	Selenium(IV) bromide	Br_4Se	$SeBr_4$	7789-65-3	398.58	123				reac H_2O; s CS_2, chl
Selenium tetrachloride		Cl_4Se	$SeCl_4$	10026-03-6	220.77	305 tp	191.4 sp	2.6		reac H_2O
Selenium tetrafluoride		F_4Se	SeF_4	13465-66-2	154.95	−10	106	2.75		reac H_2O; vs EtOH, eth
Selenium trioxide		O_3Se	SeO_3	13768-86-0	126.96	118	subl	3.44		s H_2O, os
Selenous acid		H_2O_3Se	H_2SeO_3	7783-00-8	128.97	70 dec		3.0		vs H_2O; s EtOH

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Silane		H_4Si	SiH_4	7803-62-5	32.118	−185	−111.9	1.313 g/L		reac H_2O; i EtOH, bz
Silicon		Si	Si	7440-21-3	28.086	1414	3265	2.3290		i H_2O, acid; s alk
Silicon carbide (hexagonal)	Moissanite	CSi	SiC	409-21-2	40.097	2830		3.16		i H_2O, EtOH
Silicon dioxide (α-quartz)	Quartz (α)	O_2Si	SiO_2	14808-60-7	60.085	trans to beta quartz 573	2950	2.648		i H_2O, acid; s HF
Silicon dioxide (β-quartz)	Quartz (β)	O_2Si	SiO_2	14808-60-7	60.085	trans to tridymite 867	2950	2.533^{600}		i H_2O, acid; s HF
Silicon dioxide (tridymite)	Tridymite	O_2Si	SiO_2	15468-32-3	60.085	trans cristobalite 1470	2950	2.265		i H_2O, acid; s HF
Silicon dioxide (cristobalite)	Cristobalite	O_2Si	SiO_2	14464-46-1	60.085	1722	2950	2.334		i H_2O, acid; s HF
Silicon dioxide (vitreous)	Fused silica	O_2Si	SiO_2	60676-86-0	60.085	1713	2950	2.196		i H_2O, acid; s HF
Silicon disulfide		S_2Si	SiS_2	13759-10-9	92.218	1090	subl	2.04		reac H_2O, EtOH; i bz
Silicon monosulfide		SSi	SiS	12504-41-5	60.152	≈900	940	1.85		reac H_2O
Silicon monoxide	Silicon(II) oxide	OSi	SiO	10097-28-6	44.085			2.18		
Silicon nitride (Si_3N_4)		N_4Si_3	Si_3N_4	12033-89-5	140.284	1900		3.17		
Silver		Ag	Ag	7440-22-4	107.868	961.78	2162	10.5		
Silver(I) acetate		$C_2H_3AgO_2$	$AgC_2H_3O_2$	563-63-3	166.912	dec		3.26	1.04^{20}	
Silver(I) acetylide	Disilver acetylide	C_2Ag_2	Ag_2C_2	7659-31-6	239.757					
Silver(I) acetylide (AgC_2H)	Monosilver acetylide	C_2HAg	AgC_2H	13092-75-6	132.897					
Silver(I) arsenate		Ag_3AsO_4	Ag_3AsO_4	13510-44-6	462.524	dec		6.657	0.00085	s NH_4OH
Silver azide		AgN_3	AgN_3	13863-88-2	149.888	exp ≈250		4.9	0.00081^{20}	
Silver(I) bromate		$AgBrO_3$	$AgBrO_3$	7783-89-3	235.77	360 dec		5.21	0.193^{25}	
Silver(I) bromide	Bromyrite	AgBr	AgBr	7785-23-1	187.772	432	1502	6.47	0.000014^{25}	i acid
Silver(I) carbonate		CAg_2O_3	Ag_2CO_3	534-16-7	275.745	218		6.077	0.0036^{20}	s acid
Silver(I) chlorate		$AgClO_3$	$AgClO_3$	7783-92-8	191.319	230	270 dec	4.430	17.6^{25}	sl EtOH
Silver(I) chloride	Cerargyrite	AgCl	AgCl	7783-90-6	143.321	455	1547	5.56	0.00019^{25}	
Silver(I) chlorite		$AgClO_2$	$AgClO_2$	7783-91-7	175.32	105 exp			0.55^{25}	
Silver(I) chromate		Ag_2CrO_4	Ag_2CrO_4	7784-01-2	331.73			5.625	0.000014^{0}	
Silver(I) citrate		$C_6H_5Ag_3O_7$	$Ag_3C_6H_5O_7$	126-45-4	512.705					i H_2O; s HNO_3
Silver(I) cyanide		CAgN	AgCN	506-64-9	133.886	320 dec		3.95	0.0000011	i EtOH, dil acid
Silver(I) dichromate		$Ag_2Cr_2O_7$	$Ag_2Cr_2O_7$	7784-02-3	431.724			4.770		sl H_2O
Silver(I) diethyldithiocarbamate		$C_5H_{10}AgNS_2$	$Ag(C_2H_5)_2NCS_2$	1470-61-7	256.14	173				s py
Silver(I) fluoride		AgF	AgF	7775-41-9	126.866	435	1159	5.852	172^{20}	
Silver(II) fluoride	Silver difluoride	AgF_2	AgF_2	7783-95-1	145.865	690		4.58		reac H_2O
Silver(I) hexafluoroantimonate		AgF_6Sb	$AgSbF_6$	26042-64-8	343.618					
Silver(I) hexafluoroarsenate		$AgAsF_6$	$AgAsF_6$	12005-82-2	296.78					
Silver(I) hexafluorophosphate		AgF_6P	$AgPF_6$	26042-63-7	252.832	102 dec				
Silver(I) hydrogen fluoride		AgF_2H	$AgHF_2$	12249-52-4	146.873	dec				

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Silver(I) iodate		$AgIO_3$	$AgIO_3$	7783-97-3	282.77	> 200		5.53	0.053^{25}	
Silver(I) iodide	Iodyrite	AgI	AgI	7783-96-2	234.772	558	1506	5.68	0.000003	i acid
Silver(I) lactate monohydrate		$C_3H_7AgO_4$	$AgC_3H_5O_3 \cdot H_2O$	128-00-7	214.954					sl H_2O, EtOH
Silver(I) metaphosphate		AgO_3P	$AgPO_3$	13465-96-8	186.84	490		6.37		i H_2O; s HNO_3, NH_4OH
Silver(I) molybdate		Ag_2MoO_4	Ag_2MoO_4	13765-74-7	375.67	483		6.18		sl H_2O
Silver(I) nitrate		$AgNO_3$	$AgNO_3$	7761-88-8	169.873	212	440 dec	4.35	234^{25}	sl EtOH, ace
Silver(I) nitrite		$AgNO_2$	$AgNO_2$	7783-99-5	153.874	140 dec		4.453	0.415^{25}	i EtOH; reac acid
Silver(I) oxalate		$C_2Ag_2O_4$	$Ag_2C_2O_4$	533-51-7	303.755	exp 140		5.03	0.0043^{20}	
Silver(I) oxide		Ag_2O	Ag_2O	20667-12-3	231.735	≈200 dec		7.2	0.0025	i EtOH; s acid, alk
Silver(II) oxide		AgO	AgO	1301-96-8	123.867	> 100 dec		7.5	0.0027^{25}	s alk; reac acid
Silver(II) oxide (Ag_2O_2)		Ag_2O_2	Ag_2O_2	25455-73-6	247.735	> 100		7.44		i H_2O; s acid, NH_4OH
Silver(I) perchlorate		$AgClO_4$	$AgClO_4$	7783-93-9	207.319	486 dec		2.806	558^{25}	s bz, py, os
Silver(I) perchlorate monohydrate		$AgClH_2O_5$	$AgClO_4 \cdot H_2O$	14242-05-8	225.334	43 dec			558^{25}	
Silver(I) permanganate		$AgMnO_4$	$AgMnO_4$	7783-98-4	226.804	dec		4.49	0.91^{18}	reac EtOH
Silver(I) phosphate		Ag_3O_4P	Ag_3PO_4	7784-09-0	418.576	849		6.37	0.0064	sl dil acid
Silver(I) picrate monohydrate		$C_6H_4AgN_3O_8$	$AgC_6H_2N_3O_7 \cdot H_2O$	146-84-9	353.979					sl H_2O, EtOH; i chl, eth
Silver(I) selenate		Ag_2O_4Se	Ag_2SeO_4	7784-07-8	358.69			5.72	0.118^{20}	
Silver(I) selenide		Ag_2Se	Ag_2Se	1302-09-6	294.7	880		8.216		i H_2O
Silver(I) selenite		Ag_2O_3Se	Ag_2SeO_3	7784-05-6	342.69	530	> 550 dec	5.930		sl H_2O; s acid
Silver subfluoride		Ag_2F	Ag_2F	1302-01-8	234.734	100 dec		8.6		reac H_2O
Silver(I) sulfate		Ag_2O_4S	Ag_2SO_4	10294-26-5	311.8	652		5.45	0.84^{25}	
Silver(I) sulfide		Ag_2S	Ag_2S	21548-73-2	247.802	825		7.23		i H_2O; s acid
Silver(I) sulfite		Ag_2O_3S	Ag_2SO_3	13465-98-0	295.8	100 dec			0.00046^{20}	s acid, NH_4OH
Silver(I) telluride		Ag_2Te	Ag_2Te	12002-99-2	343.34	955		8.4		
Silver(I) tetraiodomercurate(II)	Mercuric silver iodide	Ag_2HgI_4	Ag_2HgI_4	7784-03-4	923.94	trans to red cub ≈40		6.1		i H_2O, dil acid
Silver(I) thiocyanate		CAgNS	AgSCN	1701-93-5	165.952	dec				i H_2O
Silver(I) thiosulfate		$Ag_2O_3S_2$	$Ag_2S_2O_3$	23149-52-2	327.866	dec				sl H_2O; s NH_4OH
Silver(I) tungstate		Ag_2O_4W	Ag_2WO_4	13465-93-5	463.57	620			0.015	s HNO_3, NH_4OH
2-Silylpentasilane		$H_{14}Si_6$	Si_6H_{14}	14868-55-4	182.624	−78.4	185.2	0.840		
3-Silylpentasilane		$H_{14}Si_6$	Si_6H_{14}	14868-55-4	182.624	−69	179.5	0.843		reac H_2O
2-Silyltetrasilane		$H_{12}Si_5$	Si_5H_{12}	14868-54-3	152.523	−109.9	146.2	0.820		reac H_2O
2-Silyltrisilane		$H_{10}Si_4$	Si_4H_{10}	13597-87-0	122.421	−99.4	101.7	0.792		reac H_2O
Sodium	Natrium	Na	Na	7440-23-5	22.99	97.80	883	0.97		reac H_2O
Sodium acetate		$C_2H_3NaO_2$	$NaC_2H_3O_2$	127-09-3	82.034	328.2		1.528	50.4^{25}	
Sodium acetate trihydrate		$C_2H_9NaO_5$	$NaC_2H_3O_2 \cdot 3H_2O$	6131-90-4	136.079	58 dec		1.45	50.4^{25}	sl EtOH
Sodium aluminate	Aluminum sodium oxide	$AlNaO_2$	$NaAlO_2$	1302-42-7	81.971	1650		4.63		vs H_2O; i EtOH
Sodium aluminum hydride		AlH_4Na	$NaAlH_4$	13770-96-2	54.004	174 dec		1.24		i eth; s thf

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Sodium aluminum sulfate dodecahydrate	Sodium alum	$AlH_{24}NaO_{20}S_2$	$NaAl(SO_4)_2 \cdot 12H_2O$	10102-71-3	458.283	≍60		1.61	39.7^{20}	i EtOH
Sodium amide	Sodamide	H_2NNa	$NaNH_2$	7782-92-5	39.013	210	500 dec	1.39		reac H_2O
Sodium ammonium phosphate tetrahydrate	Ammonium sodium phosphate tetrahydrate	$H_{13}NNaO_8P$	$NaNH_4HPO_4 \cdot 4H_2O$	13011-54-6	209.069	≍80 dec		1.54		s H_2O; i EtOH
Sodium arsenite	Sodium metaarsenite	AsO_2Na	$NaAsO_2$	7784-46-5	129.911			1.87		vs H_2O; i EtOH
Sodium azide	Smite	N_3Na	NaN_3	26628-22-8	65.01	300 dec		1.846	40.8^{20}	sl EtOH; i eth
Sodium bismuthate	Sodium metabismuthate	$BiNaO_3$	$NaBiO_3$	12232-99-4	279.968					i cold H_2O, reac acid
Sodium borohydride		BH_4Na	$NaBH_4$	16940-66-2	37.833	≍400 dec		1.07	55^{20}	reac EtOH
Sodium bromate		$BrNaO_3$	$NaBrO_3$	7789-38-0	150.892	381		3.34	39.4^{25}	i EtOH
Sodium bromide		BrNa	NaBr	7647-15-6	102.894	747	1390	3.200	94.6^{25}	s EtOH
Sodium bromide dihydrate		BrH_4NaO_2	$NaBr \cdot 2H_2O$	13466-08-5	138.925	36 dec		2.18	94.6^{25}	sl EtOH
Sodium carbonate	Soda ash	CNa_2O_3	Na_2CO_3	497-19-8	105.989	858.1		2.54	30.7^{25}	i EtOH
Sodium carbonate decahydrate	Sal soda	$CH_{20}Na_2O_{13}$	$Na_2CO_3 \cdot 10H_2O$	6132-02-1	286.142	34 dec		1.46	30.7^{25}	i EtOH
Sodium carbonate monohydrate	Thermonatrite	$CH_2Na_2O_4$	$Na_2CO_3 \cdot H_2O$	5968-11-6	124.005	100 dec		2.25	30.7^{25}	i EtOH
Sodium chlorate		$ClNaO_3$	$NaClO_3$	7775-09-9	106.441	248	>300 dec	2.5	100^{25}	sl EtOH
Sodium chloride	Halite	ClNa	NaCl	7647-14-5	58.443	800.7	1465	2.17	36.0^{25}	sl EtOH
Sodium chlorite		$ClNaO_2$	$NaClO_2$	7758-19-2	90.442	≍180 dec			64^{17}	
Sodium chromate		$CrNa_2O_4$	Na_2CrO_4	7775-11-3	161.974	792		2.72	87.6^{25}	sl EtOH
Sodium chromate tetrahydrate		$CrH_8Na_2O_8$	$Na_2CrO_4 \cdot 4H_2O$	10034-82-9	234.035	dec			87.6^{25}	sl EtOH
Sodium citrate dihydrate	1,2,3-Propanetricarboxylic acid, 2-hydroxy-, trisodium salt, dihydrate	$C_6H_9Na_3O_9$	$Na_3C_6H_5O_7 \cdot 2H_2O$	6132-04-3	294.099	150 dec				vs H_2O; i EtOH, eth
Sodium cyanate		CNNaO	NaCNO	917-61-3	65.007	550		1.89		s H_2O; sl EtOH; i eth
Sodium cyanide	Cyanogran	CNNa	NaCN	143-33-9	49.008	563		1.6	58.2^{20}	sl EtOH
Sodium cyanoborohydride		CH_3BNNa	$NaBH_3(CN)$	25895-60-7	62.843	240 dec		1.12		vs H_2O; s thf; sl EtOH; i bz, eth
Sodium dichromate		$Cr_2Na_2O_7$	$Na_2Cr_2O_7$	10588-01-9	261.968	357	400 dec		187^{25}	
Sodium dihydrogen hypophosphate hexahydrate		$H_{14}Na_2O_{12}P_2$	$Na_2H_2P_2O_6 \cdot 6H_2O$	7782-95-8	314.031	110 dec		1.849	2.0^{25}	i EtOH
Sodium dihydrogen phosphate		H_2NaO_4P	NaH_2PO_4	7558-80-7	119.977	200 dec			94.9^{25}	
Sodium dihydrogen phosphate monohydrate	Sodium phosphate, monobasic, monohydrate	H_4NaO_5P	$NaH_2PO_4 \cdot H_2O$	10049-21-5	137.993	100 dec			94.9^{25}	i EtOH
Sodium dihydrogen phosphate dihydrate		H_6NaO_6P	$NaH_2PO_4 \cdot 2H_2O$	13472-35-0	156.008	60 dec		1.91	94.9^{25}	i EtOH
Sodium dihydrogen pyrophosphate	Sodium acid pyrophosphate	$H_2Na_2O_7P_2$	$Na_2H_2P_2O_7$	7758-16-9	221.939	220 dec		≍1.9		s H_2O
Sodium dithionate	Sodium hydrosulfite	$Na_2O_4S_2$	$Na_2S_2O_4$	7775-14-6	174.11	52 dec			24.1^{20}	sl EtOH
Sodium dithionate dihydrate		$H_4Na_2O_8S_2$	$Na_2S_2O_6 \cdot 2H_2O$	7631-94-9*	242.139	110 dec		2.19	15.1^{20}	i EtOH
Sodium ethanolate	Sodium ethoxide	C_2H_5NaO	NaC_2H_5O	141-52-6	68.05					reac H_2O; s EtOH
Sodium ferricyanide monohydrate		$C_6H_2FeN_6Na_3O$	$Na_3Fe(CN)_6 \cdot H_2O$	14217-21-1*	298.933					s H_2O; i EtOH

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Sodium ferrocyanide decahydrate	Sodium prussiate yellow	$C_6H_{20}FeN_6Na_4O_{10}$	$Na_4Fe(CN)_6 \cdot 10H_2O$	13601-19-9	484.061	≍50 dec		1.46	20^{20}	i os
Sodium fluoride	Villiaumite	FNa	NaF	7681-49-4	41.988	996	1704	2.78	4.13^{25}	i EtOH
Sodium fluorophosphate		FNa_2O_3P	Na_2PO_3F	10163-15-2	143.95					
Sodium formate		$CHNaO_2$	$NaCHO_2$	141-53-7	68.008	257.3	dec	1.92	94.9^{25}	sl EtOH
Sodium germanate		$GeNa_2O_3$	Na_2GeO_3	12025-19-3	166.59	1083		3.31		
Sodium hexabromoplatinate(IV) hexahydrate		$Br_6H_{12}Na_2O_6Pt$	$Na_2PtBr_6 \cdot 6H_2O$	39277-13-9	828.57					
Sodium hexachloroiridate(IV) hexahydrate		$Cl_6H_{12}IrNa_2O_6$	$Na_2IrCl_6 \cdot 6H_2O$	19567-78-3	559.004	600 dec				
Sodium hexachloroplatinate(IV)		Cl_6Na_2Pt	Na_2PtCl_6	16923-58-3	453.77				53^{16}	s EtOH
Sodium hexachloroplatinate(IV) hexahydrate		$Cl_6H_{12}Na_2O_6Pt$	$Na_2PtCl_6 \cdot 6H_2O$	16923-58-3	561.87	110 dec		2.50	53^{16}	s EtOH; i eth
Sodium hexafluoroaluminate	Cryolite	AlF_6Na_3	Na_3AlF_6	13775-53-6	209.941	1009		2.97		i H_2O
Sodium hexafluoroantimonate		F_6NaSb	$NaSbF_6$	16925-25-0	258.74			3.375	129^{20}	s EtOH, ace
Sodium hexafluorophosphate monohydrate		F_6H_2NaOP	$NaPF_6 \cdot H_2O$	20644-15-9	185.969			2.369	103^{0}	s EtOH, MeOH, ace
Sodium hexafluorosilicate	Malladrite	F_6Na_2Si	Na_2SiF_6	16893-85-9	188.056	dec		2.7	0.67^{20}	i EtOH
Sodium hexanitrocobaltate(III)	Sodium Cobaltinitrite	$CoN_6Na_3O_{12}$	$Na_3Co(NO_2)_6$	14649-73-1	403.935					vs H_2O; sl EtOH
Sodium hydride		HNa	NaH	7646-69-7	23.998	425 dec		1.39		reac H_2O, EtOH
Sodium hydrogen arsenate		$AsHNa_2O_4$	Na_2HAsO_4	7778-43-0	185.908	≍195 dec			51^{20}	sl EtOH
Sodium hydrogen arsenate heptahydrate		$AsH_{15}Na_2O_{11}$	$Na_2HAsO_4 \cdot 7H_2O$	10048-95-0	312.014	≍50 dec		1.87	51^{20}	sl EtOH
Sodium hydrogen carbonate	Sodium bicarbonate	$CHNaO_3$	$NaHCO_3$	144-55-8	84.007	≍50 dec		2.20	10.3^{25}	i EtOH
Sodium hydrogen fluoride	Sodium bifluoride	F_2HNa	$NaHF_2$	1333-83-1	61.995	> 160 dec		2.08	3.25^{20}	
Sodium hydrogen phosphate	Sodium phosphate, dibasic	HNa_2O_4P	Na_2HPO_4	7558-79-4	141.959			1.7	11.8^{25}	
Sodium hydrogen phosphate heptahydrate		$H_{15}Na_2O_{11}P$	$Na_2HPO_4 \cdot 7H_2O$	7782-85-6	268.066			≍1.7	11.8^{25}	i EtOH
Sodium hydrogen phosphate dodecahydrate		$H_{25}Na_2O_{16}P$	$Na_2HPO_4 \cdot 12H_2O$	10039-32-4	358.143	≍35 dec		≍1.5	11.8^{25}	i EtOH
Sodium hydrogen sulfate	Sodium bisulfate	$HNaO_4S$	$NaHSO_4$	7681-38-1	120.062	≍315		2.43	28.5^{25}	
Sodium hydrogen sulfate monohydrate	Sodium bisulfate monohydrate	H_3NaO_5S	$NaHSO_4 \cdot H_2O$	10034-88-5	138.077			2.10	28.5^{25}	reac EtOH
Sodium hydrogen sulfide	Sodium bisulfide	HNaS	NaHS	16721-80-5	56.064	350		1.79		s H_2O, EtOh, eth
Sodium hydrogen sulfide dihydrate	Sodium bisulfide dihydrate	H_5NaO_2S	$NaHS \cdot 2H_2O$	16721-80-5	92.095	55 dec				vs H_2O, EtOH, eth
Sodium hydrogen sulfite	Sodium bisulfite	$HNaO_3S$	$NaHSO_3$	7631-90-5	104.062			1.48		s H_2O; sl EtOH
Sodium hydroxide	Caustic soda	HNaO	NaOH	1310-73-2	39.997	323	1388	2.13	100^{25}	s EtOH, MeOH
Sodium hypochlorite		ClNaO	NaClO	7681-52-9	74.442	anh form exp			79.9^{25}	

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Sodium hypochlorite pentahydrate		$ClH_{10}NaO_6$	$NaClO \cdot 5H_2O$	10022-70-5	164.518	18		1.6		s H_2O
Sodium iodate		$INaO_3$	$NaIO_3$	7681-55-2	197.892	dec		4.28	9.47^{25}	i EtOH
Sodium iodide		INa	NaI	7681-82-5	149.894	660	1304	3.67	184^{25}	s EtOH, ace
Sodium metabisulfite	Sodium pyrosulfite	$Na_2O_5S_2$	$Na_2S_2O_5$	7681-57-4	190.109				66.7^{25}	sl EtOH
Sodium metaborate		$BNaO_2$	$NaBO_2$	7775-19-1	65.8	966	1434	2.46		s H_2O
Sodium metasilicate		Na_2O_3Si	Na_2SiO_3	6834-92-0	122.064	1089		2.61		s cold H_2O; reac hot H_2O
Sodium molybdate		$MoNa_2O_4$	Na_2MoO_4	7631-95-0	205.92	687		$\asymp 3.5$	65.0^{25}	
Sodium molybdate dihydrate		$H_4MoNa_2O_6$	$Na_2MoO_4 \cdot 2H_2O$	10102-40-6	241.95	100 dec		$\asymp 3.5$	65.0^{25}	
Sodium niobate		$NaNbO_3$	$NaNbO_3$	12034-09-2	163.894	1422		4.55		i H_2O
Sodium nitrate	Chile saltpeter	$NNaO_3$	$NaNO_3$	7631-99-4	84.995	307		2.26	91.2^{25}	sl EtOH, MeOH
Sodium nitrite		$NNaO_2$	$NaNO_2$	7632-00-0	68.996	271	> 320 dec	2.17	84.8^{25}	sl EtOH; reac acid
Sodium nitroferricyanide dihydrate	Sodium nitroprusside dihydrate	$C_5H_4FeN_6Na_2O_3$	$Na_2[Fe(CN)_5NO] \cdot 2H_2O$	13755-38-9	297.949			1.72	40^{16}	sl EtOH
Sodium orthovanadate		Na_3O_4V	Na_3VO_4	13721-39-6	183.909	860				s H_2O; i EtOH
Sodium oxalate		$C_2Na_2O_4$	$Na_2C_2O_4$	62-76-0	133.999	$\asymp 250$ dec		2.34	3.61^{25}	i EtOH
Sodium oxide	Sodium monoxide (Na_2O)	Na_2O	Na_2O	1313-59-3	61.979	1132 dec		2.27		reac H_2O
Sodium perborate tetrahydrate		BH_8NaO_7	$NaBO_3 \cdot 4H_2O$	7632-04-4	153.861	60 dec				reac H_2O
Sodium perchlorate		$ClNaO_4$	$NaClO_4$	7601-89-0	122.441	480 dec		2.52	205^{25}	
Sodium perchlorate monohydrate		ClH_2NaO_5	$NaClO_4 \cdot H_2O$	7791-07-3	140.456	$\asymp 130$ dec		2.02	205^{25}	
Sodium periodate		$INaO_4$	$NaIO_4$	7790-28-5	213.892	$\asymp 300$ dec		3.86	14.4^{25}	s acid
Sodium periodate trihydrate	Sodium metaperiodate	H_6INaO_7	$NaIO_4 \cdot 3H_2O$	13472-31-6	267.938	175 dec		3.22	14.4^{25}	
Sodium permanganate trihydrate		H_6MnNaO_7	$NaMnO_4 \cdot 3H_2O$	10101-50-5*	195.972	170 dec		2.47	144^{20}	reac EtOH
Sodium peroxide		Na_2O_2	Na_2O_2	1313-60-6	77.979	675		2.805		reac H_2O
Sodium perrhenate		NaO_4Re	$NaReO_4$	13472-33-8	273.195	300		5.39		
Sodium persulfate	Sodium peroxydisulfate	$Na_2O_8S_2$	$Na_2S_2O_8$	7775-27-1	238.107					vs H_2O; reac EtOH
Sodium phosphate dodecahydrate		$H_{24}Na_3O_{16}P$	$Na_3PO_4 \cdot 12H_2O$	10101-89-0	380.124	$\asymp 75$		1.62	14.4^{25}	i EtOH
Sodium phosphinate	Sodium hypophosphite	H_2NaO_2P	NaH_2PO_2	7681-53-0	87.979				100^{25}	
Sodium phosphinate monohydrate	Sodium hypophosphite monohydrate	H_4NaO_3P	$NaH_2PO_2 \cdot H_2O$	10039-56-2	105.994	310 dec			100^{25}	s EtOH
Sodium pyrophosphate	Tetrasodium pyrophosphate	$Na_4O_7P_2$	$Na_4P_2O_7$	7722-88-5	265.902	988		2.53	7.09^{25}	
Sodium selenate		Na_2O_4Se	Na_2SeO_4	13410-01-0	188.94				58.5^{25}	
Sodium selenate decahydrate		$H_{20}Na_2O_{14}Se$	$Na_2SeO_4 \cdot 10H_2O$	10102-23-5	369.09			1.61	58.5^{25}	
Sodium selenide		Na_2Se	Na_2Se	1313-85-5	124.94	> 875		2.62		reac H_2O
Sodium selenite		Na_2O_3Se	Na_2SeO_3	10102-18-8	172.94				89.8^{25}	i EtOH
Sodium stearate		$C_{18}H_{35}NaO_2$	$NaC_{18}H_{35}O_2$	822-16-2	306.46					sl H_2O, EtOH; vs hot H_2O
Sodium succinate hexahydrate		$C_4H_{16}Na_2O_{10}$	$Na_2C_4H_4O_4 \cdot 6H_2O$	150-90-3	270.144	120 dec			20	i EtOH

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Sodium sulfate	Thenardite	Na_2O_4S	Na_2SO_4	7757-82-6	142.044	884		2.7	28.1^{25}	i EtOH
Sodium sulfate decahydrate	Glauber's salt	$H_{20}Na_2O_{14}S$	$Na_2SO_4 \cdot 10H_2O$	7727-73-3	322.197	32 dec		1.46	28.1^{25}	i EtOH
Sodium sulfide		Na_2S	Na_2S	1313-82-2	78.046	1172		1.856	20.6^{25}	sl EtOH; i eth
Sodium sulfide nonahydrate		$H_{18}Na_2O_9S$	$Na_2S \cdot 9H_2O$	1313-84-4	240.184	≍50 dec		1.43	20.6^{25}	sl EtOH; i eth
Sodium sulfide pentahydrate		$H_{10}Na_2O_5S$	$Na_2S \cdot 5H_2O$	1313-83-3	168.122	120 dec		1.58	20.6^{25}	s EtOH; i eth
Sodium sulfite		Na_2O_3S	Na_2SO_3	7757-83-7	126.044	dec		2.63	30.7^{25}	i EtOH
Sodium sulfite heptahydrate		$H_{14}Na_2O_{10}S$	$Na_2SO_3 \cdot 7H_2O$	10102-15-5	252.151			1.56	30.7^{25}	sl EtOH
Sodium superoxide	Sodium dioxide	NaO_2	NaO_2	12034-12-7	54.989	552		2.2		reac H_2O
Sodium tellurate		Na_2O_4Te	Na_2TeO_4	10101-83-4	237.58				0.8	
Sodium tellurite		Na_2O_3Te	Na_2TeO_3	10102-20-2	221.58					sl H_2O
Sodium tetraborate	Sodium borate	$B_4Na_2O_7$	$Na_2B_4O_7$	1330-43-4	201.22	743	1575	2.4	3.17^{25}	sl MeOH
Sodium tetraborate decahydrate	Borax	$B_4H_{20}Na_2O_{17}$	$Na_2B_4O_7 \cdot 10H_2O$	1303-96-4	381.373	75 dec		1.73	3.17^{25}	i EtOH
Sodium tetraborate pentahydrate	Tincalconite	$B_4H_{10}Na_2O_{12}$	$Na_2B_4O_7 \cdot 5H_2O$	12045-88-4	291.296	dec		1.88	3.17^{25}	
Sodium tetraborate tetrahydrate	Kernite	$B_4H_8Na_2O_{11}$	$Na_2B_4O_7 \cdot 4H_2O$	12045-87-3	273.281			1.95	3.17^{25}	
Sodium tetrachloroaluminate		$AlCl_4Na$	$NaAlCl_4$	7784-16-9	191.783			2.01		s H_2O
Sodium tetrachloroaurate(III) dihydrate	Sodium chloroaurate dihydrate	$AuCl_4H_4NaO_2$	$NaAuCl_4 \cdot 2H_2O$	13874-02-7	397.799	100 dec			150^{10}	s EtOH, eth
Sodium tetrachloropalladate(II) trihydrate	Sodium chloropalladate trihydrate	$Cl_4H_6Na_2O_3Pd$	$Na_2PdCl_4 \cdot 3H_2O$	13820-53-6	348.26					vs H_2O; s EtOH
Sodium tetrachloroplatinate(II) tetrahydrate	Sodium chloroplatinate tetrahydrate	$Cl_4H_8Na_2O_4Pt$	$Na_2PtCl_4 \cdot 4H_2O$	10026-00-3	454.93	100				s H_2O, EtOH
Sodium tetrafluoroberyllate	Beryllium sodium fluoride	BeF_4Na_2	Na_2BeF_4	13871-27-7	130.986	575		2.47		sl H_2O
Sodium tetrafluoroborate	Sodium borofluoride	BF_4Na	$NaBF_4$	13755-29-8	109.795	384		2.47	108^{20}	sl EtOH
Sodium thiocyanate		CNNaS	NaSCN	540-72-7	81.074	287			151^{25}	
Sodium thiophosphate dodecahydrate	Sodium phosphorothioate	$H_{24}Na_3O_{15}PS$	$Na_3PO_3S \cdot 12H_2O$	10101-88-9	396.191	60				vs hot H_2O
Sodium thiosulfate		$Na_2O_3S_2$	$Na_2S_2O_3$	7772-98-7	158.11	100 dec		1.69	76.4^{25}	i EtOH
Sodium thiosulfate pentahydrate	Hypo	$H_{10}Na_2O_8S_2$	$Na_2S_2O_3 \cdot 5H_2O$	10102-17-7	248.186	≍50 dec		1.69	76.4^{25}	i EtOH
Sodium trimetaphosphate		$Na_3O_9P_3$	$Na_3(PO_3)_3$	7785-84-4	305.885			2.49	22	
Sodium trimetaphosphate hexahydrate		$H_{12}Na_3O_{15}P_3$	$Na_3(PO_3)_3 \cdot 6H_2O$	7785-84-4	413.976	53		1.786	22	i EtOH
Sodium tripolyphosphate		$Na_5O_{10}P_3$	$Na_5P_3O_{10}$	7758-29-4	367.864	622			20^{25}	
Sodium tungstate		Na_2O_4W	Na_2WO_4	13472-45-2	293.82	695		4.18	74.2^{25}	
Sodium tungstate dihydrate		$H_4Na_2O_6W$	$Na_2WO_4 \cdot 2H_2O$	10213-10-2	329.85	100 dec		3.25	74.2^{25}	i EtOH
Sodium uranate(VI) monohydrate	Uranium yellow	$H_2Na_2O_8U_2$	$Na_2U_2O_7 \cdot H_2O$	13721-34-1	652.049					i H_2O; s acid
Sodium vanadate(V)	Sodium metavanadate	NaO_3V	$NaVO_3$	13718-26-8	121.93	630			21^{25}	
Sodium vanadate(V) tetrahydrate	Sodium metavanadate tetrahydrate	H_8NaO_7V	$NaVO_3 \cdot 4H_2O$	13718-26-8	193.992				21^{25}	

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Stannane		H_4Sn	SnH_4	2406-52-2	122.742	−146	−51.8	5.017 g/L		
Stibine		H_3Sb	SbH_3	7803-52-3	124.784	−88	−17	5.100 g/L		sl H_2O; s EtOH
Strontium		Sr	Sr	7440-24-6	87.62	777	1382	2.64		reac H_2O; s EtOH
Strontium arsenite tetrahydrate		$As_2H_8O_8Sr$	$Sr(AsO_2)_2 \cdot 4H_2O$	10378-48-0	373.52					sl H_2O, EtOH; sol dil acid
Strontium bromate monohydrate		$Br_2H_2O_7Sr$	$Sr(BrO_3)_2 \cdot H_2O$	14519-18-7	361.44	120 dec		3.773	39.0^{25}	
Strontium bromide		Br_2Sr	$SrBr_2$	10476-81-0	247.43	657		4.216	107^{25}	
Strontium bromide hexahydrate		$Br_2H_{12}O_6Sr$	$SrBr_2 \cdot 6H_2O$	7789-53-9	355.52	88 dec			107^{25}	s EtOH; i eth
Strontium carbide		C_2Sr	SrC_2	12071-29-3	111.64	> 1700		3.19		i H_2O
Strontium carbonate	Strontianite	CO_3Sr	$SrCO_3$	1633-05-2	147.63	1494		3.5	0.00034^{20}	s dil acid
Strontium chlorate		Cl_2O_6Sr	$Sr(ClO_3)_2$	7791-10-8	254.52	120 dec		3.15	176^{25}	sl EtOH
Strontium chloride		Cl_2Sr	$SrCl_2$	10476-85-4	158.53	874	1250	3.052	54.7^{25}	
Strontium chloride hexahydrate		$Cl_2H_{12}O_6Sr$	$SrCl_2 \cdot 6H_2O$	10025-70-4	266.62	100 dec		1.96	54.7^{25}	s EtOH
Strontium chromate		CrO_4Sr	$SrCrO_4$	7789-06-2	203.61	dec		3.9	0.106^{20}	s dil acid
Strontium cyanide dihydrate		$C_2H_8N_2O_4Sr$	$Sr(CN)_2 \cdot 4H_2O$		211.72	dec				vs H_2O
Strontium ferrocyanide pentadecahydrate		$C_6H_{30}FeN_6O_{15}Sr$	$SrFe(CN)_6 \cdot 15H_2O$		569.8				50	
Strontium fluoride		F_2Sr	SrF_2	7783-48-4	125.62	1477	2460	4.24	0.021^{25}	s dil acid
Strontium formate		$C_2H_2O_4Sr$	$Sr(CHO_2)_2$	592-89-2	177.66	71.9		2.693	9.1^{0}	
Strontium formate dihydrate		$C_2H_6O_6Sr$	$Sr(CHO_2)_2 \cdot 2H_2O$	6160-34-5	213.69	100 dec		2.25	9.1^{37}	i EtOH, eth
Strontium hexaboride		B_6Sr	SrB_6	12046-54-7	152.49	2235		3.39		i H_2O; s HNO_3
Strontium hydride		H_2Sr	SrH_2	13598-33-9	89.64	1050		3.26		reac H_2O
Strontium hydroxide		H_2O_2Sr	$Sr(OH)_2$	18480-07-4	121.64	535	710 dec	3.625	2.25^{25}	
Strontium iodate		I_2O_6Sr	$Sr(IO_3)_2$	13470-01-4	437.43			5.045	0.165^{25}	
Strontium iodide		I_2Sr	SrI_2	10476-86-5	341.43	538	1773 dec	4.55	177^{25}	
Strontium iodide hexahydrate		$H_{12}I_2O_6Sr$	$SrI_2 \cdot 6H_2O$	73796-25-5	449.52	120 dec		4.4	177^{25}	s EtOH
Strontium niobate		Nb_2O_6Sr	$SrNb_2O_6$	12034-89-8	369.43	1225		5.11		i H_2O
Strontium nitrate		N_2O_6Sr	$Sr(NO_3)_2$	10042-76-9	211.63	570	645	2.99	80.2^{25}	sl EtOH, ace
Strontium nitride		N_2Sr_3	Sr_3N_2	12033-82-8	290.87	1200				reac H_2O; s HCl
Strontium nitrite		N_2O_4Sr	$Sr(NO_2)_2$	13470-06-9	179.63	240 dec		2.8	72.1^{30}	
Strontium orthosilicate		O_4SiSr_2	Sr_2SiO_4	13597-55-2	267.32			4.5		
Strontium oxide	Strontia	OSr	SrO	1314-11-0	103.62	2531		5.1		reac H_2O
Strontium perchlorate		Cl_2O_8Sr	$Sr(ClO_4)_2$	13450-97-0	286.52				306^{25}	s EtOH, MeOH
Strontium permanganate trihydrate		$H_6Mn_2O_{11}Sr$	$Sr(MnO_4)_2 \cdot 3H_2O$		379.54	175 dec		2.75	250^{18}	
Strontium peroxide		O_2Sr	SrO_2	1314-18-7	119.62	215 dec		4.78		reac H_2O
Strontium phosphate		$O_8P_2Sr_3$	$Sr_3(PO_4)_2$	7446-28-8	452.8				0.000011^{20}	s acid
Strontium selenate		O_4SeSr	$SrSeO_4$	7446-21-1	230.58			4.25	0.115^{20}	s hot HCl
Strontium selenide		SeSr	SrSe	1315-07-7	166.58	1600		4.54		
Strontium silicide		Si_2Sr	$SrSi_2$	12138-28-2	143.79	1100		3.35		
Strontium sulfate	Celestite	O_4SSr	$SrSO_4$	7759-02-6	183.68	1606		3.96	0.0135^{25}	i EtOH; sl acid

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Strontium sulfide		SSr	SrS	1314-96-1	119.69	2226		3.70		sl H_2O; s acid
Strontium sulfite		O_3SSr	$SrSO_3$	13451-02-0	167.68	dec			0.0015^{25}	s H_2SO_4, HCl
Strontium telluride		SrTe	SrTe	12040-08-3	215.22			4.83		
Strontium thiosulfate pentahydrate		$H_{10}O_8S_2Sr$	$SrS_2O_3 \cdot 5H_2O$	15123-90-7	289.83	100 dec		2.17	36.3^{25}	i EtOH
Strontium titanate		O_3SrTi	$SrTiO_3$	12060-59-2	183.49	2080		5.1		i H_2O
Strontium tungstate		O_4SrW	$SrWO_4$	13451-05-3	335.46	dec		6.187	0.14^{15}	i EtOH
Sulfamic acid		H_3NO_3S	NH_2SO_3H	5329-14-6	97.095	≍205 dec		2.15	14.7^{0}	sl ace; i eth
Sulfur (rhombic)		S	S	7704-34-9	32.066	95.3 (trans to monocl)	444.60	2.07		i H_2O; sl EtOH, bz, eth; s CS_2
Sulfur (monoclinic)		S	S	7704-34-9	32.066	115.21	444.60	2.07		i H_2O; sl EtOH, bz, eth; s CS_2
Sulfur bromide	Disulfur dibromide	Br_2S_2	S_2Br_2	13172-31-1	223.94	−46	> 25 dec	2.63		reac H_2O
Sulfur bromide pentafluoride		BrF_5S	SF_5Br	15607-89-3	206.962	−79	3.1	8.459 g/L		
Sulfur chloride	Sulfur monochloride	Cl_2S_2	S_2Cl_2	10025-67-9	135.037	−77	137	1.69		reac H_2O; s EtOH, bz, eth, ctc
Sulfur chloride pentafluoride		ClF_5S	SF_5Cl	13780-57-9	162.511	−64	−19.05	6.642 g/L		
Sulfur decafluoride	Sulfur pentafluoride (S_2F_{10})	$F_{10}S_2$	S_2F_{10}	5714-22-7	254.116	−52.7	30; dec 150	2.08		i H_2O
Sulfur dichloride		Cl_2S	SCl_2	10545-99-0	102.971	−122	59.6	1.62		reac H_2O
Sulfur dioxide		O_2S	SO_2	7446-09-5	64.065	−75.5	−10.05	2.619 g/L		s H_2O, EtOh, eth, chl
Sulfur fluoride (SSF_2)	Disulfur difluoride (SSF_2)	F_2S_2	S_2F_2	16860-99-4	102.129	−164.6	−10.6	4.174 g/L		reac H_2O
Sulfur fluoride (FSSF)	Disulfur difluoride (FSSF)	F_2S_2	FSSF	13709-35-8	102.129	−133	15	4.174 g/L		reac H_2O
Sulfur fluoride hypofluorite		F_6OS	F_5SOF	15179-32-5	162.055	−86	−35.1	6.624 g/L		
Sulfur hexafluoride		F_6S	SF_6	2551-62-4	146.056	−50.7 tp	−63.8 sp	5.970 g/L		sl H_2O; s EtOH
Sulfuric acid	Oil of vitriol	H_2O_4S	H_2SO_4	7664-93-9	98.08	10.31	337	1.8		vs H_2O
Sulfurous acid		H_2O_3S	H_2SO_3	7782-99-2	82.08					soln of SO_2 in H_2O
Sulfur tetrafluoride		F_4S	SF_4	7783-60-0	108.06	−125	−40.45	4.417 g/L		reac H_2O
Sulfur trioxide		O_3S	SO_3	7446-11-9	80.064	16.8	45	1.92		reac H_2O
Sulfuryl amide	Sulfamide	$H_4N_2O_2S$	$SO_2(NH_2)_2$	7803-58-9	96.11	93	250 dec			vs H_2O; sl EtOH
Sulfuryl chloride		Cl_2O_2S	SO_2Cl_2	7791-25-5	134.97	−51	69.4	1.680		reac H_2O; s bz, tol, eth
Sulfuryl fluoride		F_2O_2S	SO_2F_2	2699-79-8	102.062	−135.8	−55.4	4.172 g/L		sl H_2O, EtOH; s tol, ctc
Tantalum		Ta	Ta	7440-25-7	180.948	3017	5458	16.4		reac HF
Tantalum aluminide		Al_3Ta	$TaAl_3$	12004-76-1	261.893	≍1400		7.02		i H_2O, acid, alk
Tantalum boride		BTa	TaB	12007-07-7	191.759	2040		14.2		
Tantalum boride (TaB_2)	Tantalum diboride	B_2Ta	TaB_2	12007-35-1	202.57	3140		11.2		i H_2O, acid, alk
Tantalum(V) bromide	Tantalum pentabromide	Br_5Ta	$TaBr_5$	13451-11-1	580.468	265	349	4.99		
Tantalum carbide		CTa	TaC	12070-06-3	192.959	3880	4780	14.3		s HF-HNO_3 mixture
Tantalum carbide (Ta_2C)		CTa_2	Ta_2C	12070-07-4	373.907	3327		15.1		
Tantalum(V) chloride	Tantalum pentachloride	Cl_5Ta	$TaCl_5$	7721-01-9	358.212	216	239.35	3.68		reac H_2O; s EtOH

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Tantalum(V) fluoride	Tantalum pentafluoride	F_5Ta	TaF_5	7783-71-3	275.94	95.1	229.2	5.0		s H_2O, eth; sl CS_2, ctc
Tantalum(V) iodide	Tantalum pentaiodide	I_5Ta	TaI_5	14693-81-3	815.47	496	543	5.80		
Tantalum nitride		NTa	TaN	12033-62-4	194.955	3090		13.7		i H_2O; sl aqua regia; reac alk
Tantalum(IV) oxide	Tantalum dioxide	O_2Ta	TaO_2	12036-14-5	212.947			10.0		
Tantalum(V) oxide	Tantalum pentoxide	O_5Ta_2	Ta_2O_5	1314-61-0	441.893	1784		8.2		i H_2O, EtOH, acid; s HF
Tantalum(IV) selenide	Tantalum diselenide	Se_2Ta	$TaSe_2$	12039-55-3	338.87			6.7		
Tantalum silicide		Si_2Ta	$TaSi_2$	12039-79-1	237.119	2200		9.14		
Tantalum(IV) sulfide	Tantalum disulfide	S_2Ta	TaS_2	12143-72-5	245.08	> 3000		6.86		i H_2O
Tantalum(IV) telluride	Tantalum ditelluride	$TaTe_2$	$TaTe_2$	12067-66-2	436.15			9.4		
Technetium		Tc	Tc	7440-26-8	98	2157	4265	11		
Technetium(V) fluoride	Technetium pentafluoride	F_5Tc	TcF_5	31052-14-9	193	50	dec			
Technetium(VI) fluoride	Technetium hexafluoride	F_6Tc	TcF_6	13842-93-8	212	37.4	55.3	3.0		
Telluric(VI) acid	Orthotelluric acid	H_6O_6Te	H_6TeO_6	7803-68-1	229.64	136		3.07	50.1[30]	
Tellurium		Te	Te	13494-80-9	127.6	449.51	988	6.24		i H_2O, bz, CS_2
Tellurium dibromide	Tellurous bromide	Br_2Te	$TeBr_2$	7789-54-0	287.41	210	339			reac H_2O; s eth; sl chl
Tellurium dichloride	Tellurous chloride	Cl_2Te	$TeCl_2$	10025-71-5	198.51	208	328	6.9		reac H_2O; i ctc
Tellurium dioxide		O_2Te	TeO_2	7446-07-3	159.6	733	1245	5.9		i H_2O; s alk, acid
Tellurium hexafluoride		F_6Te	TeF_6	7783-80-4	241.59	−37.6 tp	−38.9 sp	9.875 g/L		reac H_2O
Tellurium tetrabromide		Br_4Te	$TeBr_4$	10031-27-3	447.22	388	≈420 dec	4.3		reac H_2O; s eth
Tellurium tetrachloride		Cl_4Te	$TeCl_4$	10026-07-0	269.41	224	387	3.0		reac H_2O; s EtOH, tol
Tellurium tetrafluoride		F_4Te	TeF_4	15192-26-4	203.59	129	195 dec			reac H_2O
Tellurium tetraiodide		I_4Te	TeI_4	7790-48-9	635.22	280		5.05		reac H_2O; sl ace
Tellurium trioxide		O_3Te	TeO_3	13451-18-8	175.6	430		5.07		i H_2O
Tellurous acid		H_2O_3Te	H_2TeO_3	10049-23-7	177.61	40 dec		3.0		sl H_2O; s dil acid, alk
Terbium		Tb	Tb	7440-27-9	158.925	1356	3230	8.23		
Terbium chloride		Cl_3Tb	$TbCl_3$	10042-88-3	265.283	588		4.35		s H_2O
Terbium chloride hexahydrate		$Cl_3H_{12}O_6Tb$	$TbCl_3 \cdot 6H_2O$	13798-24-8	373.374			4.35		vs H_2O
Terbium iodide		I_3Tb	TbI_3	13813-40-6	539.638	957		≈5.2		s H_2O
Terbium nitrate		N_3O_9Tb	$Tb(NO_3)_3$	10043-27-3	344.94				157[25]	s EtOH
Terbium nitrate hexahydrate		$H_{12}N_3O_{15}Tb$	$Tb(NO_3)_3 \cdot 6H_2O$	13451-19-9	453.031	89				s H_2O, EtOH, ace
Terbium nitride		NTb	TbN	12033-64-6	172.932			9.55		
Terbium oxide	Terbia	O_3Tb_2	Tb_2O_3	12036-41-8	365.849	2303		7.91		
Terbium silicide		Si_2Tb	$TbSi_2$	12039-80-4	215.096			6.66		
Terbium sulfide		S_3Tb_2	Tb_2S_3	12138-11-3	414.049			6.35		
Tetraborane(10)		B_4H_{10}	B_4H_{10}	18283-93-7	53.323	−121	18	2.180 g/L		reac H_2O
Tetrabromosilane	Silicon tetrabromide	Br_4Si	$SiBr_4$	7789-66-4	347.702	5.39	154	2.8		reac H_2O
Tetrachlorodiborane	Boron tetrachloride	B_2Cl_4	B_2Cl_4	13701-67-2	163.433	−92.6	65			reac H_2O

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Tetrachlorosilane	Silicon tetrachloride	Cl_4Si	$SiCl_4$	10026-04-7	169.897	−68.74	57.65	1.5		reac H_2O
Tetrafluoroboric acid	Fluoboric acid	BF_4H	HBF_4	16872-11-0	87.813		130 dec	≈1.8		vs H_2O, EtOH
Tetrafluorodiborane	Boron tetrafluoride	B_2F_4	B_2F_4	13965-73-6	97.616	−56	−34	3.990 g/L		reac H_2O
Tetrafluorohydrazine		F_4N_2	N_2F_4	10036-47-2	104.007	−164.5	−74	4.251 g/L		
Tetrafluorosilane	Silicon tetrafluoride	F_4Si	SiF_4	7783-61-1	104.08	−90.2	−86	4.254 g/L		reac H_2O
Tetragermane		Ge_4H_{10}	Ge_4H_{10}	14691-47-5	300.52		176.9			i H_2O
Tetraiodosilane	Silicon tetraiodide	I_4Si	SiI_4	13465-84-4	535.704	120.5	287.35	4.1		
Tetraphosphorus(III) hexoxide		O_6P_4	P_4O_6	12440-00-5	219.891	23.8	175.4			
Tetrasilane	Silicon decahydride	$H_{10}Si_4$	Si_4H_{10}	7783-29-1	122.421	−89.9	108.1	0.792		reac H_2O
Thallium		Tl	Tl	7440-28-0	204.383	304	1473	11.8		i H_2O; reac acid
Thallium(I) acetate	Thallous acetate	$C_2H_3O_2Tl$	$TlC_2H_3O_2$	563-68-8	263.427	131		3.68		s H_2O, EtOH
Thallium(I) bromate		BrO_3Tl	$TlBrO_3$	14550-84-6	332.285	120 dec			0.49^{30}	s EtOH
Thallium(I) bromide	Thallous bromide	BrTl	TlBr	7789-40-4	284.287	460	819	7.5	0.059^{20}	
Thallium(III) bromide tetrahydrate	Thallic bromide tetrahydrate	$Br_3H_8O_4Tl$	$TlBr_3 \cdot 4H_2O$	13701-90-1	516.157			3.65		s H_2O, EtOH
Thallium(I) carbonate	Thallous carbonate	CO_3Tl_2	Tl_2CO_3	6533-73-9	468.776	272		7.11	4.69^{20}	i EtOH
Thallium(I) chlorate	Thallous chlorate	ClO_3Tl	$TlClO_3$	13453-30-0	287.834			5.5	3.92^{20}	
Thallium(I) chloride	Thallous chloride	ClTl	TlCl	7791-12-0	239.836	430	720	7.0	0.33^{20}	i EtOH
Thallium(III) chloride	Thallic chloride	Cl_3Tl	$TlCl_3$	13453-32-2	310.741	155		4.7		vs H_2O, EtOH, eth
Thallium(III) chloride tetrahydrate	Thallic chloride tetrahydrate	Cl_3Tl	$TlCl_3 \cdot 4H_2O$	13453-32-2*	382.803			3.00		s H_2O
Thallium(I) chromate		$CrO4Tl2$	Tl_2CrO_4		524.761				0.003^{20}	sl acid, alk
Thallium(I) cyanide	Thallous cyanide	CNTl	TlCN	13453-34-4	230.401			6.523		s H_2O, acid, EtOH
Thallium(I) fluoride	Thallous fluoride	FTl	TlF	7789-27-7	223.381	326	826	8.36	245^{25}	
Thallium(III) fluoride	Thallic fluoride	F_3Tl	TlF_3	7783-57-5	261.378	550 dec		8.65		reac H_2O
Thallium(I) formate	Thallous formate	CHO_2Tl	$TlCHO_2$	992-98-3	249.401	101		4.97		vs H_2O; s MeOH
Thallium(I) hexafluorophosphate	Thallous hexafluorophosphate	F_6PTl	$TlPF_6$	60969-19-9	349.347			4.6		
Thallium(I) hydroxide	Thallous hydroxide	HOTl	TlOH	12026-06-1	221.39	139 dec		7.44	34.3^{18}	
Thallium(I) ethanolate	Thallous ethoxide	C_2H_5OTl	TlC_2H_5O	20398-06-5	249.443	−3	130 dec	3.49		reac H_2O
Thallium(I) iodide	Thallous iodide	ITl	TlI	7790-30-9	331.287	441.7	824	7.1	0.0085^{20}	i EtOH
Thallium(I) molybdate	Thallous molybdate	MoO_4Tl_2	Tl_2MoO_4	34128-09-1	568.71					i H_2O
Thallium(I) nitrate	Thallous nitrate	NO_3Tl	$TlNO_3$	10102-45-1	266.388	206	450 dec	5.55	9.55^{20}	i EtOH
Thallium(III) nitrate	Thallic nitrate	N_3O_9Tl	$Tl(NO_3)_3$	13746-98-0	390.398					reac H_2O
Thallium(I) nitrite	Thallous nitrite	NO_2Tl	$TlNO_2$	13826-63-6	250.389			5.7	32.1^{25}	
Thallium(I) iodate		IO_3Tl	$TlIO_3$	14767-09-0	379.285				0.058	sl HNO_3
Thallium(I) oxalate	Thallous oxalate	$C_2O_4Tl_2$	$Tl_2C_2O_4$	30737-24-7	496.786			6.31	1.83^{20}	
Thallium(I) oxide	Thallous oxide	OTl_2	Tl_2O	1314-12-1	424.766	579	≈1080	9.52		s H_2O, EtOH
Thallium(III) oxide	Thallic oxide	O_3Tl_2	Tl_2O_3	1314-32-5	456.765	834		10.2		i H_2O; reac acid
Thallium(I) perchlorate	Thallous perchlorate	ClO_4Tl	$TlClO_4$	13453-40-2	303.834			4.8	19.7^{30}	
Thallium(I) selenate	Thallous selenate	O_4SeTl_2	Tl_2SeO_4	7446-22-2	551.73	> 400		6.875	2.8^{20}	i EtOH, eth
Thallium selenide		SeTl	TlSe	12039-52-0	283.34	330				i H_2O, acid
Thallium(I) selenide	Thallous selenide	$SeTl_2$	Tl_2Se	15572-25-5	487.73	340				i H_2O, acid
Thallium(I) sulfate	Thallous sulfate	O_4STl_2	Tl_2SO_4	7446-18-6	504.831	632		6.77	5.47^{25}	

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Thallium(III) sulfate		$O_{12}S_3Tl_2$	$Tl_2(SO_4)_3$	16222-66-5	696.958					reac H_2O
Thallium(I) sulfide	Thallous sulfide	STl_2	Tl_2S	1314-97-2	440.833	448	1367	8.39	0.02^{20}	sl alk; s acid
Thionyl bromide	Sulfinyl dibromide	Br_2OS	$SOBr_2$	507-16-4	207.873	−50	140			reac H_2O
Thionyl chloride	Sulfinyl dichloride	Cl_2OS	$SOCl_2$	7719-09-7	118.97	−101	75.6	1.631		reac H_2O; s bz, ctc, chl
Thionyl fluoride	Sulfinyl difluoride	F_2OS	SOF_2	7783-42-8	86.062	−129.5	−43.8	3.518 g/L		reac H_2O; s bz, eth
Thorium		Th	Th	7440-29-1	232.038	1750	4788	11.7		s acid
Thorium boride	Thorium hexaboride	B_6Th	ThB_6	12229-63-9	296.904	2450		6.99		
Thorium(IV) bromide	Thorium tetrabromide	Br_4Th	$ThBr_4$	13453-49-1	551.654	679			65^{20}	
Thorium carbide		CTh	ThC	12012-16-7	244.049	2500		10.6		reac H_2O
Thorium(IV) chloride	Thorium tetrachloride	Cl_4Th	$ThCl_4$	10026-08-1	373.849	770	921	4.59		s H_2O, EtOH
Thorium dicarbide		C_2Th	ThC_2	12071-31-7	256.059	≈2650		9.0		reac H_2O
Thorium(IV) fluoride	Thorium tetrafluoride	F_4Th	ThF_4	13709-59-6	308.032	1110	1680	6.1		
Thorium hydride		H_2Th	ThH_2	16689-88-6	234.054			9.5		
Thorium(IV) iodide	Thorium tetraiodide	I_4Th	ThI_4	7790-49-0	739.656	570	837			
Thorium(IV) nitrate tetrahydrate		$H_8N_4O_{16}Th$	$Th(NO_3)_4 \cdot 4H_2O$	13470-07-0	552.119	500 dec			191^{20}	s EtOH
Thorium nitride		NTh	ThN	12033-65-7	246.045	2820		11.6		reac H_2O
Thorium orthosilicate	Thorite	O_4SiTh	$ThSiO_4$	14553-44-7	324.122			6.7		
Thorium(IV) oxide	Thoria	O_2Th	ThO_2	1314-20-1	264.037	3390	4400	10.0		i H_2O, alk; sl acid
Thorium(IV) selenide		Se_2Th	$ThSe_2$	60763-24-8	389.96			8.5		
Thorium silicide		Si_2Th	$ThSi_2$	12067-54-8	288.209	1850		7.9		
Thorium(IV) sulfate nonahydrate		$H_{18}O_{17}S_2Th$	$Th(SO_4)_2 \cdot 9H_2O$	10381-37-0	586.303	dec		2.8	4.2^{20}	
Thorium(IV) sulfide		S_2Th	ThS_2	12138-07-7	296.17	1905		7.30		i H_2O; s acid
Thulium		Tm	Tm	7440-30-4	168.934	1545	1950	9.32		s dil acid
Thulium bromide		Br_3Tm	$TmBr_3$	14456-51-0	408.646	954				s H_2O
Thulium chloride		Cl_3Tm	$TmCl_3$	13537-18-3	275.292	824				s H_2O
Thulium chloride heptahydrate		$Cl_3H_{14}O_7Tm$	$TmCl_3 \cdot 7H_2O$	13778-39-7	401.399					s H_2O, EtOH
Thulium fluoride		F_3Tm	TmF_3	13760-79-7	225.929	1158				s H_2O
Thulium iodide		I_3Tm	TmI_3	13813-43-9	549.647	1021				
Thulium nitrate		N_3O_9Tm	$Tm(NO_3)_3$	14985-19-4	354.949				212^{25}	s EtOH
Thulium nitrate pentahydrate		$H_{10}N_3O_{14}Tm$	$Tm(NO_3)_3 \cdot 5H_2O$	36548-87-5	445.025					s H_2O, EtOH, ace
Thulium oxide	Thulia	O_3Tm_2	Tm_2O_3	12036-44-1	385.866	2341	3945	8.6		sl acid
Tin (white)		Sn	Sn	7440-31-5	118.71	231.93	2602	7.265		
Tin (gray)		Sn	Sn	7440-31-5	118.71	trans to wh Sn 13.2	2602	5.769		
Tin(II) acetate	Stannous acetate	$C_4H_6O_4Sn$	$Sn(C_2H_3O_2)_2$	638-39-1	236.799	183	subl	2.31		s dil HCl
Tin(II) bromide	Stannous bromide	Br_2Sn	$SnBr_2$	10031-24-0	278.518	215	639	5.12	85^0	s EtOH, eth, ace
Tin(IV) bromide	Stannic bromide	Br_4Sn	$SnBr_4$	7789-67-5	438.326	29.1	205	3.34		vs H_2O; s EtOH
Tin(II) chloride	Stannous chloride	Cl_2Sn	$SnCl_2$	7772-99-8	189.615	247.1	623	3.90	178^{10}	s EtOH, ace, eth; i xyl
Tin(IV) chloride	Stannic chloride	Cl_4Sn	$SnCl_4$	7646-78-8	260.521	−34.07	114.15	2.234		reac H_2O; s EtOH, ctc, bz, ace

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Tin(II) chloride dihydrate	Stannous chloride dihydrate	$Cl_2H_4O_2Sn$	$SnCl_2 \cdot 2H_2O$	10025-69-1	225.646	37 dec		2.71	178[10]	s EtOH, NaOH; vs HCl
Tin(IV) chloride pentahydrate	Stannic chloride pentahydrate	$Cl_4H_{10}O_5Sn$	$SnCl_4 \cdot 5H_2O$	10026-06-9	350.597	56 dec		2.04		vs H_2O; s EtOH
Tin(IV) chromate	Stannic chromate	Cr_2O_8Sn	$Sn(CrO_4)_2$	38455-77-5	350.697	dec				s H_2O
Tin(II) fluoride	Stannous fluoride	F_2Sn	SnF_2	7783-47-3	156.707	213	850	4.57		s H_2O; i EtOH, eth, chl
Tin(IV) fluoride	Stannic fluoride	F_4Sn	SnF_4	7783-62-2	194.704		705 subl	4.78		reac H_2O
Tin(II) hexafluorozirconate	Stannous hexafluorozirconate	F_6SnZr	$SnZrF_6$	12419-43-1	323.924			4.21		s H_2O
Tin(II) hydroxide	Stannous hydroxide	H_2O_2Sn	$Sn(OH)_2$	12026-24-3	152.725					
Tin(II) iodide	Stannous iodide	I_2Sn	SnI_2	10294-70-9	372.519	320	714	5.28	0.98[20]	s bz, chl, CS_2
Tin(IV) iodide	Stannic iodide	I_4Sn	SnI_4	7790-47-8	626.328	143	364.35	4.46		reac H_2O; s EtOH, bz, chl, eth
Tin(II) oxalate	Stannous oxalate	C_2O_4Sn	SnC_2O_4	814-94-8	206.729	280 dec		3.56		i H_2O; s dil HCl
Tin(II) oxide	Stannous monoxide	OSn	SnO	21651-19-4	134.709	1080 dec		6.45		i H_2O, EtOH; s acid
Tin(IV) oxide	Cassiterite	O_2Sn	SnO_2	18282-10-5	150.709	1630		6.85		i H_2O, EtOH; s hot conc alk
Tin(II) pyrophosphate	Stannous pyrophosphate	$O_7P_2Sn_2$	$Sn_2P_2O_7$	15578-26-4	411.363	400 dec		4.009		i H_2O; s conc acid
Tin(II) selenide	Stannous selenide	SeSn	SnSe	1315-06-6	197.67	861		6.18		i H_2O; s aqua regia
Tin(IV) selenide	Stannic selenide	Se_2Sn	$SnSe_2$	20770-09-6	276.63	650		≈5.0		i H_2O; s alk, conc acid
Tin(IV) selenite	Stannic selenite	O_6Se_2Sn	$Sn(SeO_3)_2$	7446-25-5	372.63					i H_2O; s hot HCl
Tin(II) sulfate	Stannous sulfate	O_4SSn	$SnSO_4$	7488-55-3	214.774	378 dec		4.15	18.8[19]	
Tin(II) sulfide	Stannous sulfide	SSn	SnS	1314-95-0	150.776	880	1210	5.08		i H_2O; s conc acid
Tin(IV) sulfide	Stannic sulfide	S_2Sn	SnS_2	1315-01-1	182.842	600 dec		4.5		i H_2O; s alk, aqua regia
Tin(II) tartrate	Stannous tartrate	$C_4H_4O_6Sn$	$SnC_4H_4O_6$	815-85-0	266.781					s H_2O, dil HCl
Tin(II) telluride	Stannous telluride	SnTe	SnTe	12040-02-7	246.31	790		6.5		
Titanium		Ti	Ti	7440-32-6	47.867	1668	3287	4.506		
Titanium boride		B_2Ti	TiB_2	12045-63-5	69.489	3225		4.38		
Titanium(II) bromide	Titanium dibromide	Br_2Ti	$TiBr_2$	13783-04-5	207.675			4.0		reac H_2O
Titanium(III) bromide	Titanium tribromide	Br_3Ti	$TiBr_3$	13135-31-4	287.579					s H_2O
Titanium(IV) bromide	Titanium tetrabromide	Br_4Ti	$TiBr_4$	7789-68-6	367.483	39	230	3.37		reac H_2O
Titanium carbide		CTi	TiC	12070-08-5	59.878	3067		4.93		i H_2O; s HNO_3
Titanium(II) chloride	Titanium dichloride	Cl_2Ti	$TiCl_2$	10049-06-6	118.772	1035	1500	3.13		reac H_2O; s EtOH; i chl, eth
Titanium(III) chloride	Titanium trichloride	Cl_3Ti	$TiCl_3$	7705-07-9	154.225	425 dec	960	2.64		reac H_2O
Titanium(IV) chloride	Titanium tetrachloride	Cl_4Ti	$TiCl_4$	7550-45-0	189.678	−24.12	136.45	1.73		reac H_2O; s EtOH
Titanium(III) fluoride	Titanium trifluoride	F_3Ti	TiF_3	13470-08-1	104.862	1200	1400	2.98		i H_2O, dil acid, alk
Titanium(IV) fluoride	Titanium tetrafluoride	F_4Ti	TiF_4	7783-63-3	123.861	284	subl	2.798		reac H_2O; s EtOH, py
Titanium hydride		H_2Ti	TiH_2	7704-98-5	49.883	≈450 dec		3.75		i H_2O
Titanium(II) iodide	Titanium diiodide	I_2Ti	TiI_2	13783-07-8	301.676			5.02		reac H_2O
Titanium(IV) iodide	Titanium tetraiodide	I_4Ti	TiI_4	7720-83-4	555.485	150	377	4.3		reac H_2O
Titanium nitride		NTi	TiN	25583-20-4	61.874	2950		5.21		i H_2O; s aqua regia
Titanium(II) oxide	Titanium monoxide	OTi	TiO	12137-20-1	63.866	1750		4.95		

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Titanium(III) oxide	Titanium trioxide	O_3Ti_2	Ti_2O_3	1344-54-3	143.732	1842		4.486		s hot HF
Titanium(III,IV) oxide	Titanium pentoxide	O_5Ti_3	Ti_3O_5	12065-65-5	223.598	1777		4.24		
Titanium(IV) oxide		O_2Ti	TiO_2	13463-67-7	79.866	1843		4.23		i H_2O, dil acid; s conc acid
Titanium(IV) oxysulfate monohydrate	Titanyl sulfate monohydrate	H_2O_6STi	$TiOSO_4 \cdot H_2O$	13825-74-6*	177.945			2.71		reac H_2O
Titanium phosphide		PTi	TiP	12037-65-9	78.841	1990		4.08		
Titanium silicide	Titanium disilicide	Si_2Ti	$TiSi_2$	12039-83-7	104.038	1500		4.0		i H_2O, acid, alk; s HF
Titanium(III) sulfate		$O_{12}S_3Ti_2$	$Ti_2(SO_4)_3$	10343-61-0	383.925					i H_2O, EtOH; s dil HCl
Titanium(IV) sulfate		O_8S_2Ti	$Ti(SO_4)_2$	13693-11-3	239.994	150 dec				s H_2O
Titanium(II) sulfide	Titanium monosulfide	STi	TiS	12039-07-5	79.933	1780		3.85		s conc acid
Titanium(III) sulfide	Titanium trisulfide	S_3Ti_2	Ti_2S_3	12039-16-6	191.932			3.56		
Titanium(IV) sulfide	Titanium disulfide	S_2Ti	TiS_2	12039-13-3	111.999			3.37		s H_2SO_4
Tribromochlorosilane		Br_3ClSi	$SiBr_3Cl$	13465-76-4	303.251	−20.8	127	2.497		reac H_2O
Tribromogermane		Br_3GeH	$GeHBr_3$	14779-70-5	313.33	−25	dec			reac H_2O
Tribromosilane		Br_3HSi	$SiHBr_3$	7789-57-3	268.806	−73	109	2.7		reac H_2O
Trichlorofluorogermane		Cl_3FGe	$GeCl_3F$	24422-20-6	197.97	−49.8	37.5			
Trichlorofluorosilane		Cl_3FSi	$SiCl_3F$	14965-52-7	153.442		12.25	6.272 g/L		
Trichlorogermane		Cl_3GeH	$GeHCl_3$	1184-65-2	179.98	−71	75.3	1.93		reac H_2O
Trichloroiodosilane		Cl_3ISi	$SiCl_3I$	13465-85-5	261.348	−60	113.5			reac H_2O
Trichlorosilane		Cl_3HSi	$SiHCl_3$	10025-78-2	135.452	−128.2	33	1.331		reac H_2O
Triethyl arsenite	Arsenic(III) ethoxide	$C_6H_{15}AsO_3$	$As(OC_2H_5)_3$	3141-12-6	210.103		166	1.21		
Trifluoramine oxide	Trifluoroamine oxide	F_3NO	NOF_3	13847-65-9	87.001	−161	−87.5	3.556 g/L		
Trifluorosilane		F_3HSi	$SiHF_3$	13465-71-9	86.089	−131	−95	3.519 g/L		
Trigermane		Ge_3H_8	Ge_3H_8	14691-44-2	225.89	−105.6	110.5	2.20^{-105}		i H_2O
Triiodosilane		HI_3Si	$SiHI_3$	13465-72-0	409.807	8	220 dec			
Trisilane	Silicon octahydride	H_8Si_3	Si_3H_8	7783-26-8	92.321	−117.4	52.9	0.739		reac H_2O
Tungsten	Wolfram	W	W	7440-33-7	183.84	3422	5555	19.3		
Tungsten boride		BW	WB	12007-09-9	194.65	2665		15.2		i H_2O
Tungsten boride (W_2B)		BW_2	W_2B	12007-10-2	378.49	2670		16.0		i H_2O
Tungsten boride (W_2B_5)	Tungsten pentaboride	B_5W_2	W_2B_5	12007-98-6	421.74	2365		11.0		i H_2O
Tungsten(II) bromide	Tungsten dibromide	Br_2W	WBr_2	13470-10-5	343.65	400 dec				
Tungsten(III) bromide	Tungsten tribromide	Br_3W	WBr_3	15163-24-3	423.55	> 80 dec				i H_2O
Tungsten(IV) bromide	Tungsten tetrabromide	Br_4W	WBr_4	14055-81-3	503.46		240 subl			reac H_2O
Tungsten(V) bromide	Tungsten pentabromide	Br_5W	WBr_5	13470-11-6	583.36	286	333			
Tungsten(VI) bromide	Tungsten hexabromide	Br_6W	WBr_6	13701-86-5	663.26	309				
Tungsten carbide		CW	WC	12070-12-1	195.85	2785		15.6		i H_2O; s HNO_3/HF
Tungsten carbide (W_2)		CW_2	W_2C	12070-13-2	379.69	≈2800		14.8		i H_2O
Tungsten carbonyl	Tungsten hexacarbonyl	C_6O_6W	$W(CO)_6$	14040-11-0	351.9	170 dec	subl	2.65		i H_2O; s os
Tungsten(II) chloride	Tungsten dichloride	Cl_2W	WCl_2	13470-12-7	254.75	> 500 dec				s H_2O

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Tungsten(III) chloride	Tungsten trichloride	Cl_3W	WCl_3	20193-56-0	290.2	550 dec	subl			reac H_2O
Tungsten(IV) chloride	Tungsten tetrachloride	Cl_4W	WCl_4	13470-13-8	325.65	450 dec		4.62		reac H_2O
Tungsten(V) chloride	Tungsten pentachloride	Cl_5W	WCl_5	13470-14-9	361.1	242	286			reac H_2O
Tungsten(VI) chloride	Tungsten hexachloride	Cl_6W	WCl_6	13283-01-7	396.56	275	346.75	3.52		s EtOH, os
Tungsten(VI) dioxydibromide		Br_2O_2W	WO_2Br_2	13520-75-7	375.65		440 subl			
Tungsten(VI) dioxydichloride		Cl_2O_2W	WO_2Cl_2	13520-76-8	286.74	265		4.67		i H_2O
Tungsten(VI) dioxydiiodide	Tungsten oxyiodide	I_2O_2W	WO_2I_2	14447-89-3	469.65	400 dec		6.39		
Tungsten(V) ethanolate	Tungsten(V) ethoxide	$C_{10}H_{25}O_5W$	$W(C_2H_5O)_5$	62571-53-3	409.14		105(0.05 mmHg)			s EtAc
Tungsten(IV) fluoride	Tungsten tetrafluoride	F_4W	WF_4	13766-47-7	259.83	> 800 dec				
Tungsten(V) fluoride	Tungsten pentafluoride	F_5W	WF_5	19357-83-6	278.83	> 80 dec				
Tungsten(VI) fluoride	Tungsten hexafluoride	F_6W	WF_6	7783-82-6	297.83	2.3	17.1	12.17 g/L		reac H_2O
Tungsten(II) iodide	Tungsten diiodide	I_2W	WI_2	13470-17-2	437.65			6.79		
Tungsten(IV) iodide	Tungsten tetraiodide	I_4W	WI_4	14055-84-6	691.46	dec				reac H_2O; s EtOH; i eth chl
Tungsten nitride (WN_2)	Tungsten dinitride	N_2W	WN_2	60922-26-1	211.85	600 dec		7.7		
Tungsten nitride (W_2N)		NW_2	W_2N	12033-72-6	381.69	dec		17.8		
Tungsten(IV) oxide	Tungsten dioxide	O_2W	WO_2	12036-22-5	215.84	≈1500 dec		10.8		i H_2O, os
Tungsten(VI) oxide	Tungsten trioxide	O_3W	WO_3	1314-35-8	231.84	1472		7.2		i H_2O; sl acid; s alk
Tungsten(VI) oxytetrabromide	Tungsten oxybromide	Br_4OW	$WOBr_4$	13520-77-9	519.46	277	327	≈5.5		reac H_2O
Tungsten(VI) oxytetrachloride	Tungsten oxychloride	Cl_4OW	$WOCl_4$	13520-78-0	341.65	211	227.55	11.92		reac H_2O; s bz, CS_2
Tungsten(VI) oxytetrafluoride	Tungsten oxyfluoride	F_4OW	WOF_4	13520-79-1	275.83	106	185.9	5.07		reac H_2O
Tungsten(V) oxytribromide		Br_3OW	$WOBr_3$	20213-56-3	439.55			≈5.9		
Tungsten(V) oxytrichloride		Cl_3OW	$WOCl_3$	14249-98-0	306.2			≈4.6		
Tungsten(IV) selenide	Tungsten diselenide	Se_2W	WSe_2	12067-46-8	341.76			9.2		
Tungsten silicide (WSi_2)	Tungsten disilicide	Si_2W	WSi_2	12039-88-2	240.01	2160		9.3		i H_2O
Tungsten silicide (W_5Si_3)		Si_3W_5	W_5Si_3	12039-95-1	1003.46	2320		14.4		
Tungsten(IV) sulfide	Tungsten disulfide	S_2W	WS_2	12138-09-9	247.97	1250 dec		7.6		i H_2O, HCl, alk
Tungsten(VI) sulfide	Tungsten trisulfide	S_3W	WS_3	12125-19-8	280.04					sl H_2O; s alk
Tungsten(IV) telluride	Tungsten ditelluride	Te_2W	WTe_2	12067-76-4	439.04	1020		9.43		
Tungstic acid		H_2O_4W	H_2WO_4	7783-03-1	249.85	100 dec		5.5		i H_2O, acid; s alk
Uranium		U	U	7440-61-1	238.029	1135	4131	19.1		
Uranium boride (UB_2)	Uranium diboride	B_2U	UB_2	12007-36-2	259.651	2430		12.7		
Uranium boride (UB_4)	Uranium tetraboride	B_4U	UB_4	12007-84-0	281.273	2530		9.32		i H_2O
Uranium(III) bromide	Uranium tribromide	Br_3U	UBr_3	13470-19-4	477.741	727				s H_2O

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Uranium(IV) bromide	Uranium tetrabromide	Br_4U	UBr_4	13470-20-7	557.645	519				s H_2O, EtOH
Uranium(V) bromide	Uranium pentabromide	Br_5U	UBr_5	13775-16-1	637.549					reac H_2O
Uranium carbide		CU	UC	12070-09-6	250.04	2790				
Uranium carbide (UC_2)	Uranium dicarbide	C_2U	UC_2	12071-33-9	262.05	2350	4370	11.3		reac H_2O; sl EtOH
Uranium carbide (U_2C_3)	Uranium tricarbide	C_3U_2	U_2C_3	12076-62-9	512.09	≍1700 dec		12.7		
Uranium(III) chloride	Uranium trichloride	Cl_3U	UCl_3	10025-93-1	344.387	837		5.51		vs H_2O; i bz, ctc
Uranium(IV) chloride	Uranium tetrachloride	Cl_4U	UCl_4	10026-10-5	379.84	590	791	4.72		reac H_2O; s EtOH
Uranium(V) chloride	Uranium pentachloride	Cl_5U	UCl_5	13470-21-8	415.293	287				reac H_2O
Uranium(VI) chloride	Uranium hexachloride	Cl_6U	UCl_6	13763-23-0	450.745	177		3.6		
Uranium(III) fluoride	Uranium trifluoride	F_3U	UF_3	13775-06-9	295.024	dec		8.9		i H_2O; s acid
Uranium(IV) fluoride	Uranium tetrafluoride	F_4U	UF_4	10049-14-6	314.023	1036	1417	6.7	0.01^{25}	s conc acid, alk
Uranium(V) fluoride	Uranium pentafluoride	F_5U	UF_5	13775-07-0	333.021	348		5.81		s H_2O
Uranium(VI) fluoride	Uranium hexafluoride	F_6U	UF_6	7783-81-5	352.019	64.0 tp	56.5 sp	5.09		reac H_2O; s ctc, chl
Uranium(III) hydride	Uranium trihydride	H_3U	UH_3	13598-56-6	241.053			11.1		
Uranium(III) iodide	Uranium triiodide	I_3U	UI_3	13775-18-3	618.742	766				s H_2O
Uranium(IV) iodide	Uranium tetraiodide	I_4U	UI_4	13470-22-9	745.647	506				s H_2O, EtOH
Uranium nitride		NU	UN	25658-43-9	252.036	2805		14.3		i H_2O
Uranium nitride (U_2N_3)		N_3U_2	U_2N_3	12033-83-9	518.078	dec		11.3		
Uranium(IV) oxide	Uraninite	O_2U	UO_2	1344-57-6	270.028	2827		10.97		i H_2O, dil acid; s conc acid
Uranium(VI) oxide	Uranium trioxide	O_3U	UO_3	1344-58-7	286.027			≍7.3		i H_2O; s acid
Uranium(V,VI) oxide		O_8U_3	U_3O_8	1344-59-8	842.082	1300 dec		8.38		
Uranium(IV,V) oxide		O_9U_4	U_4O_9	12037-15-9	1096.111			11.2		
Uranium(VI) oxide monohydrate	Gummite	H_2O_4U	$UO_3 \cdot H_2O$	12326-21-5	304.043	570 dec		7.05		
Uranium peroxide dihydrate		H_4O_6U	$UO_4 \cdot 2H_2O$	19525-15-6	338.057	115 dec				i H_2O
Uranyl chloride	Uranium oxychloride	Cl_2O_2U	UO_2Cl_2	7791-26-6	340.933	577				vs H_2O; s EtOH, ace; i bz
Uranyl fluoride		F_2O_2U	UO_2F_2	13536-84-0	308.025				64.4^{20}	i bz
Uranyl nitrate		N_2O_8U	$UO_2(NO_3)_2$	10102-06-4	394.037				127^{25}	s eth
Uranyl nitrate hexahydrate		$H_{12}N_2O_{14}U$	$UO_2(NO_3)_2 \cdot 6H_2O$	13520-83-7	502.129	60	118 dec	2.81	127^{25}	s EtOH, eth
Uranyl sulfate		O_6SU	UO_2SO_4	1314-64-3	366.091					
Uranyl sulfate trihydrate		H_6O_9SU	$UO_2SO_4 \cdot 3H_2O$	20910-28-5	420.138			3.28	152^{16}	sl EtOH
Vanadium		V	V	7440-62-2	50.942	1910	3407	6.0		i H_2O; s acid
Vanadium boride		BV	VB	12045-27-1	61.753	2250				i H_2O
Vanadium boride (VB_2)	Vanadium diboride	B_2V	VB_2	12007-37-3	72.564	2450				
Vanadium(II) bromide	Vanadium dibromide	Br_2V	VBr_2	14890-41-6	210.75		800 subl	4.58		reac H_2O
Vanadium(III) bromide	Vanadium tribromide	Br_3V	VBr_3	13470-26-3	290.654			4.00		reac H_2O

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Vanadium(IV) bromide	Vanadium tetrabromide	Br_4V	VBr_4	13595-30-7	370.558	−23 dec				
Vanadium carbide		CV	VC	12070-10-9	62.953	2810		5.77		i H_2O
Vanadium carbide (V_2C)		CV_2	V_2C	12012-17-8	113.894	2167				
Vanadium carbonyl	Vanadium hexacarbonyl	C_6O_6V	$V(CO)_6$	20644-87-5	219.002	60 dec	subl			
Vanadium(II) chloride	Vanadium dichloride	Cl_2V	VCl_2	10580-52-6	121.847	≈1350	910 subl	3.23		reac H_2O; s EtOH, eth
Vanadium(III) chloride	Vanadium trichloride	Cl_3V	VCl_3	7718-98-1	157.3	500 dec		3.00		reac H_2O; s EtOH, eth
Vanadium(IV) chloride	Vanadium tetrachloride	Cl_4V	VCl_4	7632-51-1	192.753	−25.7	148	1.816		reac H_2O; s EtOH, eth
Vanadium(II) fluoride	Vanadium difluoride	F_2V	VF_2	13842-80-3	88.939					reac H_2O
Vanadium(III) fluoride	Vanadium trifluoride	F_3V	VF_3	10049-12-4	107.937	≈1400	subl	3.363		i H_2O, EtOH
Vanadium(IV) fluoride	Vanadium tetrafluoride	F_4V	VF_4	10049-16-8	126.936	325 dec	subl	3.15		vs H_2O
Vanadium(V) fluoride	Vanadium pentafluoride	F_5V	VF_5	7783-72-4	145.934	19.5	48.3	2.50		reac H_2O
Vanadium(III) fluoride trihydrate	Vanadium trifluoride trihydrate	$F_3H_6O_3V$	$VF_3 \cdot 3H_2O$	10049-12-4*	161.983	≈100 dec				sl H_2O
Vanadium(II) iodide	Vanadium diiodide	I_2V	VI_2	15513-84-5	304.751		800 subl	5.44		reac H_2O
Vanadium(III) iodide	Vanadium triiodide	I_3V	VI_3	15513-94-7	431.655			5.21		reac H_2O
Vanadium nitride		NV	VN	24646-85-3	64.949	2050		6.13		i H_2O; s aqua regia
Vanadium(II) oxide	Vanadium monoxide	OV	VO	12035-98-2	66.941	1789		5.758		s acid
Vanadium(III) oxide	Vanadium trioxide	O_3V_2	V_2O_3	1314-34-7	149.881	2067		4.87		i H_2O
Vanadium(IV) oxide	Vanadium dioxide	O_2V	VO_2	12036-21-4	82.941	1967		4.339		i H_2O; s acid, alk
Vanadium(V) oxide	Vanadium pentoxide	O_5V_2	V_2O_5	1314-62-1	181.88	670	1800 dec	3.35	0.07^{25}	s conc acid, alk; i EtOH
Vanadium(III) 2,4-pentanedioate	Vanadium(III) acetylacetonate	$C_{15}H_{21}O_6V$	$V(CH_3COCH\text{-}COCH_3)_3$	13476-99-8	348.266	≈185	subl	≈1.0		s MeOH, ace, bz chl
Vanadium silicide (VSi_2)	Vanadium disilicide	Si_2V	VSi_2	12039-87-1	107.113			4.42		s HF
Vanadium silicide (V_3Si)		SiV_3	V_3Si	12039-76-8	180.911	1935		5.70		
Vanadium(III) sulfate	Vanadium trisulfate	$O_{12}S_3V_2$	$V_2(SO_4)_3$	13701-70-7	390.074	≈400 dec				sl H_2O
Vanadium(II) sulfate heptahydrate		$H_{14}O_{11}SV$	$VSO_4 \cdot 7H_2O$	36907-42-3	273.112					
Vanadium(III) sulfide	Vanadium trisulfide	S_3V_2	V_2S_3	1315-03-3	198.081	dec		4.7		i H_2O; s hot HCl
Vanadyl bromide	Vanadium oxide bromide	BrOV	VOBr	13520-88-2	146.845	480 dec				
Vanadyl chloride	Vanadium oxide chloride	ClOV	VOCl	13520-87-1	102.394		127	1.72		
Vanadyl dibromide		Br_2OV	$VOBr_2$	13520-89-3	226.749	180 dec				
Vanadyl dichloride		Cl_2OV	$VOCl_2$	10213-09-9	137.846	380 dec		2.88		reac H_2O; s EtOH
Vanadyl difluoride		F_2OV	VOF_2	13814-83-0	104.938					
Vanadyl selenite hydrate		H_2O_5SeV	$VOSeO_3 \cdot H_2O$	133578-89-9	211.92			3.506		
Vanadyl sulfate dihydrate		H_4O_7SV	$VOSO_4 \cdot 2H_2O$	27774-13-6	199.036					s H_2O
Vanadyl tribromide		Br_3OV	$VOBr_3$	13520-90-6	306.653		180 dec			reac H_2O
Vanadyl trichloride		Cl_3OV	$VOCl_3$	7727-18-6	173.299	−79	127	1.829		reac H_2O; s MeOH, eth, ace

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Vanadyl trifluoride		F_3OV	VOF_3	13709-31-4	123.936	300	480	2.459		reac H_2O
Water		H_2O	H_2O	7732-18-5	18.015	0.00	100.0	0.9970		s EtOH, MeOH, ace
Xenon		Xe	Xe	7440-63-3	131.29	−111.79 tp (81.6 kPa)	−108.12	5.366 g/L		sl H_2O
Xenon difluoride		F_2Xe	XeF_2	13709-36-9	169.29	129.03 tp	114.35 sp	4.32		sl H_2O
Xenon dioxydifluoride		F_2O_2Xe	XeO_2F_2	13875-06-4	201.29	30.8 exp		4.10		
Xenon fluoride hexafluoroantimonate		F_9SbXe	XeF_3SbF_6	39797-63-2	424.04	≍110		3.92		
Xenon fluoride hexafluoroarsenate		AsF_9Xe_2	$Xe_2F_3AsF_6$	50432-32-1	508.49	99		3.62		reac H_2O
Xenon fluoride hexafluororuthenate		F_7RuXe	$XeFRuF_6$	22527-13-5	365.35	110		3.78		
Xenon fluoride undecafluoroantimonate		$F_{12}Sb_2Xe$	$XeFSb_2F_{11}$	15364-10-0	602.79	63		3.69		
Xenon hexafluoride		F_6Xe	XeF_6	13693-09-9	245.28	49.5	75.6	3.56		reac H_2O
Xenon oxytetrafluoride		F_4OXe	$XeOF_4$	13774-85-1	223.28	−46.2		3.17^0		reac H_2O
Xenon pentafluoride hexafluoroarsenate		$AsF_{11}Xe$	XeF_5AsF_6	20328-94-3	415.19	130.5		3.51		
Xenon pentafluoride hexafluororuthenate		$F_{11}RuXe$	XeF_5RuF_6	39796-98-0	441.34	152		3.79		
Xenon tetrafluoride		F_4Xe	XeF_4	13709-61-0	207.28	117.10 tp	115.75 sp	4.04		reac H_2O
Xenon tetroxide		O_4Xe	XeO_4	12340-14-6	195.29	−35.9	≍0 dec			
Xenon trifluoride undecafluoroantimonate		$F_{14}Sb_2Xe$	$XeF_3Sb_2F_{11}$	35718-37-7	640.79	82		3.98		
Xenon trioxide		O_3Xe	XeO_3	13776-58-4	179.29	exp ≍25		4.55		s H_2O
Ytterbium		Yb	Yb	7440-64-4	173.04	819	1196	6.90		s dil acid
Ytterbium(II) bromide		Br_2Yb	$YbBr_2$	25502-05-0	332.85	673				reac H_2O
Ytterbium(II) chloride		Cl_2Yb	$YbCl_2$	13874-77-6	243.95	721		5.27		reac H_2O
Ytterbium(III) chloride		Cl_3Yb	$YbCl_3$	10361-91-8	279.4	875				s H_2O
Ytterbium(III) chloride hexahydrate		$Cl_3H_{12}O_6Yb$	$YbCl_3 \cdot 6H_2O$	19423-87-1	387.49	150 dec		2.57		vs H_2O
Ytterbium(III) fluoride		F_3Yb	YbF_3	13760-80-0	230.04	1157		8.2		i H_2O
Ytterbium(II) iodide		I_2Yb	YbI_2	19357-86-9	426.85	772				reac H_2O
Ytterbium(III) nitrate		N_3O_9Yb	$Yb(NO_3)_3$	13768-67-7	359.06				239^{25}	s EtOH
Ytterbium(III) oxide	Ytterbia	O_3Yb_2	Yb_2O_3	1314-37-0	394.08	2355	4070	9.2		s dil acid
Ytterbium silicide		Si_2Yb	$YbSi_2$	12039-89-3	229.21			7.54		
Ytterbium(III) sulfate octahydrate		$H_{16}O_{20}S_3Yb_2$	$Yb_2(SO_4)_3 \cdot 8H_2O$	10034-98-7	778.39			3.3	38.4^{20}	
Yttrium		Y	Y	7440-65-5	88.906	1522	3345	4.47		reac H_2O; s dil acid
Yttrium aluminum oxide	Aluminum yttrium aluminate	$Al_5O_{12}Y_3$	$Y_3Al_5O_{12}$	12005-21-9	593.619			≍4.5		
Yttrium antimonide		SbY	YSb	12186-97-9	210.666	2310		5.97		
Yttrium arsenide		AsY	YAs	12255-48-0	163.828			5.59		
Yttrium boride		B_6Y	YB_6	12008-32-1	153.772	2600		3.72		
Yttrium bromide		Br_3Y	YBr_3	13469-98-2	328.618	904			83.3^{30}	
Yttrium carbide		C_2Y	YC_2	12071-35-1	112.927	≍2400		4.13		
Yttrium carbonate trihydrate		$C_3H_6O_{12}Y_2$	$Y_2(CO_3)_3 \cdot 3H_2O$	5970-44-5	411.885					i H_2O; s dil acid

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Yttrium chloride		Cl_3Y	YCl_3	10361-92-9	195.264	721		2.61	75.1^{20}	
Yttrium fluoride		F_3Y	YF_3	13709-49-4	145.901	≈1150		4.0		i H_2O
Yttrium nitrate		N_3O_9Y	$Y(NO_3)_3$	10361-93-0	274.921				149^{25}	s EtOH
Yttrium nitrate hexahydrate		$H_{12}N_3O_{15}Y$	$Y(NO_3)_3 \cdot 6H_2O$	13494-98-9	383.012				149^{25}	
Yttrium nitrate tetrahydrate		$H_8N_3O_{13}Y$	$Y(NO_3)_3 \cdot 4H_2O$	13773-69-8	346.982			2.68	149^{25}	
Yttrium oxide	Yttria	O_3Y_2	Y_2O_3	1314-36-9	225.81	2438		5.03		s dil acid
Yttrium phosphide		PY	YP	12294-01-8	119.88			≈4.4		
Yttrium sulfate octahydrate		$H_{16}O_{20}S_3Y_2$	$Y_2(SO_4)_3 \cdot 8H_2O$	7446-33-5	610.125			2.6	7.47^{16}	
Yttrium sulfide		S_3Y_2	Y_2S_3	12039-19-9	274.01	1925		3.87		
Zinc		Zn	Zn	7440-66-6	65.39	419.53	907	7.14		s acid, alk
Zinc acetate dihydrate		$C_4H_{10}O_6Zn$	$Zn(C_2H_3O_2)_2 \cdot 2H_2O$	5970-45-6	219.51	237 dec		1.735	30.0^{20}	s EtOH
Zinc ammonium sulfate		$H_8N_2O_8S_2Zn$	$Zn(NH_4)_2(SO_4)_2$	7783-24-6	293.59				9.2^{20}	
Zinc antimonide		SbZn	ZnSb	12039-35-9	187.15	565		6.33		reac H_2O
Zinc arsenate	Zinc orthoarsenate	$As_2O_8Zn_3$	$Zn_3(AsO_4)_2$	13464-44-3	474.01				0.000078^{20}	s acid, alk
Zinc arsenate octahydrate	Koettigite	$As_2H_{16}O_{16}Zn_3$	$Zn_3(AsO_4)_2 \cdot 8H_2O$	13464-45-4	618.13			3.33	0.000078^{20}	s acid, alk
Zinc arsenide		As_2Zn_3	Zn_3As_2	12006-40-5	346.01	1015		5.528		
Zinc arsenite	Zinc metaarsenite	As_2O_4Zn	$Zn(AsO_2)_2$	10326-24-6	279.23					i H_2O; s acid
Zinc borate		$B_4O_9Zn_3$	$3ZnO \cdot 2B_2O_3$	27043-84-1	383.41			3.64		sl H_2O; s dil acid
Zinc borate hemiheptahydrate		$B_6H_7O_{14.5}Zn_2$	$2ZnO \cdot 3B_2O_3 \cdot 3.5H_2O$	12513-27-8	434.69	980		4.22		i H_2O
Zinc borate pentahydrate		$B_6H_{10}O_{16}Zn_2$	$2ZnO \cdot 3B_2O_3 \cdot 5H_2O$	12536-65-1	461.72			3.64	0.007^{25}	sl HCl
Zinc bromate hexahydrate		$Br_2H_{12}O_{12}Zn$	$Zn(BrO_3)_2 \cdot 6H_2O$	13517-27-6	429.29	100		2.57		vs H_2O
Zinc bromide		Br_2Zn	$ZnBr_2$	7699-45-8	225.2	394	697	4.5	488^{25}	vs EtOH; s eth
Zinc caprylate	Zinc octanoate	$C_{16}H_{30}O_4Zn$	$Zn(C_8H_{15}O_2)_2$	557-09-5	351.8	136				sl H_2O
Zinc carbonate	Smithsonite	CO_3Zn	$ZnCO_3$	3486-35-9	125.4	140 dec		4.4	0.000091^{20}	s dil acid, alk
Zinc carbonate hydroxide	Hydrozincite	$C_2H_6O_{12}Zn_5$	$3Zn(OH)_2 \cdot 2ZnCO_3$	12070-69-8	549.01					
Zinc chlorate		Cl_2O_6Zn	$Zn(ClO_3)_2$	10361-95-2	232.29	60 dec		2.15	200^{20}	
Zinc chloride		Cl_2Zn	$ZnCl_2$	7646-85-7	136.29	290	732	2.907	408^{25}	s EtOH, ace
Zinc chromate		CrO_4Zn	$ZnCrO_4$	13530-65-9	181.38	316		3.40	3.08	s acid; i ace
Zinc chromite		Cr_2O_4Zn	$ZnCr_2O_4$	12018-19-8	233.38			5.29		
Zinc citrate dihydrate		$C_{12}H_{14}O_{16}Zn_3$	$Zn_3(C_6H_5O_7)_2 \cdot 2H_2O$	546-46-3	610.4					sl H_2O; s dil acid, alk
Zinc cyanide		C_2N_2Zn	$Zn(CN)_2$	557-21-1	117.42			1.852	0.00047^{20}	reac acid
Zinc dithionate	Zinc hydrosulfite	O_4S_2Zn	ZnS_2O_4	7779-86-4	193.52	200 dec			40^{20}	
Zinc fluoride		F_2Zn	ZnF_2	7783-49-5	103.39	872	1500	4.9	1.55^{25}	
Zinc fluoride tetrahydrate		$F_2H_8O_4Zn$	$ZnF_2 \cdot 4H_2O$	13986-18-0	175.45			2.30	1.55^{25}	
Zinc fluoroborate hexahydrate		$B_2F_8H_{12}O_6Zn$	$Zn(BF_4)_2 \cdot 6H_2O$	27860-83-9	347.09			2.12		vs H_2O; s EtOH
Zinc formate dihydrate		$C_2H_6O_6Zn$	$Zn(CHO_2)_2 \cdot 2H_2O$	5970-62-7	191.46			2.207	5.2^{20}	i EtOH

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Zinc hexafluorosilicate hexahydrate		$F_6H_{12}O_6SiZn$	$ZnSiF_6 \cdot 6H_2O$	16871-71-9	315.56					s H_2O
Zinc hydroxide		H_2O_2Zn	$Zn(OH)_2$	20427-58-1	99.41	125 dec		3.05	0.000042^{20}	
Zinc iodate		I_2O_6Zn	$Zn(IO_3)_2$	7790-37-6	415.2				0.64^{25}	
Zinc iodide		I_2Zn	ZnI_2	10139-47-6	319.2	446	625	4.74	438^{25}	s EtOH, eth
Zinc laurate	Zinc dodecanoate	$C_{24}H_{46}O_4Zn$	$Zn(C_{12}H_{23}O_2)_2$	2452-01-9	464.01	128				sl H_2O
Zinc molybdate		MoO_4Zn	$ZnMoO_4$	13767-32-3	225.33	> 700		4.3		i H_2O
Zinc nitrate		N_2O_6Zn	$Zn(NO_3)_2$	7779-88-6	189.4				120^{25}	
Zinc nitrate hexahydrate		$H_{12}N_2O_{12}Zn$	$Zn(NO_3)_2 \cdot 6H_2O$	10196-18-6	297.49	36 dec		2.067	120^{25}	vs EtOH
Zinc nitride		N_2Zn_3	Zn_3N_2	1313-49-1	224.18	700 dec		6.22		i H_2O
Zinc nitrite		N_2O_4Zn	$Zn(NO_2)_2$	10102-02-0	157.4					reac H_2O
Zinc oleate		$C_{36}H_{66}O_4Zn$	$Zn(C_{18}H_{33}O_2)_2$	557-07-3	628.3	70 dec				i H_2O; s EtOH, eth, bz
Zinc orthosilicate	Willemite	O_4SiZn_2	Zn_2SiO_4	13597-65-4	222.86	1509		4.1		i H_2O, dil acid
Zinc oxalate		C_2O_4Zn	ZnC_2O_4	547-68-2	153.41				0.0026^{25}	
Zinc oxalate dihydrate		$C_2H_4O_6Zn$	$ZnC_2O_4 \cdot 2H_2O$	4255-07-6	189.44	100 dec		2.56	0.0026^{25}	s dil acid
Zinc oxide	Zincite	OZn	ZnO	1314-13-2	81.39	1974		5.6		i H_2O; s dil acid
Zinc 2,4-pentanedioate	Zinc acetylacetonate	$C_{10}H_{14}O_4Zn$	$Zn(CH_3COCHCOCH_3)_2$	14024-63-6	263.61	137 dec				sl H_2O; s EtOH
Zinc perchlorate hexahydrate		$Cl_2H_{12}O_{14}Zn$	$Zn(ClO_4)_2 \cdot 6H_2O$	10025-64-6	372.38	106 dec		2.2	121.3^{25}	s EtOH
Zinc permanganate hexahydrate		$H_{12}Mn_2O_{14}Zn$	$Zn(MnO_4)_2 \cdot 6H_2O$	23414-72-4	411.35			2.45		s H_2O; reac EtOH
Zinc peroxide		O_2Zn	ZnO_2	1314-22-3	97.39	> 150 dec	212 exp	1.57		i H_2O; reac acid, EtOH, ace
Zinc phosphate		$O_8P_2Zn_3$	$Zn_3(PO_4)_2$	7779-90-0	386.11	900		4.0		i H_2O
Zinc phosphate tetrahydrate	Hopeite	$H_8O_{12}P_2Zn_3$	$Zn_3(PO_4)_2 \cdot 4H_2O$	7543-51-3	458.17			3.04		i H_2O, EtOH; s dil acid, alk
Zinc phosphide		P_2Zn_3	Zn_3P_2	1314-84-7	258.12	1160		4.55		i H_2O, EtOH; reac acid; s bz
Zinc pyrophosphate		$O_7P_2Zn_2$	$Zn_2P_2O_7$	7446-26-6	304.72			3.75		i H_2O; s dil acid
Zinc selenate pentahydrate		$H_{10}O_9SeZn$	$ZnSeO_4 \cdot 5H_2O$	13597-54-1	298.42	50 dec		2.59	63.4^{25}	
Zinc selenide	Stilleite	SeZn	ZnSe	1315-09-9	144.35	> 1100	subl	5.65		i H_2O; s dil acid
Zinc selenite		O_3SeZn	$ZnSeO_3$	13597-46-1	192.35					
Zinc stearate		$C_{36}H_{70}O_4Zn$	$Zn(C_{18}H_{35}O_2)_2$	557-05-1	632.33	130		1.095		i H_2O, EtOH, eth; s bz
Zinc sulfate	Zinkosite	O_4SZn	$ZnSO_4$	7733-02-0	161.45	680 dec		3.8	57.7^{25}	
Zinc sulfate heptahydrate	Goslarite	$H_{14}O_{11}SZn$	$ZnSO_4 \cdot 7H_2O$	7446-20-0	287.56	100 dec		1.97	57.7^{25}	i EtOH
Zinc sulfate monohydrate	Gunningite	H_2O_5SZn	$ZnSO_4 \cdot H_2O$	7446-19-7	179.47	238 dec		3.20	57.7^{25}	i EtOH
Zinc sulfide (wurtzite)	Wurtzite	SZn	ZnS	1314-98-3	97.46	1700		4.09		i H_2O; s dil acid
Zinc sulfide (sphalerite)	Sphalerite	SZn	ZnS	1314-98-3	97.46	1700		4.04		i H_2O, EtOH; s dil acid
Zinc sulfite dihydrate		H_4O_5SZn	$ZnSO_3 \cdot 2H_2O$	7488-52-0	181.49	200 dec			0.224^{25}	i EtOH
Zinc telluride		TeZn	ZnTe	1315-11-3	192.99	1239		5.9		i H_2O
Zinc thiocyanate		$C_2N_2S_2Zn$	$Zn(SCN)_2$	557-42-6	181.56					sl H_2O; s EtOH
Zirconium		Zr	Zr	7440-67-7	91.224	1855	4409	6.52		s hot conc acid

Name	Synonym	Mol. Form.	Formula	CAS Reg. No.	Mol. Wt.	mp/°C	bp/°C	Density	Sol. in g/ 100 g H_2O	Qualitative Sol.
Zirconium boride		B_2Zr	ZrB_2	12045-64-6	112.846	3245		6.17		
Zirconium(IV) bromide	Zirconium tetrabromide	Br_4Zr	$ZrBr_4$	13777-25-8	410.84	450 tp	360 sp	3.98		
Zirconium carbide		CZr	ZrC	12020-14-3	103.235	3532		6.73		s HF
Zirconium(II) chloride		Cl_2Zr	$ZrCl_2$	13762-26-0	162.129	772 dec		3.16		reac H_2O
Zirconium(IV) chloride	Zirconium tetrachloride	Cl_4Zr	$ZrCl_4$	10026-11-6	233.035	437 tp	331 sp	2.80		reac H_2O; s EtOH, eth
Zirconium(IV) fluoride	Zirconium tetrafluoride	F_4Zr	ZrF_4	7783-64-4	167.218	932 tp	912 sp	4.43	1.5^{25}	
Zirconium(II) hydride		H_2Zr	ZrH_2	7704-99-6	93.24	800 dec		5.6		i H_2O
Zirconium(IV) hydroxide		H_4O_4Zr	$Zr(OH)_4$	14475-63-9	159.254	dec		3.25		i H_2O; s acid
Zirconium(IV) iodide	Zirconium tetraiodide	I_4Zr	ZrI_4	13986-26-0	598.842	499 tp	431 sp	4.85		vs H_2O
Zirconium(IV) nitrate pentahydrate		$H_{10}N_4O_{17}Zr$	$Zr(NO_3)_4 \cdot 5H_2O$	13746-89-9	429.32	100 dec				vs H_2O; s EtOH
Zirconium nitride		NZr	ZrN	25658-42-8	105.231	2960		7.09		s conc HF; sl dil acid
Zirconium(IV) orthosilicate	Zircon	O_4SiZr	$ZrSiO_4$	10101-52-7	183.308	1540 dec		4.6		i H_2O, acid
Zirconium(IV) oxide	Zirconia	O_2Zr	ZrO_2	1314-23-4	123.223	2709		5.68		i H_2O; sl acid
Zirconium phosphide		P_2Zr	ZrP_2	12037-80-8	153.172			$\asymp$5.1		
Zirconium silicide		Si_2Zr	$ZrSi_2$	12039-90-6	147.395	1620		4.88		i H_2O, aqua regia; s HF
Zirconium(IV) sulfate		O_8S_2Zr	$Zr(SO_4)_2$	14644-61-2	283.351	410 dec		3.22		s H_2O; sl EtOH
Zirconium(IV) sulfate tetrahydrate		$H_8O_{12}S_2Zr$	$Zr(SO_4)_2 \cdot 4H_2O$	7446-31-3	355.413	100 dec		2.80		vs H_2O
Zirconium(IV) sulfide		S_2Zr	ZrS_2	12039-15-5	155.356	1480		3.82		i H_2O
Zirconyl chloride	Zirconium oxychloride	Cl_2OZr	$ZrOCl_2$	7699-43-6	178.128	250 dec				s H_2O, EtOH
Zirconyl chloride octahydrate		$Cl_2H_{16}O_9Zr$	$ZrOCl_2 \cdot 8H_2O$	13520-92-8	322.251	400 dec		1.91		vs H_2O, EtOH