2.2. PHYSICAL PROPERTIES OF PURE SUBSTANCES

Table 2-1 Physical Properties of the Elements and Inorganic Compounds*

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
Abbreviations Used in the Table									
a., acid	atm., atmosphere or 760 mm. of mercury pressure	d. 50, decomposes at 50°C; 50 d., melts at 50°C with decomposition	hyg., hygroscopic	pl., plates	trig., trigonal				
A., specific gravity with reference to air = 1			i., insoluble	pr., prisms or prismatic	v., very				
	bk., black		ign., ignites	pyr., pyridine	vac., in vacuo				
abs., absolute	brn., brown	delq., deliquescent	lq., liquid	rhb., rhombic (orthorhombic)	vl., violet				
ac., acetic acid	bz., benzene	dil., dilute	lt., light	s., soluble	volt., volatile or volatilizes				
act., acetone	c., cold	dk., dark	m. al., methyl alcohol	satd., saturated	wh., white				
al., 95 percent ethyl alcohol	cb., cubic	eff., effloresces or effloresce nt	mn., monoclinic	sl., slightly	yel., yellow				
alk, alkali (i.e., aq. NaOH or KOH)	cc, cubic centimeter	et., ethyl ether	nd., needles	soln., solution	∞, soluble in all proportions				
am., amyl (C_5H_{11})	chl., chloroform	expl., explodes	NH_3, liquid ammonia	subl., sublimes	<, less than				

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
amor., amorphous	col., colorless or white	gel., gelatinous	NH_4OH, ammonium hydroxide solution	sulf., sulfides	>, greater than				
anh., anhydrous	conc., concentrated	gly., glycerol (glycerin)		tart. a., tartaric acid	42±, about or near 42				
aq., aqueous or water	cr., crystals or crystalline	gn., green	oct., octahedral	tet., tetragonal	$-3H_2O$, 100, loses 3 moles of water per formula weight at 100°C				
aq. reg., aqua regia	d., decomposes	h., hot	or., orange	tr., transition					
	D., specific gravity with reference to hydrogen = 1	hex., hexagonal	pd., powder	tri., triclinic					

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
Formula weights are based upon the International Atomic Weights in "Atomic Weights of the Elements 2001," *Pure Appl. Chem.,* **75,** 1107, 2003, and are computed to the nearest hundredth. **Refractive index** where given for a uniaxial crystal, is for the ordinary (ω) ray; where given for a biaxial crystal, the index given is for the median (β) value. Unless otherwise specified, the index is given for the sodium D-line (λ = 589.3 μm). **Specific gravity** values are given at room temperatures (15 to 20°C) unless otherwise indicated by the small figures which follow the value: thus, $5.6\frac{18^\circ}{4}$ indicates a specific gravity of 5.6 for the substance at 18°C referred to water at 4°C. In this table the values for the specific gravity of gases are given with reference to air (A) = 1, or hydrogen (D) = 1. **Melting point** is recorded in a certain case as 82 d. and in some other case as d. 82, the distinction being made in this manner to indicate that the former is a melting point with decomposition at 82°C, while in the latter decomposition only occurs at 82°C. Where a value such as $-2H_2O$, 82 is given, it indicates loss of 2 moles of water per formula weight of the compound at a temperature of 82°C. **Boiling point** is given at atmospheric pressure (760 mm of mercury) unless otherwise indicated; thus, $82^{15\ mm}$ indicates the boiling point is 82°C when the pressure is 15 mm.			**Solubility** is given in parts by weight (of the formula shown at the extreme left) per 100 parts by weight of the solvent; the small superscript indicates the temperature. In the case of gases the solubility is often expressed in some manner as 5^{10° cc which indicates that at 10°C, 5 cc of the gas are soluble in 100 g of the solvent. The symbols of the common mineral acids: H_2SO_4, HNO_3, HCl, etc., represent dilute aqueous solutions of these acids. See also special tables on Solubility. REFERENCES: The information given in this table has been collected mainly from the following sources: Mellor, *A Comprehensive Treatise on Inorganic and Theoretical Chemistry,* Longmans, New York, 1922. Abegg, *Handbuch der anorganischen Chemie,* S. Hirzel, Leipzig, 1905. Gmelin-Kraut, *Handbuch der anorganischen Chemie,* 7th ed., Carl Winter, Heidelberg; 8th ed., Verlag Chemie, Berlin, 1924. Friend, *Textbook of Inorganic Chemistry,* Griffin, London, 1914. Winchell, *Microscopic Character of Artificial Inorganic Solid Substances or Artificial Minerals,* Wiley, New York, 1931. *International Critical Tables,* McGraw-Hill, New York, 1926. *Tables annuelles internationales de constants et donnes numeriques,* McGraw-Hill, New York. *Annual Tables of Physical Constants and Numerical Data,* National Research Council, Princeton, N.J., 1943. Comey and Hahn, *A Dictionary of Chemical Solubilities,* Macmillan, New York, 1921. Seidell, *Solubilities of Inorganic and Metal Organic Compounds,* Van Nostrand, New York, 1940.						
Aluminum	Al	26.98	silv., cb.	2.70^{20°	660	2056	i.	i.	s. HCl, H_2SO_4, alk.
acetate, normal	$Al(C_2H_3O_2)_3$	204.11	wh. pd.		d. 200		s.	d.	
acetate, basic	$Al(OH)(C_2H_3O_2)_2$	162.08	wh., amor.		d.		i.		s.a.; i. NH_4 salts
bromide	$AlBr_3$	266.69	trig.	$3.01\ \frac{25^\circ}{4}$	97.5	268	s.		s.al., act., CS_2
bromide	$AlBr_3 \cdot 6H_2O$	374.78	col., delq. cr.		d. 100		s.	s.	s. al., CS_2

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
carbide	Al_4C_3	143.96	yel., hex., 2.70	2.95	d. >2200		d. to CH_4		s. a.; i. act.
chloride	$AlCl_3$	133.34	wh., delq., hex.	$2.44^{\frac{25^\circ}{4}}$	$194^{5.2atm.}$	182.7^{752mm}; subl. 178	69.87^{15°	s. d.	s. et., chl., CCl_4; i. bz.
chloride	$AlCl_3 \cdot 6H_2O$	241.43	col., delq., trig., 1.560				400	v. s.	50 al.; s. et.
fluoride (fluellite)	$AlF_3 \cdot H_2O$	101.99	col., rhb., 1.490	2.17	d.		sl. s.		
fluoride	$Al_2F_6 \cdot 7H_2O$	294.06	wh., cr. pd.		$-4H_2O$, 120	$-6H_2O$, 250	i.	sl. s.	
hydroxide	$Al(OH)_3$	78.00	wh., mn.	2.42	$-2H_2O$, 300		0.000104^{18°	i.	s. a., alk.; i. a.
nitrate	$Al(NO_3)_3 \cdot 9H_2O$	375.13	rhb., delq.		73	d. 134	v. s.	v. s. d.	s. al., CS_2
nitride	Al_2N_2	81.98	yel., hex.	$3.05^{\frac{25^\circ}{4}}$	$2150^{4atm.}$	d. >1400	d. slowly		s. alk. d.
oxide	Al_2O_3	101.96	col., hex., 1.67–8	3.99	1999 to 2032		i.	i.	v. sl. s. a., alk.
oxide (corundum)	Al_2O_3	101.96	wh., trig., 1.768	4.00	1999 to 2032	2210	i.	i.	v. sl. s. a., alk.
phosphate	$AlPO_4$	121.95	col., hex.	2.59			i.	i.	s. a., alk.; i. ac.
potassium silicate (muscovite)	$3Al_2O_3 \cdot K_2O \cdot 6SiO_2 \cdot 2H_2O$	796.61	mn., 1.590	2.9	d.		i.		
potassium silicate (orthoclase)	$Al_2O_3 \cdot K_2O \cdot 6SiO_2$	556.66	col., mn., 1.524	2.56	1450 (1150)		i.		
Aluminum potassium tartrate	$AlK(C_4H_4O_6)_2$	362.22	col.				s.	s.	
sodium fluoride (cryolite)	$AlF_3 \cdot 3NaF$	209.94	wh., mn., 1.3389	2.90	1000		sl. s.		i. HCl

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
sodium silicate	$Al_2O_3 \cdot Na_2O \cdot 6SiO_2$	524.44	col., tri., 1.529	2.61	1100		i.	i.	d. a.
sulfate	$Al_2(SO_4)_3$	342.15	wh. cr.	2.71	d. 770		$31.3^{0°}$	$89^{100°}$	
Alum, ammonium (tschermigite)	$Al_2(SO_4)_3 \cdot (NH_4)_2SO_4 \cdot 24H_2O$	906.66	col., oct., 1.4594	$1.64\ \frac{20°}{4}$	93.5	$-20H_2O$, 120; $-24H_2O$, 200	$3.9^{0°}$	∞ 100°	i. al.
ammonium chrome	$Cr_2(SO_4)_3 \cdot (NH_4)_2SO_4 \cdot 24H_2O$	956.69	gn. or vl., oct., 1.4842	1.72	100 d.		$21.2^{25°}$		s. al.
ammonium iron	$Fe_2(SO_4)_3 \cdot (NH_4)_2SO_4 \cdot 24H_2O$	964.38	vl., oct., 1.485	1.71	40		$124^{25°}$		i. al.
potassium (kalinite)	$Al_2(SO_4)_3 \cdot K_2SO_4 \cdot 24H_2O$	948.78	col., mn., 1.4564	$1.76\ \frac{26°}{4}$	92	$-18H_2O$, 64.5	$5.7^{0°}$	$\infty^{93°}$	
potassium chrome	$Cr_2(SO_4)_3 \cdot K_2SO_4 \cdot 24H_2O$	998.81	red or gn., cb., 1.4814	1.83	89		20	50	i. al.
sodium	$Al_2(SO_4)_3 \cdot Na_2SO_4 \cdot 24H_2O$	916.56	col., oct., 1.4388	$1.675\ \frac{20°}{4}$	61		$106.4^{0°}$	$121.7^{45°}$	i. al.
Ammonia†	NH_3	17.03	col. gas, 1.325 (lq.)	$0.817^{-79°}$	−77.7	−33.4	$89.9^{0°}$	$7.4^{96°}$	$14.8^{20°}$ al.; s. et.
				0.5971 (A)					
Ammonium acetate	$NH_4C_2H_3O_2$	77.08	wh., hyg. cr.	1.073	114	d.	$148^{4°}$		s. al.; sl. s. act.
auricyanide	$NH_4CN \cdot Au(CN)_3 \cdot H_2O$	337.09	pl.		d. 200		s.	v. s.	i. al.
bicarbonate	NH_4HCO_3	79.06	mn. or rhb., 1.5358	1.573	d. 35–60		$11.9^{0°}$	$27^{30°}$	i. al.
bromide	NH_4Br	97.94	col., cb., 1.7108	$2.327\ \frac{15°}{4}$	subl. 542		$68^{10°}$	$145.6^{100°}$	s. al., et., act.
carbonate	$(NH_4)_2CO_3 \cdot H_2O$	114.10	col. pl.		d. 58		$100^{15°}$		i. al., CS_2, NH_3

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
carbonate, carbamate	$NH_4HCO_3 \cdot NH_2CO_2NH_4$‡	157.13	wh. cr.		subl.		$25^{15°}$	$67^{65°}$	
carbonate, sesqui-	$(NH_4)_2CO_3 \cdot 2NH_4HCO_3 \cdot H_2O$	272.21	wh.		d.		$20^{15°}$	$50^{49°}$	
chloride (salammoniac)	NH_4Cl	53.49	wh., cb., 1.639, 1.6426	$1.53^{17°}$	d. 350	subl. 520	$29.4^{0°}$	$77.3^{100°}$	s. NH_3; sl. s. al., m. al.
chloroplatinate	$(NH_4)_2PtCl_6$	443.87	yel., cb.	3.065	d.		$0.7^{15°}$	$1.25^{100°}$	0.005 al.
chloroplatinite	$(NH_4)_2PtCl_4$	372.97	tet.		d.		s.	v. s.	
chlorostannate	$(NH_4)_2SnCl_6$	367.50	pink., cb.	2.4			$33.3^{15°}$		
chromate	$(NH_4)_2CrO_4$	152.07	yel., mn.	$1.917^{12°}$	d. 180		$40.5^{30°}$	d.	sl. s. act., NH_3; i. al.
cyanide	NH_4CN	44.06	col., cb.	$0.79^{100°}$ (A)	36		s.	v. s.	s. al.
dichromate	$(NH_4)_2Cr_2O_7$	252.06	or., mn.	2.15	d. 185		$47.2^{30°}$	v. s.	s. al.; i. act.
ferrocyanide	$(NH_4)_4Fe(CN)_6 \cdot 6H_2O$	392.19	mn.		d.		s.		i. al.
fluoride	NH_4F	37.04	wh., hex.				v. s.	d.	s. al.; i. NH_3
fluoride, acid	$NH_4F \cdot HF$	57.04	wh., rhb., 1.390	$2.21\ \frac{12°}{12°}$			v. s.		
formate	HCO_2NH_4	63.06	col., mn., delq.	1.266	114–116	d. 180; subl. in vac.	$102^{0°}$	$531^{80°}$	s. al.
hydrosulfide	NH_4HS	51.11	col., rhb.		d.	subl. 120	v. s.		s. al.
hydroxide	NH_4OH	35.05	in soln. only				s.		

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
molybdate	$(NH_4)_2MoO_4$	196.01	mn.	2.27	d.		d.	d.	i. al., NH_3
molybdate, hepta-	$(NH_4)_6Mo_7O_{24}\cdot 4H_2O$ ‡	1235.86	col., mn.				$44^{25°}$		i. al.
nitrate (α), stable −16° to 32°	NH_4NO_3	80.04	col., tet., 1.611	$1.66\ \frac{25°}{4}$	169.6	d. 210	$118.3^{0°}$	$241.8^{30°}$	
nitrate (β), stable 32° to 84°	NH_4NO_3	80.04	col., rhb. or mn.	$1.725\ \frac{25°}{4}$		d. 210	$365.8^{35°}$	$580^{80°}$	$3.8^{20°}$ al., $17.1^{20°}$ m. al.; v. s. NH_3
nitrite	NH_4NO_2	64.04	wh. nd.	1.69	expl.		s.	d.	s. al.
osmochloride	$(NH_4)_2OsCl_6$	439.02	cb.	$2.93\ \frac{20°}{4}$					
oxalate	$(NH_4)_2C_2O_4\cdot H_2O$	142.11	col., rhb.	1.501			$2.5^{0°}$	$11.8^{50°}$	sl. s. al.; i. NH_3
oxalate, acid	$NH_4HC_2O_4\cdot H_2O$	125.08	col., trimetric	1.556	d.		s.		
perchlorate	NH_4ClO_4	117.49	col., rhb., 1.4833	1.95	d.		$10.9^{0°}$	$46.9^{100°}$	$2^{20°}$ al.; s. act.; i. et.
persulfate	$(NH_4)_2S_2O_8$	228.20	wh., mn., 1.5016	1.98	d. 120		$58.2^{0°}$	d.	
phosphate, monobasic	$NH_4H_2PO_4$	115.03	col., tet., 1.5246	$1.803\ \frac{19°}{4}$			$22.7^{0°}$	$173.2^{100°}$	i. ac.
phosphate, dibasic	$(NH_4)_2HPO_4$	132.06	col., mn., 1.53	1.619			$131^{15°}$		i. act.
phosphate, meta-	$(NH_4)_4P_4O_{12}$	388.04	col., mn.	2.21			s.		
Ammonium phosphomolybdate	$(NH_4)_3PO_4\cdot 12MoO_3\cdot 3H_2O$ (?)	1930.39	yel.		d.		$0.03^{15°}$	i.	s. alk.; i. al., HNO_3

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
silicofluoride	$(NH_4)_2SiF_6$	178.15	cb., 1.3696	2.01		subl.	$18.5^{17.5°}$	55.5	s. al.; i. act.
sulfamate	$NH_4{\cdot}SO_3NH_2$	114.12	col. pl.		132	d. 160	$134^{0°}$	$357^{50°}$	
sulfate (mascagnite)	$(NH_4)_2SO_4$	132.14	col., rhb., 1.5230	$1.769\ \frac{20°}{4}$	235 d.		$70.6^{0°}$	$103.3^{100°}$	i. al., act., CS_2
sulfate, acid	NH_4HSO_4	115.11	col., rhb., 1.480	1.78	146.9	490	100		v. sl. s. al.; i. act.
sulfide	$(NH_4)_2S$	68.14	yel.-wh.		d.		v. s.		$120^{25°}$ NH_3
sulfide, penta-	$(NH_4)_2S_5$	196.40	or.-red pr.				s.		
sulfite	$(NH_4)_2SO_3{\cdot}H_2O$	134.16	col., mn.	1.41	d.		$100^{12°}$		i. al., act.
sulfite, acid	NH_4HSO_3	99.11	rhb.	$2.03\ \frac{12°}{4}$	d.		s.		
tartrate	$(NH_4)_2C_4H_4O_6$	184.15	col., mn.	1.60	d.		$45^{0°}$	$87^{60°}$	sl. s. al.
thiocyanate	NH_4CNS	76.12	col., mn., 1.685±	1.305	149.6	d. 170	$120^{0°}$	$170^{20°}$	s. al., act., NH_3, SO_2
vanadate, meta-	NH_4VO_3	116.98	col. cr.	2.326	d.		$0.44^{18°}$	$3.05^{70°}$	i. al., NH_4Cl
Antimony	Sb	121.76	tin wh., trig.	$6.684^{25°}$	630.5	1380	i.	i.	s. aq. reg., h. conc. H_2SO_4
chloride, tri- (butter of antimony) *	$SbCl_3$	228.12	col., rhb., delq.	$3.14\ \frac{20°}{4}$	73.4	220.2	$601.6^{0°}$	$\infty^{72°}$	s. al., HCl, HBr, $H_2C_4H_4O_6$
oxide, tri- (valentinite)	Sb_2O_3	291.52	rhb., 2.35	5.67	656	1570	v. sl. s.	sl. s.	s. HCl, KOH, $H_2C_4H_4O_6$

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
oxide, tri- (senarmontite)	Sb_2O_3	291.52	cb., 2.087	5.2	652				
sulfide, tri- (stibnite)	Sb_2S_3	339.72	bk., rhb., 4.046	4.64	550		$0.00017^{18}_{\circ}$	d.	s. HCl; alk., NH_4HS, K_2S; i. ac.
sulfide, penta-	Sb_2S_5	403.85	golden	4.120^{0°	−2S, 135		i.	i.	s. HCl, alk., NH_4HS
telluride, tri-	Sb_2Te_3	626.32	gray		629				
Antimonyl potassium tartrate (tartar emetic)	$(SbO)KC_4H_4O_6 \cdot ½H_2O$	333.94	wh., rhb.	2.60	$-½H_2O$, 100		$5.26^{8.7^\circ}$	35.7^{100°	s. gly.; i. al.
sulfate, normal	$(SbO)_2SO_4$	371.58	wh. pd.	4.89			d.	d.	
sulfate, basic	$(SbO)_2SO_4 \cdot Sb_2(OH)_4$	683.20	wh. pd.				i.	d.	5.15^{15° gly.
Argon	Ar	39.95	col. gas	1.65^{-288°; $1.402^{-185.7^\circ}$; 1.38 (A)	−189.2	−185.7	5.6^{0° cc	2.23^{50° cc	24^{25° cc al.
Arsenic (crystalline) (α)	As_4	299.69	met., hex.	5.727^{14°	$814^{36atm.}$	subl. 615	i.	i.	s. HNO_3
Arsenic (black) (β)	As_4	299.69	bk., amor.	4.7^{20°			i.	i.	s. HNO_3, aq. reg., aq. Cl_2, h. alk.
Arsenic (yellow) (γ)	As_4	299.69	yel., cb.	2.0^{20°	d. 358				
acid, ortho-	$H_3AsO_4 \cdot ½H_2O$	150.95	col., hyg.	2.0–2.5	35.5	$-H_2O$, 160	16.7	50	s. alk.
acid, meta-	$HAsO_3$	123.93	wh., hyg.		d.		d. to form	H_3AsO_4	

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
acid, pyro-	$H_4As_2O_7$	265.87	col.		d. 206		d. to form	H_3AsO_4	
pentoxide	As_2O_5	229.84	wh., amor.	4.086		d.	$59.5^{0°}$	$76.7^{100°}$	s. alk., al.
sulfide, di- (realgar)	As_2S_2	213.97	red, mn., 2.68	$(\alpha)3.506^{19°}$; $(\beta)3.254^{19°}$	(α)tr. 267; (β)307	565	i.	d.	s. K_2S, $NaHCO_3$
sulfide, penta-	As_2S_5	310.17	yel.			d. 500	$0.000136^{0°}$	i.	s. HNO_3, alk.
Arsenious chloride (butter of arsenic)	$AsCl_3$	181.28	oily lq.	lq. 2.163	−18	130	d.	d.	s. HCl, HBr, PCl_3
hydride (arsine)	AsH_3	77.95	col. gas	2.695 (A)	−113.5	−55; d. 230	20 cc	sl. s.	sl. s. alk.
oxide (arsenolite)	As_2O_3	197.84	col., cb., fibrous, 1.755	$3.865^{\frac{25°}{4}}$	subl.		sl. s.	sl. s.	i. al., et.
oxide (claudetite)	As_2O_3	197.84	col., mn., 1.92	3.85	subl.		sl. s.	sl. s.	i. al., et.
oxide	As_2O_3	197.84	amor. or vitreous	3.738	315		$1.21^{0°}$	$2.93^{40°}$	s. HCl, alk., Na_2CO_3; i. al., et.
Auric chloride	$AuCl_3 \cdot 2H_2O$	339.36	or. cr.		d.		v. s.	v. s.	s. HCl, al., et.; sl. s. NH_3
cyanide	$Au(CN)_3 \cdot 6H_2O$	383.11			d. 50		v. s.	v. s.	s. al.
Aurous chloride	AuCl	232.42	yel. cr.	7.4	$AuCl_3$, 170	d. 290	d.	d.	s. HCl, HBr; d. al.
cyanide	AuCN	222.98	yel. cr.		d.		i.	i.	s. KCN; i. al., et.
Cf. also under *Gold*									
Barium	Ba	137.33	silv. met.	3.5	850	1140	d.	d.	s. a.; d. al.
acetate	$Ba(C_2H_3O_2)_2$	255.42	col.	2.468			$58.8^{0°}$	$75.0^{100°}$	

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
acetate	$Ba(C_2H_3O_2)_2 \cdot H_2O$	273.43	wh., tri. pr., 1.517	2.19	$-H_2O$, 41		75^{30°(anh.)	79^{40°(anh.)	i. al.
bromide	$BaBr_2$	297.14	col.	4.781 $\frac{24^\circ}{4}$	847	d.	98^{0°	149^{100°	v. s. m. al.; v. sl. s. act.
bromide	$BaBr_2 \cdot 2H_2O$	333.17	col., mn., 1.7266	3.69	$-2H_2O$, 100	d.	v. s.	v. s.	s. al.
carbonate (witherite)	$BaCO_3$	197.34	wh., rhb., 1.676	4.29	tr. 811 to α	d. 1450	0.0022^{18°	0.0065^{100°	s. a.; i. al.
carbonate (α)	$BaCO_3$	197.34	wh., hex.		tr. 982 to β				
carbonate (β)	$BaCO_3$	197.34	wh.		$1740^{90\ atm.}$		0.0022^{18°	0.0065^{100°	s. a.; i. al.
Barium chlorate	$Ba(ClO_3)_2$	304.23	col.		414		20.35^{0°	84.8^{80°	
chlorate	$Ba(ClO_3)_2 \cdot H_2O$*	322.24	col., mn., 1.577	3.179	d. 120		s.	s.	sl. s. al., act.
chloride	$BaCl_2$	208.23	col., mn., 1.7361	3.856 $\frac{24^\circ}{4}$	tr. 925	1560	31^{0°	59^{100°	sl. s. HCl, HNO_3; i. al.
chloride	$BaCl_2$	208.23	col., cb.		962	1560			
chloride	$BaCl_2 \cdot 2H_2O$†	244.26	col., mn., 1.646	3.097 $\frac{24^\circ}{4}$	$-2H_2O$, 100		39.3^{0°	76.8^{100°	sl. s. HCl, HNO_3; i. al.
hydroxide	$Ba(OH)_2$	171.34	col., mn.	4.495			1.67^{0°	101.4^{80°	
hydroxide	$Ba(OH)_2 \cdot 8H_2O$	315.46	col., mn., 1.5017	2.188^{16°	77.9	$-8H_2O$, 550	5.6^{15°		v. sl. s. al.; i. et.
nitrate (nitrobarite)	$Ba(NO_3)_2$	261.34	col., cb., 1.572	3.244^{28°	592	d.	5.0^{0°	34.2^{100°	sl. s. a.; i. al.
oxalate	BaC_2O_4	225.35	wh. cr.	2.658			0.0016^{8°	0.0024^{24°	s. a., NH_4Cl; i. al.

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
oxide	BaO	153.33	col., cb., 1.98	5.72	1923	2000±	$1.5^{0°}$	$90.8^{80°}$	s. HCl, HNO_3, abs. al.; i. NH_3, act.
peroxide	BaO_2*	169.33	gray or wh. pd.	4.958	−O, 800		v. sl. s.	d.	s. dil. a.; i. act.
peroxide	$BaO_2 \cdot 8H_2O$	313.45	pearly sc.		$-8H_2O$, 100		0.168	d.	s. dil. a.; i. al., et., act.
phosphate, monobasic	$BaH_4(PO_4)_2$	331.30	tri.	$2.9^{4°}$			d.	d.	s. a.
phosphate, dibasic	$BaHPO_4$	233.31	wh., rhb. nd., 1.635	$4.165^{15°}$			0.015		s. a., NH_4 salts
phosphate, tribasic	$Ba_3(PO_4)_2$	601.92	wh., cb.	$4.1^{16°}$			i.		s. a.
phosphate, pyro-	$Ba_2P_2O_7$	448.60	wh., rhb.	$3.9^{20°}$			0.01		s. a., NH_4 salts
silicofluoride	$BaSiF_6$	279.40	pr.	$4.279^{15°}$			$0.026^{17°}$	$0.09^{100°}$	sl. s. HCl, NH_4Cl; i. al.
sulfate (barite, barytes)	$BaSO_4$	233.39	col., rhb., 1.636	$4.499^{15°}$	1580 d.	tr. to mn. 1149	$0.000115^{0°}$	$0.000285^{30°}$	s. conc. H_2SO_4; 0.006, 3% HCl
sulfide, mono-	BaS	169.39	col., cb., 2.155	$4.25^{15°}$			d.	d.	d. HCl; i. al.
sulfide, tri-	BaS_3	233.52	yel.-gn.		d. 400		s.	s.	
sulfide, tetra-	$BaS_4 \cdot 2H_2O$	301.62	red, rhb.	$2.988^{20°}$	d. 200		$41^{15°}$	v. s.	i. al., CS_2
Beryllium (glucinum)	Be(Gl)	9.01	gray, met., hex.	1.816	1284	2767	i.	sl. s. d.	s. dil. a., alk.
Bismuth	Bi	208.98	silv. wh. or reddish, hex.	$9.80^{20°}$	271	1450	i.	i.	s. aq. reg., conc. H_2SO_4, HNO_3

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
carbonate, sub-	$Bi_2O_3 \cdot CO_2 \cdot H_2O$	527.98	wh. pd.	6.86	d.		i.	i.	s. a.
chloride, di-	$BiCl_2$	279.89	bk. nd.	4.86	163	d. 300	d.		
chloride, tri-	$BiCl_3$*	315.34	wh. cr.	4.75	230	447	d.		s. al.
nitrate	$Bi(NO_3)_3 \cdot 5 H_2O$	485.07	col., tri.	2.82	d. 30	$-5H_2O$, 80	d.		42^{19° act.; s. a.; i. al.
nitrate, sub-	$BiONO_3 \cdot H_2O$	305.00	hex. pl.	4.928^{15°	d. 260		i.	i.	s. a.
oxide, tri-	Bi_2O_3	465.96	yel., rhb.	8.9	820	1900±	i.	i.	s. a.
oxide, tri-	Bi_2O_3	465.96	yel., tet.	8.55	860		i.	i.	s. a.
oxide, tri-	Bi_2O_3	465.96	yel., cb.	8.20	tr. 704		i.	i.	s. a.
oxychloride	BiOCl	260.43	wh., amor.	7.72^{15°			sl. s.	sl. s.	s. a.; i. act., NH_3, $H_2C_4H_4O_6$
Boric acid	H_3BO_3	61.83	wh., tri.	1.435^{15°	185 d.		2.66^{0°	40.2^{100°	22.2^{20° gly., 0.24^{25° et.; s. al.
Boron	B	10.81	gray or bk., amor. or mn.	2.32	2300	2550	i.	i.	s. HNO_3; i. al.
carbide	B_4C	55.25	bk. cr.	2.54	2450	>3500	i.	i.	i. a.
oxide	B_2O_3	69.62	col. glass, 1.459	1.85	577	>1500	1.1^{0°	15.7^{100°	s. a., al., gly.
oxide (sassolite)	$B_2O_3 \cdot 3H_2O$	123.67	tri., 1.456	1.49	d.		sl. s.	s.	
Bromic acid	$HBrO_3$	128.91	col.; in soln. only		d. 100		v. s.	d.	
Bromine	Br_2	159.81	rhb., or red lq.	3.119^{20°; 5.87 (A)	−7.2	58.78	4.22^{0°	3.13^{30°	s. al., et., alk., CS_2
hydrate	$Br_2 \cdot 10H_2O$	339.96	red, oct.		d. 6.8		s.		

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
Cadmium	Cd	112.41	silv. met., hex.	8.65^{20°	320.9	767	i.	i.	s. a., NH_4NO_3
acetate	$Cd(C_2H_3O_2)_2$	230.50	col.	2.341	256	d.	v. s.		s. m. al.
acetate	$Cd(C_2H_3O_2)_2 \cdot 2H_2O$*	266.53	col., mn.	2.01	$-H_2O$, 130		v. s.		s. al.
carbonate	$CdCO_3$	172.42	wh., trig.	4.258^{4°	d. <500		i.	i.	s. a., KCN, NH_4 salts; i. NH_3
chloride	$CdCl_2$	183.32	wh., cb.	$4.047\ \frac{25^\circ}{4}$	568	960	90^{0°	147^{100°	1.52^{15° al.; i. et., act.
chloride	$CdCl_2 \cdot 2½ H_2O$	228.36	col., mn., 1.6513	3.327	tr. 34		168^{20°	180^{100°	2.05^{15° m. al.
cyanide	$Cd(CN)_2$	164.45			d. >200		0.0247^{18°		s. a.; NH_4OH, KCN
hydroxide	$Cd(OH)_2$	146.43	wh., trig.	$4.79\ \frac{15^\circ}{4}$	d. 300		0.00026^{25°		s. a., NH_4 salts; i. alk.
nitrate	$Cd(NO_3)_2$	236.42	col.		350		109.7^{0°	$326^{59.5^\circ}$	v. s. a.
nitrate	$Cd(NO_3)_2 \cdot 4H_2O$*	308.48	col. nd.	$2.455\ \frac{17^\circ}{4}$	59.4	132	215^{0°		s. al., NH_3; i. HNO_3
oxide	CdO	128.41	brn., cb.	8.15			i.	i.	s. a., NH_4 salts; i. alk.
oxide	CdO	128.41	brn., amor, 2.49	6.95	d. 900–1000		i.	i.	s. a., NH_4 salts; i. alk.
oxide, sub-	Cd_2O	240.82	gn., amor.	$8.192\ \frac{18^\circ}{4}$	d.				d. a., alk.
Cadmium sulfate	$CdSO_4$	208.47	rhb.	$4.691\ \frac{24^\circ}{4}$	1000		76.5^{0°	60.8^{100°	i.act., NH_3
sulfate	$CdSO_4 \cdot H_2O$	226.49	mn.	3.786^{20°	tr. 108		s.	s.	
sulfate	$3CdSO_4 \cdot 8H_2O$*	769.54	col., mn., 1.565	3.09	tr. 41.5		114.2^{0°	127.6^{60°	i. al.

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
sulfate	$CdSO_4 \cdot 4H_2O$	280.53	col.	3.05			s.	s.	i. al.
sulfate	$CdSO_4 \cdot 7H_2O$	334.58	mn.	$2.48\ ^{20^\circ}_{4}$	tr. 4		350^{-5°		i. al.
sulfide (greenockite)	CdS	144.48	yel.-or., hex., 2.506	4.58	$1750^{100\text{atm.}}$	subl. in N_2, 980	0.000001	Colloidal	s. a.; v. s. NH_4OH
Calcium	Ca	40.08	silv. met., cb.	1.55^{20°	810	1200 ± 30	d.	d.	s, a.; sl. s. al.
acetate	$Ca(C_2H_2O_2)_2 \cdot H_2O$	176.18	wh. nd.		d.		52^{0°	45.5^{80°	sl. s. al.
aluminate	$Ca(AlO_2)_2$	158.04	col., rhb. or mn.	3.67^{20°	1600		d.		s. HCl
aluminum silicate (anorthite)	$CaO \cdot Al_2O_3 \cdot 2SiO_2$	278.21	tri., 1.5832	2.765	1551				
arsenate	$Ca_3(AsO_4)_2$	398.07	wh. pd.				0.013^{25°	i.	s. dil. a.
bromide	$CaBr_2$	199.89	delq. nd.	$3.353\ ^{25^\circ}_{4}$	760	1810	125^{0°	312^{105°	s. al., act.; sl. s. NH_3
carbonate (aragonite)	$CaCO_3$	100.09	col., rhb., 1.6809	2.93	d. 825		$0.0012^{20^\circ\dagger}$	0.002^{100°	s. a., NH_4Cl
carbonate (calcite)	$CaCO_3$	100.09	col., hex., 1.550	$2.711\ ^{25^\circ}_{4}$	$1339^{103\text{atm.}}$		0.0014^{25°	0.002^{100°	s. a., NH_4Cl
chloride (hydrophilite)	$CaCl_2$*	110.98	wh., delq., cb, 1.52	$2.152\ ^{15^\circ}_{4}$	772	>1600	59.5^{0°	347^{260°	s. al.
chloride	$CaCl_2 \cdot H_2O$	129.00	col., delq.				s.	s.	s. al.
chloride	$CaCl_2 \cdot 6H_2O$	219.08	col., trig., 1.417	1.68^{17°	29.92	$-6H_2O$, 200	v. s.	v. s.	s. al.
citrate	$Ca_3(C_6H_5O_7)_2 \cdot 4H_2O$	570.49	col. nd.		$-2H_2O$, 130	$-4H_2O$, 185	0.085^{18°	0.096^{26°	0.0065^{18° al.
cyanamide	$CaCN_2$	80.10	col., rhombohedral				s. d.	d.	

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
ferrocyanide	$Ca_2Fe(CN)_6 \cdot 12H_2O$	508.29	yel., tri., 1.5818	1.7			s.	$150^{90°}$	i. al.
fluoride (fluorite)	CaF_2	78.07	wh., cb., 1.4339	$3.180^{20°}$	1330		$0.0016^{18°}$	$0.0017^{26°}$	sl. s. a.
formate	$Ca(HCO_2)_2$	130.11	col., rhb.	2.015	d.		$16.1^{0°}$	18.4^{100}	i. al., et.
hydride	CaH_2	42.09	wh. cr. or pd.	1.7	d. 675		d.		d. a.; i. bz.
hydroxide	$Ca(OH)_2$	74.09	col., hex., 1.574	2.2	$-H_2O$, 580		$0.185^{0°}$	$0.077^{100°}$	s. NH_4Cl
hypochlorite	$Ca(ClO)_2 \cdot 4H_2O$	215.04	wh., feathery cr.		d.		delq.; d.	d.	d. a.
hypophosphate	$Ca_2P_2O_6 \cdot 2H_2O$	274.13	granular		$-2H_2O$, 200		i.		s. HCl, $H_4P_2O_6$
lactate	$Ca(C_3H_5O_3)_2 \cdot 5H_2O$	308.29	col., eff.		$-3H_2O$, 100		10.5	∞	∞h. al.; i. et.
magnesium carbonate (dolomite)	$CaO \cdot MgO \cdot 2CO_2$	184.40	trig., 1.68174	2.872	d. 730–760		$0.032^{18°}$		
magnesium silicate (diopside)	$CaO \cdot MgO \cdot 2SiO_2$	216.55	wh., mn.	3.3	1391		i.	i.	
nitrate (nitrocalcite)	$Ca(NO_3)_2$	164.09	col., cb.	2.36	561		$102^{0°}$	$376^{151°}$	$14^{15°}$ al.; s. amyl al., NH_3
nitrate	$Ca(NO_3)_2 \cdot 4H_2O$*	236.15	col., mn., 1.498	1.82	42.7		$266^{0°}$	v. s.	
nitride	Ca_3N_2	148.25	brn. cr.	$2.63^{17°}$	900		d.	d.	s. dil. a.; i. abs. al.
nitrite	$Ca(NO_2)_2 \cdot H_2O$	150.10	delq., hex.	$2.23^{34°}$			$77^{0°}$	$417^{90°}$	s. 90% al.
oxalate	CaC_2O_4	128.10	col., cb.	$2.2^{4°}$	d.		$0.00067^{13°}$	$0.0014^{95°}$	s. a.; i. ac.
oxalate	$CaC_2O_4 \cdot H_2O$	146.11	col.	2.2	$-H_2O$, 200		i.	i.	s. a.; i. ac

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
oxide	CaO	56.08	col., cb., 1.837	3.32	2570	2850	Forms $Ca(OH)_2$		s. a.; i. al.
peroxide	$CaO_2 \cdot 8H_2O$	216.20	pearly, tet.		$-8H_2O$, 100	expl. 275	sl. s.	d.	s. a. d.; i. al., et.
phosphate, monobasic	$CaH_4(PO_4)_2 \cdot H_2O$	252.07	wh., tri.	$2.220\ \frac{16^\circ}{4}$	$-H_2O$, 100	d. 200		d.	
phosphate, dibasic	$CaHPO_4 \cdot 2H_2O$	172.09	wh., mn. pl.	$2.306\ \frac{16^\circ}{4}$	d.		$0.02^{24.5^\circ}$	0.075^{100°	
phosphate, tribasic	$Ca_3(PO_4)_2$	310.18	wh., amor.	3.14	1670		0.0025	d.	s. a.; i. al., ac.
phosphate, meta-	$Ca(PO_3)_2$	198.02	wh., tet., 1.588	2.82	975		i.	i.	i. a.
phosphate, pyro-	$Ca_2P_2O_7$	254.10	col., biaxial, 1.60	3.09	1230		i.		s. a.
phosphate, pyro- (brushite)	$Ca_2P_2O_7 \cdot 5H_2O$	344.18	wh., mn.	2.25			sl. s.		s. a.; i. NH_4Cl
phosphide	Ca_3P_2	182.18	red cr.	2.51^{15°	>1600		d.		s. dil. a.; i. al., et.
silicate (α) (pseudowollastonite)	$CaSiO_3$	116.16	col., pseudo hex., 1.6150 or mn.	2.905	1540		0.0095^{17°		s. HCl
silicate (β) (wollastonite)	$CaSiO_3$	116.16	col., mn., 1.610	2.915	tr. 1190 to α				
sulfate (anhydrite)	$CaSO_4$	136.14	col., rhb., 1.576, or mn., 1.50	2.96	1450(mn.)	tr. 1193 to rhb.	0.298^{20°	0.1619^{100°	s. a., $Na_2S_2O_3$, NH_4 salts

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
sulfate (gypsum)	$CaSO_4 \cdot 2H_2O$	172.17	col., mn., 1.5226	2.32	$-1\frac{1}{2}H_2O$, 128	$-2H_2O$, 163	$0.223^{0°}$	$0.257^{50°}$	s. a., gly., $Na_2S_2O_3$, NH_4 salts
sulfhydrate	$Ca(SH)_2 \cdot 6H_2O$	214.32	col. pr.		d. 15		v. s.	v. s.	s. al.
sulfide (oldhamite)	CaS	72.14	col., cb.	$2.8^{15°}$			d.	d.	s. a.
sulfite	$CaSO_3 \cdot 2H_2O$	156.17	wh., cr., 1.595		$-2H_2O$, 100	d. 650	$0.0043^{18°}$	$0.0027^{90°}$	s. H_2SO_3
tartrate	$CaC_4H_4O_6 \cdot 4H_2O$	260.21	col., rhb.		d.		$0.037^{0°}$	$0.22^{85°}$	sl. s. al.
thiocyanate	$Ca(CNS)_2 \cdot 3H_2O$	210.29	wh., delq. cr.				s.	v. s.	v. s. al.
thiosulfate	$CaS_2O_3 \cdot 6H_2O$	260.30	col., tri., 1.56	$1.873^{16°}$	d.		$71.2^{9°}$	d.	i. al.
tungstate (scheelite)	$CaWO_4$	287.92	wh., tet., 1.9200	6.06			0.2		s. NH_4Cl; i. a.
Carbon, *cf.* table of organic compounds									
Carbon, amorphous	C	12.01	bk., amor.	1.8–2.1	>3500	4200	i.	i.	i. a., alk.
Carbon, diamond	C	12.01	col., cb., 2.4195	$3.51^{20°}$	>3500	4200	i.	i.	i. a., alk.
Carbon, graphite	C	12.01	bk., hex.	$2.26^{20°}$	>3500	4200	i.	i.	i. a., alk.
dioxide	CO_2	44.01	col. gas	lq. $1.101^{-87°}$; 1.53 (A); solid $1.56^{-79°}$	$-56.6^{5.2\text{atm.}}$	subl. −78.5	$179.7^{0°}$ cc	$90.1^{20°}$ cc	s. a., alk.
disulfide	CS_2	76.14	col. lq.	lq. 1.261 $\frac{22°}{20}$; 2.63 (A)	−108.6	46.3	$0.2^{0°}$	$0.014^{50°}$	s. al.; et.

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
monoxide	CO	28.01	col., poisonous, odorless gas	lq. 0.814 $\frac{-195^\circ}{4}$; 0.968 (A)	−207	−192	0.0044^{0°; 3.5^{0° cc	0.0018^{50° 2.32^{20° cc	s. al., Cu_2Cl_2
oxychloride (phosgene)	$COCl_2$	98.92	poisonous gas	1.392 $\frac{19^\circ}{4}$	−104	8.2^{756mm}	v. s. sl. d.	d.	s. ac., CCl_4, bs.; d.a.
oxysulfide	COS	60.08	gas	lq. 1.24^{-87°; 2.10 (A)	−138.2	-50.2^{760mm}	133^{0° cc	40.3^{30° cc	v. s. alk., al.
suboxide	C_3O_2	68.03	gas	lq. 1.114^{0°	−107	7^{761mm}	d.		s. et.
thionyl chloride	$CSCl_2$	114.98	yel.-red lq.	1.509^{15°		73.5			
Ceric hydroxide	$2CeO_2 \cdot 3H_2O$	398.28	yel., gelatinous						s. a.; sl. s. alk. carb.; i. alk
hydroxynitrate	$Ce(OH)(NO_3)_3 \cdot 3H_2O$	397.18	red, mn.				d.		
oxide	CeO_2	172.11	wh. or pa. yel., cb.	7.3	1950		i.	i.	s. H_2SO_4, HCl
sulfate	$Ce(SO_4)_2 \cdot 4H_2O$	404.30	yel., rhb.	3.91			s. d.		s. dil. H_2SO_4
Cerium	Ce	140.12	steel gray, cb. or hex.	6.9^{20° cb.; 6.7 hex.	645	1400	i.	Slowly oxidized	s. dil. a.; i. al.
Cerous sulfate	$Ce_2(SO_4)_3$	568.42	wh., mn. or rhb.	3.91			18.98^{0°	0.4^{100°	
sulfate	$Ce_2(SO_4)_3 \cdot 8H_2O$	712.54	tri.	2.886^{17°	$-8H_2O$, 630		25^{0°	7.6^{40°	
Cesium	Cs	132.91	silv. met., hex.	1.90^{20°	28.5	670	d.		s. a., al., NH_3
Chloric acid	$HClO_3 \cdot 7H_2O$	210.57	lq.	$1.282^{14.2^\circ}$	<−20	d. 40	v. s.		
Chlorine	Cl_2	70.91	rhb., or gn.-yel. gas	lq. $1.56^{-33.6^\circ}$; 2.49^{0° (A)	−101.6	−34.6	1.46^{0°; 310^{10° cc	0.57^{30°; 177^{30° cc	s. alk.
hydrate	$Cl_2 \cdot 8H_2O$	215.03	rhb.	1.23	d. 9.6		s.		s. alk.

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
Chloroplatinic acid	$H_2PtCl_6 \cdot 6H_2O$	517.90	red-brn., delq.	2.431	60		v. s.	v. s.	s. al., et.
Chlorostannic acid	$H_2SnCl_6 \cdot 6H_2O$	441.54	delq.	1.971^{28°	19.2		s.		
Chlorosulfonic acid	$HO \cdot SO_2 \cdot Cl$	116.52	col. lq.	1.787^{25°	−80	151.5^{765mm}	d.		d. al.; i. CS_2
Chromic acetate	$Cr_2(C_2H_3O_2)_6 \cdot 2H_2O$	494.29	gn.				s.		4.76^{15° m. al.
chloride	$CrCl_3$	158.36	pink, trig.	2.757^{15°		1200–1500 d.	i.§	sl. s.	i. a., act., CS_2
chloride	$CrCl_3 \cdot 6H_2O$*	266.45	vl. or gn., hex. pl.	$1.835^{\frac{25^\circ}{4}}$	subl. 83		v. s. d.		s. al.; i. et.
fluoride	CrF_3	108.99	gn., rhb.	3.8	>1000	d.	i.		sl. s. a.; i. al., NH_3
hydroxide	$Cr(OH)_3$	103.02	gn. or blue, gelatinous				i.		s. a., alk.; sl. s. NH_3
hydroxide	$Cr(OH)_3 \cdot 2H_2O$	139.05	gn.		$-2H_2O$, 100		i.	i.	s. a., alk.
nitrate	$Cr(NO_3)_3 \cdot 9H_2O$*	400.15	purple pr.		36.5	d. 100	s.	s.	s. a., alk., al., act.
nitrate	$Cr(NO_3)_3 \cdot 7½H_2O$	373.13	purple, mn.		100	d.	s.	s.	
oxide	Cr_2O_3	151.99	dark gn., hex.	5.21	1900		i.	i.	sl. s. a.
sulfate	$Cr_2(SO_4)_3$	392.18	rose pd.	3.012			i.†		i. a.
sulfate	$Cr_2(SO_4)_3 \cdot 5H_2O$	482.26	gn.				s.		s. al., H_2SO_4
sulfate	$Cr_2(SO_4)_3 \cdot 15H_2O$	662.41	vl.	1.867^{17°	100	$-10H_2O$, 100	s.	d. 67°	sl. s. al.
sulfate	$Cr_2(SO_4)_3 \cdot 18H_2O$	716.46	vl., cb., 1.564	1.7^{22°		$-12H_2O$, 100	120^{20°	d.	s. al.
sulfide	Cr_2S_3	200.19	brn.-bk. pd.	3.77^{19°	−S, 1350		i.	d.	s. h. HNO_3

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
Chromium	Cr	52.00	gray, met., cb.	7.1	1615	2200	i.	i.	s. HCl, dil. H_2SO_4; i. HNO_3
trioxide (chromic acid)	CrO_3	99.99	red, rhb.	2.70	197 d.		$164.9^{0°}$	$206.7^{100°}$	s. H_2SO_4, al., et.
Chromous chloride	$CrCl_2$	122.90	wh., delq.	2.75			v. s.	v. s.	sl. s. al.; i. et.
hydroxide	$Cr(OH)_2$	86.01	yel.-brn.		d.		d.		s. conc. a.
oxide	CrO	68.00	bk. pd.				i.	i.	i. dil. HNO_3
sulfate	$CrSO_4 \cdot 7H_2O$	274.17	blue				$12.35^{0°}$		sl. s. al.
sulfide (daubrelite)	CrS	84.06	bk. pd.	3.97	1550		i.		v. s. a.
Chromyl chloride	CrO_2Cl_2	154.90	dark red lq.	1.92	−96.5	117.6	d.		s. et.
Cobalt	Co	58.93	silv. met., cb.	$8.9^{20°}$	1480	2900	i.	i.	s. a.
carbonyl	$Co(CO)_4$	170.97	or. cr.	$1.73^{18°}$	51	d. 52	i.	d.	s. al., et., CS_2
sulfide, di-	CoS_2	123.06	bk., cb.	4.269			i.		s. HNO_3, aq. reg.
Cobaltic chloride	$CoCl_3$	165.29	red cr.	2.94	subl.		s.	s.	
chloride, dichro	$Co(NH_3)_3Cl_3 \cdot H_2O$	234.40					s.		s. a.; al.
chloride, luteo	$Co(NH_3)_6Cl_3$	267.48	or., mn.	$1.7016^{20°}$			$4.26^{0°}$	$12.74^{46.5°}$	i. al., NH_4OH
chloride, praseo	$Co(NH_3)_4Cl_3 \cdot H_2O$	251.43	gn., rhb.	1.847			v. s.		s. a.; i. al.
Cobaltic chloride, purpureo	$Co(NH_3)_5Cl_3$	250.44	rhb.	$1.819^{\frac{25°}{25}}$			$0.232^{0°}$	$1.031^{46.5°}$	i. al.

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
chloride, roseo	$Co(NH_3)_5Cl_3 \cdot H_2O$	268.46	brick red		d. 100		16.12^{0°	24.87^{16°	sl. s. HCl
hydroxide	$Co(OH)_3$	109.96	bk.		$-1\frac{1}{2}H_2O$, 100		i.	i.	s. a.; i. al.
oxide	Co_2O_3	165.86	bk.	5.18	d. 900		i.	i.	s. a.
sulfate	$Co_2(SO_4)_3$	406.05	blue cr.				d.		s. H_2SO_4
sulfide	Co_2S_3	214.06	bk. cr.	4.8			i.		d. a.
Cobalto-cobaltic oxide	Co_3O_4	240.80	bk., cb.	6.07			i.	i.	s. H_2SO_4; i. HCl, HNO_3
Cobaltous acetate	$Co(C_2H_3O_2)_2 \cdot 4H_2O$	249.08	red-vl., mn., 1.542	$1.7053^{18.7^\circ}$	$-4H_2O$, 140		s.	s.	s. a., al.
chloride	$CoCl_2$	129.84	blue cr.	3.356	subl.	1049	45^{7°	105^{96°	31 al.; 8.6 act.
chloride	$CoCl_2 \cdot 6H_2O$*	237.93	red, mn.	$1.924\ \frac{25^\circ}{25}$	86	$-6H_2O$, 110	116.5^{0°	177^{80°	v. s. et., act.
nitrate	$Co(NO_3)_2 \cdot 6H_2O$	291.03	red, mn., 1.4	$1.883\ \frac{25^\circ}{25}$	<100	d.	84.03^{0°(anh.)	334.9^{90° (anh.)	$100^{12.5^\circ}$ al.; s. act.; sl. s. NH_3
oxide	CoO	74.93	brn., cb.	5.68	d. 1800		i.	i.	s. a., NH_4OH; i. al.
sulfate	$CoSO_4$	155.00	red pd.	3.710^{25°	d. 880		25.6^{0°	83^{100°	1.04^{18° m. al.; i. NH_8
sulfate	$CoSO_4 \cdot H_2O$	173.01	red pd., mn.(?), 1.639	3.13	d.		s.	s.	
sulfate (biebeorite)	$CoSO_4 \cdot 7H_2O$*	281.10	red, mn., 1.483	$1.948\ \frac{25^\circ}{25}$	96.8	$-7H_2O$, 420	33^{80°	s.	2.5^{8° al.
sulfide (syeporite)	CoS	91.00	brn. nd.	5.45^{18°	>1100		0.00038^{18°		s. a., aq. reg.
Copper	Cu	63.55	yel.-red met., cb.	8.92^{20°	1083	2300	i.	i.	s. HNO_3, h. H_2SO_4

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
Cupric	$Cu(C_2H_3O_2)_2$	181.63		1.930 $\frac{20^\circ}{4}$			s.		
acetate	$Cu(C_2H_3O_2)_2 \cdot H_2O$	199.65	dark gn., mn.	1.882	115	240 d.	7.2	20	7 al.; s. et.; gly.
aceto-arsenite (Paris green)	$(CuOAs_2O_3)_3 \cdot Cu(C_2H_3O_2)_2$*	1013.79	gn.				i.		s. a., NH_4OH
ammonium chloride	$CuCl_2 \cdot 2NH_4Cl \cdot 2H_2O$	277.47	blue, tet., 1.670, 1.744	1.98	d. 110		33.8^{0°	99.3^{80°	s. a.
ammonium sulfate	$CuSO_4 \cdot 4NH_3 \cdot H_2O$	245.75	blue, rhb.	1.81	d. 150		$18.05^{21.5^\circ}$	d.	i. al.
carbonate, basic (azurite)	$2CuCO_3 \cdot Cu(OH)_2$	344.67	blue, mn., 1.758	3.88	d. 220		i.	d.	s. NH_4OH, h. aq. $NaHCO_3$
carbonate, basic (malachite)	$CuCO_3 \cdot Cu(OH)_2$	221.12	dark gn., mn., 1.875	3.9	d.		i.	d.	s. KCN; 0.03 aq. CO
chloride (eriochalcite)	$CuCl_2$	134.45	brn.-yel. pd.	3.054	498	Forms Cu_2Cl_2 993	70.7^{0°	107.9^{100°	53^{15° al.; 68^{15° m. al.
chloride	$CuCl_2 \cdot 2H_2O$	170.48	gn., rhb., 1.684	$2.39^{22.4^\circ}$	$-2H_2O$, 110	d.	110.4^{0°	192.4^{100°	s. al.; et., NH_4Cl
chromate, basic	$CuCrO_4 \cdot 2CuO \cdot 2H_2O$	374.66	yel.-brn.		$-2H_2O$, 260		i.		s. HNO_3, NH_4OH
cyanide	$Cu(CN)_2$	115.58	yel.-gn.		d.		i.		s. KCN, C_5H_5N
dichromate	$CuCr_2O_7 \cdot 2H_2O$	315.56	bk., tri.	2.286^{18°	$-2H_2O$, 100		sl. s.	d.	s. a.; NH_4OH
ferricyanide	$Cu_3[Fe(CN)_6]_2$	614.54	yel.-gn.				i.		s. NH_4OH; i. HCl
ferrocyanide	$Cu_2Fe(CN)_6 \cdot 7H_2O$	465.15	red-brn.				i.	i.	s. NH_4OH; i. a., NH_8

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
formate	$Cu(HCO_2)_2$	153.58	blue, mn.	1.831			12.5	d.	0.25 al.
hydroxide	$Cu(OH)_2$	97.56	blue, gelatinous	3.368	$-H_2O$		i.	d.	s. a., NH_4OH, KCN, al.
lactate	$Cu(C_3H_5O_3)_2 \cdot 2H_2O$	277.72	dark blue, mn.				16.7	$45^{100°}$	sl. s. al.
nitrate	$Cu(NO_3)_2 \cdot 3H_2O$*	241.60	blue, delq.	$2.047^{3.9°}$	114.5	$-HNO_3$, 170	$381^{40°}$	$666^{80°}$	$100^{12.5°}$ al.
nitrate	$Cu(NO_3)_2 \cdot 6H_2O$	295.65	blue, rhb.	2.074	$-3H_2O$, 26.4		$243.7^{0°}$	∞	s. al.
oxide (paramelaconite)	CuO	79.55	bk., cb.	6.40	d. 1026		i.	i.	s. a.; KCN, NH_4Cl
oxide (tenorite)	CuO	79.55	bk., tri., 2.63	6.45	d. 1026		i.	i.	s. a., KCN, NH_4Cl
oxychloride	$CuCl_2 \cdot 2CuO \cdot 4H_2O$	365.60	blue-gn.		$-3H_2O$, 140		i.		s. a.
phosphide	Cu_3P_2	252.59	bk.	6.35	d.		i.		s. HNO_3; i. HCl
sulfate (hydrocyanite)	$CuSO_4$	159.61	gn.-wh., rhb., 1.733	$3.606^{15°}$	d. >600	Forms CuO, 650	$14.3^{0°}$	$75.4^{100°}$	i. al.
sulfate (blue vitriol or chalcanthite)	$CuSO_4 \cdot 5H_2O$*	249.69	blue, tri., 1.5368	$2.286\ \frac{15.6°}{4}$	$-4H_2O$, 110	$-5H_2O$, 250	$24.3^{0°}$	$205^{100°}$	$1.1^{8°}$ al.
sulfide (covellite)	CuS	95.61	blue, hex. or mn., 1.45	4.6	tr. 103	d. 220	$0.000033^{18°}$		s. HNO_3, KCN
tartate	$CuC_4H_4O_6 \cdot 3H_2O$	265.66	1 gn. pd.		d.		$0.02^{15°}$	$0.14^{85°}$	s. a., KOH
Cuprous ammonium iodide	$CuI \cdot NH_4I \cdot H_2O$	353.41	rhb. pl.				d.		s. NH_4I
carbonate	Cu_2CO_3	187.10	yel.	4.4	d.		i.	i.	s. a., NH_4OH

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
chloride (nantokite)	Cu_2Cl_2	198.00	wh., cb., 1.973	3.53	422	1366	$1.52^{25°}$		s. HCl, NH_4OH, al.
cyanide	$Cu_2(CN)_2$	179.13	wh., mn.	2.9	474.5	d.	i.	i.	s. KCN, HCl, NH_4OH; sl. s. NH_3
ferricyanide	$Cu_3Fe(CN)_6$	402.59	brn.-red				i.		s. NH_4OH; i. HCl
ferrocyanide	$Cu_4Fe(CN)_6$	466.13	brn.-red				i.		s. NH_4OH; i. NH_4Cl
fluoride	Cu_2F_2	165.09	red cr.		908	subl. 1100	i.		s. HF, HCl, HNO_3; i. al.
hydroxide	CuOH	80.55	yel.	3.4	$-½H_2O$, 360		i.	i.	s. a., NH_4OH
oxide (cuprite)	Cu_2O	143.09	red, cb., 2.705	6.0	1235	$-O$, 1800	i.	i.	s. HCl, NH_4Cl, NH_4OH
Cuprous phosphide	Cu_6P_2	443.22	gray-bk.	6.4 to 6.8			i.		s. HNO_3; i. HCl
sulfide (chalcocite)	Cu_2S	159.16	bk., rhb.	5.6	1100		$0.0005^{18°}$		s. HNO_3, NH_4OH; i. act.
sulfide	Cu_2S	159.16	bk., cb.	5.80	1130		$0.0005^{18°}$		s. HNO_3, NH_4OH; i. act.
Cyanogen	C_2N_2	52.03	poisonous gas	lq. $0.866^{-17.2°}$; 1.806 (A)	−34.4	−20.5	$450^{20°}$ cc		$2300^{20°}$ cc al.; $500^{18°}$ cc et.
Cyanogen compounds, *cf.* table of organic compounds									
Ferric acetate, basic	$Fe(OH)(C_2H_3O_2)_2$	190.94	brn., amor.				i.		s. a.; al.

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
ammonium sulfate, *cf.* Alum									
chloride (molysite)	$FeCl_3$	162.20	bk.-brn., hex. delq.	$2.804^{11°}$	282	315	$74.4^{0°}$	$535.8^{100°}$	v. s. al.; et. +HCl
chloride	$FeCl_3 \cdot 6H_2O$*	270.30	red-yel., delq.		37	280	$246^{0°}$	∞	s. al., act., gly.
ferrocyanide (Prussian blue)	$Fe_4[Fe(CN)_6]_3$	859.23	dark blue		d.		i.	d.	s. HCl, conc. H_2SO_4; i. al., et.
hydroxide	$Fe(OH)_3$	106.87	red-brn.	3.4 to 3.9	$-1½H_2O$, 500		i.	i.	s. a.; i. al., et.
lactate	$Fe(C_3H_5O_3)_3$	323.06	brn., amor., delq.				v. s.	v. s.	i. et.
nitrate	$Fe(NO_3)_3 \cdot 6H_2O$	349.95	rhb., delq.	$1.684^{20°}$	35	d.	$150^{0°}$	∞	s. al., act.
oxide (hematite)	Fe_2O_3	159.69	red or bk., trig., 3.042	5.12	1560 d.		i.		s. HCl
sulfate	$Fe_2(SO_4)_3$	399.88	rhb., 1.814	$3.097^{18°}$	d. 480		sl. s.	d.	i. H_2SO_4, NH_3
sulfate (coquimbite)	$Fe_2(SO_4)_3 \cdot 9H_2O$	562.02	yel., trig.	2.1			440	d.	s. abs. al.
Ferroso-ferric chloride	$FeCl_2 \cdot 2FeCl_3 \cdot 18H_2O$	775.43	yel., delq.		d. 50		s.	s.	
ferricyanide (Prussian green)	$Fe_4Fe_3[Fe(CN)_6]_6$	1662.61	gn.		d. 180		i.		s. d. h. HCl
oxide (magnetite; magnetic iron oxide)	Fe_3O_4	231.53	bk., cb., 2.42	5.2	1538 d.		i.	i.	i. al.
oxide, hydrated	$Fe_3O_4 \cdot 4H_2O$	303.59	bk.		d.		i.	i.	s. a.

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
Ferrous ammonium sulfate	$FeSO_4 \cdot (NH_4)_2SO_4 \cdot 6H_2O$	392.14	blue-gn., mn., 1.4915	1.864	d.		$18^{0°}$	$100^{75°}$	i. al.
chloride (lawrencite)	$FeCl_2$	126.75	gn.-yel., hex., 1.567	2.7		delq.	$64.4^{10°}$	$105.7^{100°}$	100 al.; s. act.; i. et.
chloroplatinate	$FePtCl_6 \cdot 6H_2O$	571.73	yel., hex.	2.714			v. s.	v. s.	
ferricyanide (Turnbull's blue)	$Fe_3[Fe(CN)_6]_2$	591.43	dark blue		d.		i.		i. dil. a., al.
ferrocyanide	$Fe_2Fe(CN)_6$	323.64	blue-wh., amor.				i.		
formate	$Fe(HCO_2)_2 \cdot 2H_2O$	181.91			d.		sl. s.		
hydroxide	$Fe(OH)_2$	89.86	lt. gn.	3.4			0.00067		s. a., NH_4Cl
nitrate	$Fe(NO_3)_2 \cdot 6H_2O$	287.95	cr.		60.5		$200^{0°}$	$300^{25°}$	
oxide	FeO	71.84	bk.	5.7	1420		i.	i.	s. a.; i. alk.
phosphate (vivianite)	$Fe_3(PO_4)_2 \cdot 8H_2O$	501.60	blue, mn., 1.592, 1.603	2.58			i.	i.	s. a.; i. ac.
silicate	$FeSiO_3$	131.93	mn.	3.5	1550				
sulfate (siderotilate)	$FeSO_4 \cdot 5H_2O$	241.98	gn., tri., 1.536	2.2		$-5H_2O$, 300	s.	s.	i. al.
sulfate (copperas)	$FeSO_4 \cdot 7H_2O$*	278.01	blue-gn., mn.	$1.899^{14.8°}$	64	$-7H_2O$, 300	$32.8^{0°}$	$149^{50°}$	i. al.
sulfide	FeS	87.91	bk., hex.	4.84	1193	d.	$0.000616^{18°}$		s. a.; i. NH_3
cf. also under iron									
Fluoboric acid	HBF_4	87.81	col. lq.			130 d.	∞	∞	s. al.

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
Fluorine	F_2	38.00	gn.-yel. gas	lq. $1.51^{-187°}$; $1.31^{15°}$ (A)	−223	−187	d.		
Fluosilicic acid	H_2SiF_6	144.09					s.	s.	
Gadolinium	Gd	157.25							
Gallium bromide	$GaBr_3$	309.44	delq. cr.				s.	s.	
Glucinum *cf.* Beryllium									
Gold	Au	196.97	yel. met., cb.	$19.3^{20°}$	1063	2600	i.	i.	s. aq. reg., KCN; i. a.
Gold, colloidal	Au	196.97	blue to vl.				s.		s. aq. reg., KCN; i. a.
Gold salts *cf.* under Auric and Aurous									
Hafnium	Hf	178.49	hex.	12.1	>1700	>3200(?)			
Helium	He	4.00	col. gas	0.1368 (A)	<−272.2	−268.9	$0.97^{0°}$ cc	$1.08^{50°}$ cc	Absorbed by Pt
Hydrazine	N_2H_4	32.05	col. lq.	$1.011\ \frac{15°}{4}$	1.4	113.5	∞	∞	s. al.
formate	$N_2H_4{\cdot}2HCO_2H$	124.10	cb.		128		s.		
hydrate	$N_2H_4{\cdot}H_2O$	50.06	col.	$1.03^{21°}$	−40	$118.5^{739.5\ mm}$	∞	∞	∞ al.; i. et.
hydrochloride	$N_2H_4{\cdot}HCl$	68.51	yel. lq.				v. s.	v. s.	sl. s. al.
hydrochloride, di-	$N_2H_4{\cdot}2HCl$	104.97	wh., cb.	1.42	198		s.	v. s.	s. al.
nitrate	$N_2H_4{\cdot}HNO_3$	95.06	cr.		70.7	subl. 140	$174.9^{10°}$	v. s.	
nitrate, di-	$N_2H_4{\cdot}2HNO_3$	158.07	nd.		104	d.	v. s.		

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
sulfate	$N_2H_4 \cdot \frac{1}{2}H_2SO_4$	81.08	delq. pl.		85		v. s.		i. al.
sulfate	$N_2H_4 \cdot H_2SO_4$	130.12	rhb.	1.378	254		3.055^{22°	27.65^{60°	v. sl. s. abs. al.
Hydrazoic acid (azoimide)	HN_3	43.03	col. lq.		−80	37	∞	∞	∞ al.
Hydriodic acid	HI	127.91	col. gas	4.4^{0° (A)	−50.8	−35.5	$42{,}500^{10^\circ}$ cc	v. s.	s. al.
Hydriodic acid	$HI \cdot H_2O$	145.93	col. lq.	1.7^{15°		127^{774mm}	∞		∞ al.
Hydriodic acid	$HI \cdot 2H_2O$	163.94	col. lq.		−43		∞		s. al.
Hydriodic acid	$HI \cdot 3H_2O$	181.96	col. lq.		−48		∞		s. al.
Hydriodic acid	$HI \cdot 4H_2O$	199.97	col. lq.		−36.5		∞		s. al.
Hydrobromic acid	HBr	80.91	col. gas; 1.325 (lq.)	2.71^{0° (A)	−86	−67	221^{0°	130^{100°	s. al.
Hydrobromic acid	$HBr \cdot H_2O$	98.93	col. lq.	1.78					Stable at −15.5° and 1 atm., and at −11.3° and 2.5 atm.
Hydrobromic acid	HBr (47.8% in H_2O)	80.91	col. lq.	1.486		126	∞		s. al.
Hydrobromic acid	$HBr \cdot 2H_2O$	118.96	wh. cr.	2.11^{-15°	−11		s.	s.	
Hydrochloric acid	HCl†	36.46	col. gas; 1.256 (lq.)	1.268^{0° (A)	−111	−85	82.3^{0°	56.1^{60°	s. al., et.
Hydrochloric acid	HCl (45.2% in H_2O)	36.46	col. lq.	1.48	−15.35		∞		s. al.
Hydrochloric acid	$HCl \cdot 2H_2O$	72.49	col. lq.	$1.46^{\frac{-18.3^\circ}{4}}$	0	d.	∞		s. al.

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
Hydrochloric acid	$HCl{\cdot}3H_2O$	90.51	col. lq.		−24.4	d.	∞		s. al.
Hydrocyanic acid (prussic acid)	HCN	27.03	poisonous gas or col. lq., 1.254	$0.697^{18°}$	−14	26	∞		∞ al., et.
Hydrofluoric acid	HF	20.01	gas or col. lq.	$0.988^{13.6°}$	−83	19.4	∞ 0° to 19.4°	v. s.	
Hydrofluoric acid	HF (35.35% in H_2O)	20.01	col. lq.	1.15	−35	120	v. s.		
Hydrogen	H_2	2.02	col. gas or cb.	lq. $0.0709^{-252.7°}$ 0.06948 (A)	−259.1	−252.7	$2.1^{0°}$ cc	$0.85^{80°}$ cc	sl. s. Fe, Pd, Pt
peroxide	H_2O_2‡	34.01	col. lq., 1.333	1.438 $\frac{20°}{4}$	−0.89	151.4^{760mm}	∞		s. a., et.; i. petr. et
selenide	H_2Se	80.98	col. gas	$2.12^{-42°}$	−64	−42	$377^{4°}$ cc	$270^{22.5°}$ cc	s. CS_2, $COCl_2$
sulfide	H_2S	34.08	col. gas	1.1895 (A)	−82.9	−59.6	$437^{0°}$ cc	$186^{40°}$ cc	$9.54^{15°}$ cc al.; s. CS_2
Hydroxylamine	NH_2OH	33.03	rhb., delq.	$1.35^{18°}$	34	56.5^{22mm}	s.	d.	s. a., al.
hydrochloride	$NH_2OH{\cdot}HCl$	69.49	col., mn.	$1.67^{17°}$	151	d.	$83.3^{17°}$	v. s.	s. al.; i. et.
nitrate	$NH_2OH{\cdot}HNO_3$	96.04	col. cr.		48	d. <100	v. s.	d.	v. s. abs. al.
sulfate	$NH_2OH{\cdot}½H_2SO_4$	82.07	col., mn.		170 d.		$32.9^{0°}$	$68.5^{90°}$	v. sl. s. al.; i. et., abs. al.
Hypobromous acid	HBrO	96.91	yel.			40^{50mm}	s.	d.	
Indium	In	114.82	soft, tet. met.	$7.3^{20°}$	155	1450	i.	i.	s. a.
Iodic acid	HIO_3	175.91	col., rhb.	$4.629^{0°}$	110 d.		$286^{0°}$	$576^{101°}$	v. s. 87% al.; i. abs. al. et., chl.

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
Iodine	I_2	253.81	blue-bk., rhb.	4.93^{20°	113.5	184.35	0.0162^{0°	0.09566^{60°	s. al., KI, et.
oxide, penta-	I_2O_5	333.81	wh., trimetric	$4.799\ \frac{25^\circ}{4}$	d. 300		187.4^{12°		i. abs. al., et., chl.
Iodoplatinic acid	$H_2PtI_6 \cdot 9H_2O$	1120.66	brn., delq. mn.				s. d.		
Iridium	Ir	192.22	wh. met., cb.	22.4^{20°	2350	>4800	i.	i.	sl. s. aq. reg., aq. Cl_2
Iron, cast†	Fe	55.85	gray	7.03	1275		i.	i.	s. a.; i. alk.
pure	Fe	55.85	silv. met., cb.	7.86^{20°	1535	3000	i.	i.	s. a.; i. alk.
steel	Fe	55.85	silv. gray	7.6 to 7.8	1375		i.	i.	s. a.; i. alk.
white pig	Fe	55.85	gray	7.6 to 7.8	1075		i.	i.	s. a.; i. alk.
wrought	Fe	55.85	gray	7.86	1505		i.	i.	s. a.; i. alk.
carbide (cementite)	Fe_3C	179.55	pseudo hex.	7.4	1837		i.	i.	s. a.
carbonyl	$Fe(CO)_5$	195.90	pa. yel. lq.	1.457^{21°	−21	102.5^{760mm}	i.		s. al., H_2SO_4, alk.
nitride	Fe_2N	125.70	gray	6.35	d. >560		d.		s. HCl, H_2SO_4
silicide	FeSi	83.93	yel.-gray, oct.	$6.1\ \frac{20^\circ}{4}$			i.	i.	i. aq. reg.
sulfide, di- (marcasite)	FeS_2	119.98	yel., rhb.	4.87	tr. 450	d.	0.00049		i. dil. a.
sulfide, di- (pyrite)	FeS_2	119.98	yel., cb.	5.0	1171	d.	0.0005		i. dil. a.
sulfide (pyrrhotite)	Fe_7S_8	647.44	hex.	$4.6\ \frac{20^\circ}{4}$	d. >700		i.		

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
Cf. also under ferric and ferrous									
Krypton	Kr	83.80	col. gas	2.818 (A)	−169	−151.8	11.05^{0° cc	3.57^{60° cc	sl. s. al., bz.
Lanthanum	La	138.91	lead gray	6.15^{20°	826	1800	d.		s. a.
Lead	Pb	207.20	silv. met., cb.	$11.337\ \frac{20^\circ}{20}$	327.5	1620	i.	i.	s. HNO_3; i. c. HCl, H_2SO_4
acetate	$Pb(C_2H_3O_2)_2$	325.29	wh. cr.	$3.251\ \frac{20^\circ}{4}$	280		19.7^{0°	221^{50°	s. gly.; v. sl. s. al.
acetate (sugar of lead)	$Pb(C_2H_3O_2)_2{\cdot}3H_2O^\dagger$	379.33	wh., mn.	2.55	$-3H_2O$, 75		45.64^{15°	200^{100°	s. gly.; sl. s. al.
acetate	$Pb(C_2H_3O_2)_2{\cdot}10H_2O$	505.44	wh., rhb.	1.689	22		s.	s.	
acetate, basic	$Pb_2(C_2H_3O_2)_3OH$	608.54	wh.				v. s.		sl. s. al.
acetate, basic	$Pb(C_2H_3O_2)_2{\cdot}Pb(OH)_2{\cdot}H_2O$	584.52	wh. nd.				v. s.		s. al.
acetate, basic	$Pb(C_2H_3O_2)_2{\cdot}2Pb(OH)_2$	807.72	wh. nd.				5.55	18.2	s. al.
arsenate, monobasic	$PbH_4(AsO_4)_2$	489.07	tri., 1.82	4.46^{15°	d. 140		d.		s. HNO_3
arsenate, dibasic (schultenite)	$PbHAsO_4$	347.13	wh., mn., 1.9097	5.94	d. >200	$-H_2O$, 280	i.	sl. s.	s. HNO_3, NaOH
arsenate, meta-	$Pb(AsO_3)_2$	453.04	hex.	6.42^{15°			d.		s. HNO_3
arsenate, pyro-	$Pb_2As_2O_7$	676.24	rhb., 2.03	$6.85\ \frac{15^\circ}{15}$	802		i.	d.	s. HCl, HNO_3; i. sc.

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
azide	PbN_6	291.24	col. nd.		expl. 350		i.	$0.05^{100°}$	v. s. ac.; i. NH_4OH
bromide	$PbBr_2$	367.01	col., rhb.	6.66	373	918	$0.4554^{0°}$	$4.75^{100°}$	s. a., KBr.; sl. s. NH_3; i. al.
carbonate (cerussite)	$PbCO_3$	267.21	wh., rhb., 2.0763	6.6	d. 315		$0.00011^{20°}$	d.	s. a., alk.; i. NH_3, al.
carbonate, basic	$2PbCO_3 \cdot Pb(OH)_2$[†]	775.63	wh., hex.	6.14	d. 400		i.	i.	s. ac.; sl. s. aq. CO_2
(hydrocerussite; white lead)									
chloride (cotunnite)	$PbCl_2$	278.11	wh., rhb., 2.2172	5.80	501	954^{760mm}	$0.673^{0°}$	$3.34^{100°}$	sl. s. dil. HCl, NH_3, i. al.
chromate (crocoite)	$PbCrO_4$	323.19	yel., mn., 2.42	6.12	844	d.	$0.0000072^{0°}$	i.	s. a., alk.; i. NH_3, ac.
chromate, basic	$PbCrO_4 \cdot PbO$	546.39	or.-yel. nd.				i.	i.	s. a., alk.
formate	$Pb(HCO_2)_2$	297.23	wh., rhb.	4.56	d. 190		$1.6^{16°}$	$18^{100°}$ d.	i. al.
hydroxide	$3PbO \cdot H_2O$	687.61	cb.	7.592	$-H_2O$, 130		0.014		s. a., alk.
nitrate	$Pb(NO_3)_2$	331.21	col., cb. or mn., 1.7815	4.53	d. 470		$38.8^{0°}$	$138.8^{100°}$	$8.8^{22°}$ al.
oxide, sub-	Pb_2O	430.40	bk., amor.	8.34	d. red heat		i.	i.	s. a., alk.
oxide, mono- (litharge)	PbO	223.20	yel., tet.	9.53	888		$0.0068^{18°}$		s. alk., PbAc, NH_4Cl, $CaCl_2$
oxide, mono (massicotite)	PbO	223.20	yel., rhb., 2.61	8.0					

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
oxide, mono-	PbO	223.20	amor.	9.2 to 9.5			i.	i.	s. alk., PbAc, NH_4Cl, $CaCl_2$
oxide, red (minium)	Pb_3O_4	685.60	red, amor.	9.1	d. 500		i.	i.	s. ac., h. HCl
oxide, sesqui-	Pb_2O_3	462.40	red-yel., amor.		d. 360		i.	i.	s. a., alk.
oxide, di- (plattnerite)	PbO_2	239.20	brn., tet., 2.229	9.375	d. 290		i.	i.	s. ac., h. alk.; i. al.
silicate	$PbSiO_3$	283.28	col., mn., 1.961	6.49	766		i.		s. a.
sulfate (anglesite)	$PbSO_4$	303.26	wh., mn. or rhb., 1.8823	6.2	1170		$0.0028^{0°}$	$0.0056^{40°}$	s. conc. a., NH_4 salts; i. al.
sulfate, acid	$Pb(HSO_4)_2 \cdot H_2O$	419.36	cr.		d.		$0.0001^{18°}$		sl. s. H_2SO_4
sulfate, basic (lanarkite)	$PbSO_4 \cdot PbO$	526.46	col., mn.	6.92	977		$0.0044^{18°}$		sl. s. H_2SO_4
sulfide (galena)	PbS	239.27	lead gray, cb., 3.912	7.5	1120		$0.00009^{18°}$	i.	s. a.; i. alk.
thiocyanate	$Pb(CNS)_2$	323.36	col., mn.	3.82	d. 190		$0.05^{20°}$	s.	s. KCNS, HNO_3
Lithium	Li	6.94	silv. met. cb.	$0.53^{20°}$	186	1336 ± 5	d.	d.	s. a., NH_3
benzoate	$LiC_7H_5O_2$	128.05	wh. leaflets				$33^{25°}$	$40^{100°}$	$7.7^{25°}$, $10^{78°}$ al.
bromide	LiBr	86.85	wh., delq., cb., 1.784	$3.464^{\frac{25°}{4}}$	547	1265	$143^{0°}$ ($2H_2O$)	$266^{100°}$ ($1H_2O$)	s. al., act.
bromide	$LiBr \cdot 2H_2O$	122.88	wh. pr.		44		$246^{20°}$		s. al.
carbonate	Li_2CO_3	73.89	col., mn., 1.567	$2.11^{0°}$	618	d.	$1.54^{0°}$	$0.72^{100°}$	s. dil. a.; i. al., act., NH_3
chloride	LiCl	42.39	wh., delq., cb., 1.662	$2.068^{\frac{25°}{4}}$	614	1360	$67^{0°}$	$127.5^{100°}$	$2.48^{15°}$ al.; s. et.

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
citrate	$Li_3C_6H_5O_7 \cdot 4H_2O$	281.98	wh. cr.		d.		$61.2^{15°}$	$66.7^{100°}$	sl. s. al., et.
fluoride	LiF	25.94	wh., cb., 1.3915	$2.295^{21.5°}$	870	1670	$0.27^{18°}$	$0.135^{35°}$	s. HF; i. act.
formate	$LiHCO_2 \cdot H_2O$	69.97	col., rhb.	1.46	$-H_2O$, 94		$49.2^{0°}$	$346.6^{104°}$	sl. s. al., et.
hydride	LiH	7.95	wh., cb.	0.820	680		d.		i. et.
hydroxide	LiOH	23.95	wh. cr.	2.54	445	925±	$12.7^{0°}$	$17.5^{100°}$	sl. s. al.
hydroxide	$LiOH \cdot H_2O$	41.96	col., mn.	1.83		d.	$22.3^{10°}$	$26.8^{80°}$	sl. s. al.
nitrate	$LiNO_3$	68.95	col., trig., 1.735	2.38	261		$53.4^{0°}$	$194^{70°}$	s. al., NH_3
nitrate	$LiNO_3 \cdot 3H_2O$	122.99	col.		29.88		v. s.	∞	
oxide	Li_2O	29.88	col., 1.644	$2.013\ \frac{25°}{4}$		subl. <1000	forms LiOH		
phosphate, monobasic	LiH_2PO_4	103.93	col.	2.461	>100				
phosphate, tribasic	Li_3PO_4	115.79	wh., rhb.	$2.537^{17.5°}$	837		$0.034^{18°}$	v. sl. s.	s. a., NH_4Cl; i. act.
phosphate, tribasic	$Li_3PO_4 \cdot 12H_2O$	331.98	wh., trig.	1.645	100		v. sl. s.	v. sl. s.	
salicylate	$LiC_7H_5O_3$	144.05	col.		d.		$128^{26°}$		v. s. al.
sulfate	Li_2SO_4	109.94	col., mn., 1.465	2.22	860		$35.34^{0°}$	$29.9^{100°}$	i. act., 80% al.
sulfate	$Li_2SO_4 \cdot H_2O^{\dagger}$	127.96	col., mn., 1.477	2.06	$-H_2O$, 130		$43.6^{0°}$	$35^{100°}$	i. 80% al.
sulfate, acid	$LiHSO_4$	104.01	pr.	$2.123^{13°}$	170.5		d.		
Lutecium	Lu	174.97							

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
Magnesium	Mg	24.31	silv. met., hex.	$1.74^{20°}$	651	1110	i.	sl. s. d.	s. a., NH_4 salts
acetate	$Mg(C_2H_3O_2)_2$	142.39	wh.	1.42	323		v. s.	v. s.	$5.25^{15°}$ m. al.
acetate	$Mg(C_2H_3O_2)_2{\cdot}4H_2O$ †	214.45	wh., mn. pr., 1.491	1.454	80		v. s.	v. s.	v. s. al.
aluminate (spinel)	$MgO{\cdot}Al_2O_3$	142.26	col. cb., 1.718–23	3.6	2135		i.		v. sl. s. dil. HCl; i. dil. HNO_3
ammonium chloride	$MgCl_2{\cdot}NH_4Cl{\cdot}6H_2O$	256.79	wh., rhb., delq.	1.456	$-4H_2O$, 195		16.7	s.	
ammonium phosphate (struvite)	$MgNH_4PO_4{\cdot}6H_2O$	245.41	col., rhb., 1.496	1.715	d. 100		$0.0231^{0°}$	$0.0195^{80°}$	s. a.; i. al.
ammonium sulfate (boussingaultite)	$MgSO_4{\cdot}(NH_4)_2SO_4{\cdot}6H_2O$	360.60	col., mn.	1.72	>120		$16.86^{0°}$	$130^{100°}$	
benzoate	$Mg(C_7H_5O_2)_2{\cdot}3H_2O$	320.58	wh. pd.		$-3H_2O$, 110		$4.5^{25°}$ (anh.)	s.	s. act.
carbonate (magnesite)	$MgCO_3$	84.31	wh., trig. 1.700	3.037	d. 350		0.0106		s. a., aq. CO_2; i. act., NH_3
carbonate (nesquehonite)	$MgCO_3{\cdot}3H_2O$	138.36	col., rhb., 1.501	1.852	$-H_2O$, 100		$0.1518^{19°}$	d.	s. a., aq. CO_2
carbonate, basic (hydromagnesite)	$3MgCO_3{\cdot}Mg(OH)_2{\cdot}3H_2O$	365.31	wh., rhb., 1.530	2.16	d.		0.04	0.011	s. a., NH_4 salts; i. al.
Magnesium chloride (chloromagnesite)	$MgCl_2$	95.21	col., hex., 1.675	$2.325^{25°}$	712	1412	$52.8^{0°}$	$73^{100°}$	50 al.

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
chloride (bischofite)	$MgCl_2 \cdot 6H_2O$†	203.30	wh., delq., mn., 1.507	1.56	118 d.	d.	$281^{0°}$	$918^{100°}$	50 al.
hydroxide (brucite)	$Mg(OH)_2$	58.32	wh., trig., 1.5617	2.4	d.		$0.0009^{18°}$		s. NH_4 salts, dil. a.
nitride	Mg_3N_2	100.93	gn.-yel., amor.		d.		i.	d.	s. a.; i. al.
oxide (magnesia; periclase)	MgO	40.30	col., cb., 1.7364	3.65	2800	3600	0.00062		s. a., NH_4 salts; i. al.
perchlorate	$Mg(ClO_4)_2$†	223.21	wh., delq.	$2.60^{25°}$	d.		$99.6^{25°}$	v. s.	24^{25} al., $51.8^{25°}$ m. al.; 0.29 et.
peroxide	MgO_2	56.30	wh. pd.		expl. 275		i.	i.	s. a.
phosphate, pyro-	$Mg_2P_2O_7$	222.55	col., mn., 1.604	$2.598^{22°}$	1383		i.	i.	s. a.; i. alk.
phosphate, pyro-	$Mg_2P_2O_7 \cdot 3H_2O$	276.60	wh., amor.	2.56	$-3H_2O$, 100		i.	sl. s.	s. a.; i. al.
potassium chloride (carnallite)	$MgCl_2 \cdot KCl \cdot 6H_2O$	277.85	delq., rhb., 1.475	$1.60^{19.4°}_{4}$	265		$64.5^{19°}$ d.	d.	d. al.
potassium sulfate (picromerite)	$MgSO_4 \cdot K_2SO_4 \cdot 6H_2O$	402.72	mn., 1.4629	2.15	d. 72		$19.26^{0°}$	$81.7^{75°}$	
silicofluoride	$MgSiF_6 \cdot 6H_2O$	274.47	col., trig., 1.3439	$1.788^{17.5°}_{4}$	d.		$64.8^{17.5°}$	s.	d. HF
sodium chloride	$MgCl_2 \cdot NaCl \cdot H_2O$	171.67	col.				s.	s.	
sulfate	$MgSO_4$	120.37	col.	2.66	1185		$26.9^{0°}$	$68.3^{100°}$	s. al.
sulfate (epsom salt; epsomite)	$MgSO_4 \cdot 7H_2O$*	246.47	col., rhb., 1.4554	1.68	70 d.		$72.4^{0°}$	$178^{40°}$	s. al.

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
Manganese	Mn	54.94	gray-pink met.	7.2^{20°	1260	1900	d.		s. dil. a.
acetate	$Mn(C_2H_3O_2)_2$	173.03		$1.74\ \frac{20^\circ}{4}$			s.	s.	
acetate	$Mn(C_2H_3O_2)_2 \cdot 4H_2O$ *	245.09	pa. pink, mn.	1.589			s.	64.5^{50°	s. al., m. al.
carbonate (rhodocrosite)	$MnCO_3$	114.95	rose, trig., 1.817	3.125	d.		0.0065^{25°		s. aq. CO_2, dil. a.; l. NH_3, al.
chloride (scacchite)	$MnCl_2$	125.84	rose, delq., cb.	$2.977\ \frac{25^\circ}{4}$	650	1190	63.4^{0°	123.8^{100°	s. al.; i. et., NH_3
chloride	$MnCl_2 \cdot 4H_2O$*	197.91	rose red, delq., mn. 1.575	2.01	58.0	$-H_2O$, 106; $-4H_2O$, 200	151^{8°	∞	s. al.; i. et.
chloride, per-	$MnCl_4$	196.75	gn.				s.	s.	s. al., et.
hydroxide (ous) (pyrochroite)	$Mn(OH)_2$	88.95	wh., trig.	3.258^{18°	d.		0.002^{20°	i.	s. a., NH_4 salts; i. alk.
hydroxide (ic) (manganite)	$Mn_2O_3 \cdot H_2O$	175.89	brn., rhb., 2.24	3.258	d.		i.	i.	s. h. H_2SO_4
nitrate	$Mn(NO_3)_2 \cdot 6H_2O$	287.04	rose red, mn.	1.82^{21°	25.8	129.5	426^{0°	∞	v. s. al.
oxide (ous) (manganosite)	MnO	70.94	gray-gn., cb., 2.16	5.18	1650		i.	i.	s. a., NH_4Cl
oxide (ic)	Mn_2O_3	157.87	brn.-bk., cb.	4.81	−0, 1080		i.	i.	s. a.; i. act.
oxide, di- (pyrolusite; polianite)	MnO_2*	86.94	bk., rhb.	5.026	−0, >230		i.	i.	s. HCl; i. HNO_3, act.

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
sulfate (ous)	$MnSO_4$	151.00	red-wh.	3.235	700	d. 850	$53^{0°}$	$73^{50°}$	s. al.; i. et.
sulfate (ous) (szmikite)	$MnSO_4·H_2O$	169.02	pa. pink, mn., 1.595	2.87	Stable 57 to 117		$98.47^{48°}$	$79.77^{100°}$	
sulfate (ous)	$MnSO_4·2H_2O$	187.03		$2.526^{15°}$	Stable 40 to 57		$85.27^{35°}$	$106.8^{55°}$	
sulfate (ous)	$MnSO_4·3H_2O$	205.05		$2.356^{15°}$	Stable 30 to 40		$74.22^{5°}$	$99.31^{57°}$	
sulfate (ous)	$MnSO_4·4H_2O$*	223.06	pink, rhb. or mn., 1.518	2.107	Stable 18 to 30	$-4H_2O$, 450	$136^{16°}$	$169^{50°}$	i. al.
sulfate (ous)	$MnSO_4·5H_2O$	241.08	pink, tri., 1.508	$2.103^{15°}$	Stable 8 to 18		$142^{5°}$	$200^{35°}$	
sulfate (ous)	$MnSO_4·6H_2O$	259.09			Stable −5 to +8		$204^{0°}$	$247^{9°}$	
sulfate (ous)	$MnSO_4·7H_2O$	277.11	pink, mn. or rhb.	2.092	Stable −10 to −5; 19 d.	$-7H_2O$, 280	$176^{0°}$	$251^{14°}$	
sulfate (ic)	$Mn_2(SO_4)_3$	398.06	gn., delq. cr.	3.24	d. 160		v. s.	d.	s. HCl, dil. H_2SO_4; l.
Mercuric acetate	$Hg(C_2H_3O_2)_2$	318.68	wh. pl.	3.270	d.		$25^{10°}$	$100^{100°}$	s. al. sl. d.
bromide	$HgBr_2$	360.40	wh., rhb.	6.053	237	322	$0.5^{20°}$	$25^{100°}$	$25.2^{0°}$ al.; v. sl. s. et.
carbonate, basic	$HgCO_3·2HgO$	693.78	brn.-red				i.		s. aq. CO_2, NH_4Cl
chloride (corrosive sublimate)	$HgCl_2$	271.50	wh., rhb., 1.859	5.44	277	304	$3.6^{0°}$	$61.3^{100°}$	$33^{25°}$ 99% al.; 33 et.
fulminate	$Hg(CNO)_2$	284.62	cb.	4.42	expl.		sl. s.		s. NH_4OH, al.
hydroxide	$Hg(OH)_2$	234.60			$-H_2O$, 175		i.	i.	s. a.
oxide (montroydite)	HgO	216.59	yel. or red, rhb., 2.5	11.14	d. 100		$0.0052^{25°}$	$0.041^{100°}$	s. a.; i. al.

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
oxychloride (kleinite)	$HgCl_2 \cdot 3HgO$	921.26	yel., hex.	7.93	d. 260		i.	d.	s. HCl
silicofluoride, basic	$HgSiF_6 \cdot HgO \cdot 3H_2O$	613.30	yel. nd.				d.		s. a.
sulfate	$HgSO_4$	296.65	wh., rhb.	6.47	d.		d.		s. a.; i. al., act., NH_8
sulfate, basic (turpeth)	$HgSO_4 \cdot 2HgO$	729.83	yel., tet.	6.44			0.005	$0.167^{100°}$	s. a.; i. al.
Mercurous acetate	$HgC_2H_3O_2$	259.63	wh. sc.		d.		$0.75^{13°}$	d.	s. H_2SO_4, HNO_3; i. al.
bromide	HgBr	280.49	wh., tet.	7.307	subl. 345		7×10^{-9}	i.	s. a.; i. al., act.
carbonate	Hg_2CO_3	461.19	yel. pd.		d. 130		i.	d.	s. NH_4Cl
chloride (calomel)	HgCl	236.04	wh., tet., 1.9733	7.150	302	383.7	$0.0014^{0°}$	$0.0007^{43°}$	s. aq. reg., $Hg(NO_3)_2$; sl. s. HNO_3, HCl; i. al., etc.
iodide	HgI	327.49	yel., tet.	7.70	290 d.	subl. 140; 310d.	2×10^{-8}	v. sl. s.	s. KI; i. al.
nitrate	$HgNO_3 \cdot H_2O$	280.61	wh. mn.	$4.785^{3.9°}$	70	expl.	v. s.	d.	s. HNO_3; i. al., et.
Mercurous oxide	Hg_2O	417.18	bk.	9.8	d. 100		i.	0.0007	s. h. ac.; i. alk., dil. HCl, NH_3
sulfate	Hg_2SO_4	497.24	wh., mn.	7.56	d.		$0.055^{16.5°}$	$0.092^{100°}$	s. H_2SO_4, HNO_3
Mercury†	Hg	200.59	silv. lq. or hex.(?)	$13.546^{20°}$	−38.87	356.9	i.	i.	s. HNO_3; i. HCl
Molybdenum	Mo	95.94	gray, cb.	10.2	2620 ± 10	3700	i.	i.	s. h. conc. H_2SO_4; i. HCl, HF, NH_3, dil. H_2SO_4, Hg

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
chloride, di-	$MoCl_2$	166.85	yel., amor.	3.714 $\frac{25^\circ}{4}$	d.		i.	i.	s. HCl, H_2SO_4, NH_4OH, al., et.
chloride, tri-	$MoCl_3$	202.30	dark red pd.	3.578 $\frac{25^\circ}{4}$	d.		i.	d.	s. HNO_3, H_2SO_4; v. sl. s. al., et.
chloride, tetra-	$MoCl_4$	237.75	brn., delq.		volt.	d.	s.	d.	s. HNO_3, H_2SO_4; sl. s. al., et.
chloride, penta-	$MoCl_5$	273.21	bk. cr.	2.928 $\frac{25^\circ}{4}$	194	268	s.	d.	s. HNO_3, H_2SO_4; i. abs. al., et.
oxide, tri- (molybdite)	MoO_3	143.94	col., rhb.	$4.50^{19.5^\circ}$	795	subl.	0.107^{18°	2.106^{79°	s. a., NH_4OH
sulfide, di- (molybdenite)	MoS_2	160.07	bk., hex., 4.7	4.801^{14°	1185		i.	i.	s. H_2SO_4, aq. reg.
sulfide, tri-	MoS_3	192.14	red-brn.		d.		sl. s.	s.	s. alk. sulfides
sulfide, tetra-	MoS_4	224.20	brn. pd.		d.		i.	i.	s. alk. sulfides; i. NH_3
Molybdic acid	H_2MoO_4	161.95	yel-wh., hex.		d. 115		v. sl. s.	sl. s.	s. NH_4OH, H_2SO_4; i. NH
Molybdic acid	$H_2MoO_4 \cdot H_2O$	161.95	yel., mn.	3.124^{15°	$-H_2O$, 70	$-2H_2O$, 200	0.133^{18°	2.13^{70°	s. a., NH_4OH, NH_4, salts
Neodymium	Nd	144.24	yellowish	6.9^{20°	840		d.		
Neon	Ne	20.18	col. gas	lq. $1.204^{-245.9^\circ}$ 0.674 (A)	−248.67	−245.9	2.6^{0° cc	1.1^{45° cc	s. lq. O_2, al., act., bz.
Neptunium	Np^{239}	239.05			Produced by Neutron bombardment of U^{238}	Produced by Neutron bombardment of U^{238}	Produced by Neutron bombardment of U^{238}		

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
Nickel	Ni	58.69	silv. met., cb.	8.90^{20}	1452	2900	i.	i.	s. dil. HNO_3; sl. s. H_2SO_4, HCl; i. NH_3
acetate	$Ni(C_2H_3O_2)_2$	176.78	gn. pr.	1.798	d.		16.6		i. al.
ammonium chloride	$NiCl_2 \cdot NH_4Cl \cdot 6H_2O$	291.18	gn., delq., mn.	1.645			$150^{25°}$	v. s.	
ammonium sulfate	$NiSO_4 \cdot (NH_4)_2SO_4 \cdot 6H_2O$	394.99	blue-gn., mn., 1.5007	1.923			$2.5^{3.5°}$	$39.2^{88°}$	v. sl. s. $(NH_4)_2SO_4$
bromate	$Ni(BrO_3)_2 \cdot 6H_2O$	422.59	gn., cb.	2.575	d.		28		s. NH_4OH
bromide	$NiBr_2$	218.50	yel., delq.	$4.64_{4}^{28°}$	d.		$112.8^{0°}$	$156^{100°}$	s. al., et., NH_4OH
bromide	$NiBr_2 \cdot 3H_2O$	272.55	gn., delq.		$-3H_2O$, 200		$199^{9°}$	$316^{100°}$	s. al., et., NH_4OH
bromide, ammonia	$NiBr_2 \cdot 6NH_3$	320.68	vl. pd.	1.837			v. s.	d.	i. c. NH_4OH
bromoplatinate	$NiPtBr_6 \cdot 6H_2O$	841.29	trig.	3.715					
carbonate	$NiCO_3$	118.70	lt. gn., rhb.		d.		$0.0093^{25°}$	i.	s. a.
carbonate, basic	$2NiCO_3 \cdot 3Ni(OH)_2 \cdot 4H_2O$	587.59	lt. gn.		d.		i.	d.	s. a., NH_4 salts
carbonyl	$Ni(CO)_4$	170.73	lq.	$1.31^{17°}$	−25	43^{751mm}	$0.018^{9.8°}$	i.	s. aq. reg., HNO_3, al., et.
chloride	$NiCl_2$	129.60	yel., delq.	3.544	subl.	973	$53.8^{0°}$	$87.6^{100°}$	s. NH_4OH, al.; i. NH_3
chloride	$NiCl_2 \cdot 6H_2O$*	237.69	gn., delq., mn., 1.57±				180	v. s.	v. s. al.
chloride, ammonia	$NiCl_2 \cdot 6NH_3$	231.78					s.	d.	s. NH_4OH; i. al.

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
cyanide	$Ni(CN)_2 \cdot 4H_2O$	182.79	gn. pl.		$-4H_2O$, 200	d.	i.	i.	s. KCN; i. dil. KCl
dimethylglyoxime	$NiC_8H_{14}O_4N_4$	288.91	scarlet red cr.		subl. 250		i.	i.	s. abs. al., a.; i. ac., NH_4OH
formate	$Ni(HCO_2)_2 \cdot 2H_2O$	184.76	gn. cr.	2.154	d.		s.		
hydroxide (ic)	$Ni(OH)_3$	109.72	bk.		d.		i.	i.	s. a., NH_4OH, NH_4Cl
hydroxide (ous)	$Ni(OH)_2 \cdot ¼H_2O$	97.21	lt. gn.	4.36	d.		v. sl. s.	v. sl. s.	s. a., NH_4OH; i. alk.
nitrate	$Ni(NO_3)_2 \cdot 6H_2O$	290.79	gn., mn.	2.05	56.7	136.7	$243.0^{0°}$	$\infty^{56.7°}$	s. NH_4OH; i. abs. al.
nitrate, ammonia	$Ni(NO_3)_2 \cdot 4NH_3 \cdot 2H_2O$	286.86					v. s.		i. al.
oxide, mono- (bunsenite)	NiO	74.69	gn.-bk., cb., 2.37	7.45	Forms Ni_2O_3 at 400		i.	i.	s. a., NH_4OH
potassium cyanide	$Ni(CN)_2 \cdot 2KCN \cdot H_2O$	258.97	red yel., mn.	$1.875^{11°}$	$-H_2O$, 100		s.		d. a.
sulfate	$NiSO_4$	154.76	yel., cb.	3.68	$-SO_3$, 840		$27.2^{0°}$	$76.7^{100°}$	i. al., et., act.
sulfate	$NiSO_4 \cdot 6H_2O$*	262.85	gn. mn. or blue, tet., 1.5109	2.07	tr. 53.3	$-6H_2O$, 280	$131^{50°}$	$280^{100°}$	v. s. NH_4OH, al.
sulfate (morenosite)	$NiSO_4 \cdot 7H_2O$	280.86	gn., rhb., 1.4893	1.948	98–100	$-6H_2O$, 103	$63.5^{0°}$	$117.8^{30°}$	s. al.
Nitric acid	HNO_3	63.01	col. lq.	1.502	−42	86	∞	∞	expl. with al.
Nitric acid	$HNO_3 \cdot H_2O$	81.03	col. lq.		−38		∞	∞	d. al.
Nitric acid	$HNO_3 \cdot 3H_2O$	117.06	col. lq.		−18.5		$263^{-20°}$	∞	d. al.
Nitro acid sulfite	NO_2HSO_3	127.08	col., rhb.		73 d.		d.		s. H_2SO_4

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
Nitrogen	N_2	28.01	col. gas or cb. cr.	$1.026^{-252.5^\circ}$ $0.808^{-195.8^\circ}$ 12.5^{0° (D)	−209.86	−195.8	2.35^{0° cc	1.55^{20° cc	sl. s. al.
Nitrogen oxide, mono- (ous)	N_2O	44.01	col. gas	lq. 1.226^{-89° 1.530 (A)	−102.3	−90.7	130.52^{0° cc	60.82^{24° cc	s. H_2SO_4, al.
oxide, di- (ic)	NO or $(NO)_2$	30.01 60.01	col. gas	lq. $1.269^{-150.2^\circ}$ 1.0367 (A)	−161	−151	7.34^{0° cc	0.0^{100°	26.6 cc al.; 3.5 cc H_2SO_4; s. aq. $FeSO_4$
oxide, tri-	N_2O_3	76.01	red-brn. gas or blue lq. or solid	1.447^{2°	−102	3.5	s.		s. a., et.
oxide, tetra- (per- or di-)	NO_2 or $(NO_2)_2$	46.01 92.01	yel. lq., col. solid, red-brn. gas	1.448^{20°	−9.3	21.3	d.		s. HNO_3, H_2SO_4, chl., CS_2
oxide, penta-	N_2O_5	108.01	wh., rhb.	1.63^{18°	30	47	s.	Forms HNO_3	
oxybromide	NOBr	109.91	brn. lq.	>1.0	−55.5	−2	d.		
oxychloride	NOCl	65.46	red-yel. lq. or gas	1.417^{-12° 2.31 (A)	−64.5	−5.5	d.		s. fuming H_2SO_4
Nitroxyl chloride	NO_2Cl	81.46	yel.-brn. gas	lq. 1.32^{14°	<−30	5	d		
Osmium	Os	190.23	blue, hex.	22.48^{20°	2700	>5300	i.	i.	sl. s. aq. reg., HNO_3; i. NH_3
chloride, di-	$OsCl_2$	261.14	gn., delq.				s. d.		s. NaCl, al., et.
chloride, tri-	$OsCl_3$	296.59	brn., cb.		d. 560–600		sl. s.		s. a., alk., al.; sl. s. et.
chloride, tetra-	$OsCl_4$	332.04	red-yel. nd.				s. d.		s. HCl, al.

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
Oxygen	O_2	32.00	col. gas or hex. solid	$1.14^{-188°}$ $1.426^{-252.5°}$ 1.1053 (A)	−218.4	−183	$4.89^{0°}$ cc	$2.6^{30°}$ cc $1.7^{100°}$ cc	sl. s. al., s. fused Ag
Ozone	O_3	48.00	col. gas	$1.71^{-183°}$ $3.03^{-80°}$ 1.658 (A)	−251	−112	$0.494^{0°}$ cc	$0^{60°}$ cc	s. oil turp., oil cinn.
Palladium	Pd	106.42	silv. met., cb.	$12.0^{20°}$ $11^{1550°}$	1555	2200	i.	i.	s. aq. reg., h. H_2SO_4; i. NH_3
bromide (ous)	$PdBr_2$	266.23	brn.				i.	i.	s. HBr
chloride	$PdCl_2$	177.33	brn., cb.		500 d.		s.	s.	s. HCl, act., al.
chloride	$PdCl_2 \cdot 2H_2O$	213.36	brn. pr.				s.	s.	s. HCl, act., al.
cyanide	$Pd(CN)_2$	158.45	yel.		d.		i.	i.	s. HCN, KCN, NH_4OH; i. dil. a.
hydride	Pd_2H	213.85	met.	11.06	d.				
Palladous dichlorodi ammine	$Pd(NH_3)_2Cl_2$	211.39	red or yel., tet.	2.5			s.		s. a., NH_4OH
Perchloric acid	$HClO_4$	100.46	unstable, col. lq	$1.768^{\frac{22°}{4}}$	−112	16^{18mm}	s.		
Perchloric acid	$HClO_4 \cdot H_2O$	118.47	fairly stable nd.	1.88	50	d.	s.		
Perchloric acid	$HClO_4 \cdot 2H_2O$* 73.6% anh.	136.49	stable lq., col.	$1.71^{\frac{25°}{4}}$	−17.8	200	v. s.		s. al.
Periodic acid	HIO_4	191.91	wh. cr.		d. 138	subl. 110	s.		
Periodic acid	$HIO_4 \cdot 2H_2O$	227.94	delq., mn.		d. 110		v. s.	v. s.	sl. s. al., et.
Permanganic acid	$HMnO_4$	119.94	exists only in solution				v. s.	d.	d. al.
Permolybdic acid	$HMoO_4 \cdot 2H_2O$	196.98	wh. cr.				v. s.	v. s.	

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
Persulfuric acid	$H_2S_2O_8$	194.14	hyg. cr.		<60		v. s.	d.	
Phosphamic acid	$PONH_2{\cdot}(OH)_2$	97.01	cb.		d.		v. s.	v. s. d.	i. al.
Phosphatomolybdic acid	$H_7P(Mo_2O_7)_6{\cdot}28H_2O$	2365.71	yel. cb.		78	$-25H_2O$, 140	s.		s. HNO_8
Phosphine	PH_3	34.00	col. gas	lq. 0.746^{-90° 1.146 (A)	−132.5	−85	26^{17° cc	$i.^{100^\circ}$	s. Cu_2Cl_2, al., et.
Phosphonium chloride	PH_4Cl	70.46	wh., cb.		$28^{46atm.}$	subl.	d.		
Phosphoric acid, hypo-	$H_4P_2O_6$	161.98	cr.		55	d. 70	s.	450^{62°	
Phosphoric acid, meta-	HPO_3	79.98	vitreous, delq.	2.2–2.5	subl.		s.	Forms H_3PO_4	i. lq. CO_2
Phosphoric acid, ortho-	H_3PO_4	98.00	col., rhb.	$1.834^{18.2^\circ}$	42.35	$-\frac{1}{2}H_2O$, 213	2340^{26°	v. s.	s. al.
Phosphoric acid, pyro-	$H_4P_2O_7$	177.98	wh. nd.		61		800^{28°	Forms H_3PO_4	v. s. al., et.
Phosphorous acid, hypo-	H_3PO_2	66.00	syrupy	$1.493^{18.8^\circ}$	26.5	d.	∞	∞	
Phosphorous acid, ortho-	H_3PO_3	82.00	col.	$1.651^{21.2^\circ}$	74	d. 200	307.3^{0°	730^{40°	
Phosphorous acid, pyro-	$H_4P_2O_5$	145.98	nd.		38	d. 130	d.		
Phosphorus, black	P_4	123.90	rhombohedral	2.69		ign. in air, 400	i.	i.	i. CS_2
Phosphorus, red	P_4	123.90	red, cb.	2.20^{20°	$590^{43atm.}$	ign. in air, 725	i.	i.	s. alk.; i. CS_2, NH_3, et.

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
Phosphorus, yellow	P_4	123.90	yel., hex., 2.1168	$1.82^{20°}$; lq. $1.745^{44.5°}$	44.1; ign. 34	280	0.0003	sl. s.	0.4 al.; $1000^{10°}$ CS_2; $1.5^{0°}$, $10^{81°}$ bs.; s. NH_3
chloride, tri-	PCl_3	137.33	col., fuming lq.	1.574 $\frac{20.8°}{4}$	−111.8	75.95^{760mm}	d.		s. et., chl., CS_2
chloride, penta-	PCl_5	208.24	delq., tet.	solid 1.6; $3.60^{295°}$ (A)	148 under pressure	subl. 160	d.		s. CS_2, C_6H_5COCl
oxide, penta-	P_2O_5	141.94	wh., delq., amor.	2.387	subl. 250		Forms H_3PO_4	v. s.	s. H_2SO_4; i. NH_3, act.
oxychloride	$POCl_3$	153.33	col., fuming lq.	1.675	2	107.2^{760mm}	d.		d. al.
Phosphotungstic acid	$H_3PO_4 \cdot 12WO_3 \cdot xH_2O$	2880.05	yel.-gn. cr.				s.		s. al., et.
Platinum	Pt	195.08	silv. met., cb.	$21.45^{20°}$ lq. $19^{1755°}$	1755	4300	i.	i.	s. aq. reg., fused alk.
chloride (ic)	$PtCl_4$	336.89	brn.		d. 370		$140^{25°}$	v. s.	s. al., act.; sl. s. NH_2; i. et.
chloride (ous)	$PtCl_2$	265.98	brn.	$5.87^{11°}$	d. 581		i.	i.	s. HCl, NH_4OH; sl. s. NH_3; i. al., et.
chloride (ic)	$PtCl_4 \cdot 8H_2O$	481.01	red, mn.	2.43	$-4H_2O$, 100		v. s.	v. s.	s. al., et.
cyanide (ous)	$Pt(CN)_2$	247.11	yel.-brn.				i.	i.	i. alk.
Plutonium	Pu	238.05		Produced by deuteron bombardment on U^{238}	Produced by deuteron bombardment on U^{238}	Produced by deuteron bombardment on U^{238}			
Plutonium	Pu	239.05		Produced by neutron bombardment on U^{238}	Produced by neutron bombardment on U^{238}	Produced by neutron bombardment on U^{238}			

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
Potassium	K	39.10	silv. met., cb.	0.86^{20° lq. 0.83^{42°	62.3	760	d.	Forms KOH	s. a., al., Hg
acetate	$KC_2H_3O_2$	98.14	wh. pd.	1.8	292		217^{0°	396^{90°	33 al.; i. et.
acetate, acid	$KH(C_2H_3O_2)_2$	158.19	delq. nd. or pl.		148	d. 200	d.		s. ac.
aluminate	$K_2(AlO_2)_2 \cdot 3H_2O$	250.20	cr.				s.	d.	s. alk.; i al.
amide	KNH_2	55.12	yel.-grn.		338	subl. 400	d.		d. al.; 3.6^{25° NH_3
arsenate (monobasic)	KH_2AsO_4	180.03	col., tet., 1.5674	2.867	288		18.87^{6°	v. s.	i. al.
auricyanide	$KAu(CN)_4 \cdot 1{\cdot}5H_2O$	367.16	pl.		d. 200		s.	v. s.	s. al.
aurocyanide	$KAu(CN)_2$	288.10	rhb.				14.3	200^{100°	sl. s. al.; i. et.
bicarbonate	$KHCO_3$	100.12	mn., 1.482	2.17	d. 100–200		22.4^{0°	60^{60°	i. satd. K_2CO_3, al.
bisulfate	$KHSO_4$	136.17	rhb., or mn., 1.480	2.35	210	d.	36.3^{0°	121.6^{100°	d. al.
bromate	$KBrO_3$	167.00	trig.	$3.27^{17.5^\circ}$	370 d.		3.11^{0°	49.75^{100°	sl. s. al.; i. act.
bromide	KBr	119.00	col., cb., 1.5594	2.75^{25°	730	1380	53.5^{0°	104^{100°	sl. s. al., et.
carbonate	K_2CO_3	138.21	wh., delq. pd., 1.531	2.29	891	d.	105.5^{0°	156^{100°	i. al.
carbonate	$K_2CO_3 \cdot 2H_2O$	174.24	rhb.	2.043			183^{0°	331^{100°	
carbonate	$2K_2CO_3 \cdot 3H_3O$	330.46	mn.	2.13			129.4^{0°	268^{100°	
chlorate	$KClO_3$	122.55	col., mn., 1.5167	2.32	368	d. 400	3.3^{0°	57^{100°	0.83 al.; s. alk.

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
chloride (sylvite)	KCl	74.55	col., cb., 1.4904	1.988	790	1500	$27.6^{0°}$	$56.7^{100°}$	s. al., alk.
chloroplatinate	K_2PtCl_6	485.99	yel., cb., 1.825±	3.499	d. 250		$0.74^{0°}$	$5.2^{100°}$	i. al., et.
chromate (tarapacaite)	K_2CrO_4	194.19	yel., rhb., 1.7261	$2.732^{18°}$	975		$58.0^{0°}$	$75.6^{100°}$	i. al.
cyanate	KCNO	81.12	wh., tet.	2.048			s.	d.	v. sl. s. al.
cyanide	KCN	65.12	wh., cb., delq., 1.410	$1.52^{16°}$	634.5		s.	$122.2^{108.8°}$	s. gly.; $0.9^{19.5°}$ al.; 1.3 h. al.
dichromate	$K_2Cr_2O_7$	294.18	red, tri.	2.69	398	d.	$4.9^{0°}$	$80^{100°}$	i. al.
ferricyanide	$K_3Fe(CN)_6$	329.24	red, mn. pr., 1.5689	1.84	d.		$33^{4.4°}$	$77.5^{100°}$	s. act.; sl. s. al.; i. NH_3
ferrocyanide	$K_4Fe(CN)_6 \cdot 3H_2O$	422.39	yel., mn., 1.5772	$1.853^{17°}$	$-3HO_2$, 70		$27.8^{12.2°}$	$90.6^{96.8°}$	s. act.; i. NH_3, al., et.
formate	$KHCO_2$	84.12	col., rhb.	1.91	167.5	d.	$331^{18°}$	$657^{90°}$	sl. s. al.; i. et.
hydride	KH	40.11	cb., 1.453	0.80	d.		d.		i. et., bz., CS_2
hydrosulfide	KHS	72.17	wh., delq., rhb.	2.0	455		s.	s. d.	s. al.
hydroxide	KOH	56.11	wh., delq., rhb.	2.044	380	1320	$97^{0°}$	$178^{100°}$	v. s. al., et.; i. NH_3
iodate	KIO_3	214.00	col., mn.	3.89	560		$4.73^{0°}$	$32.2^{100°}$	s. KI; i. al., NH_3
iodide	KI	166.00	wh., cb., 1.6670	3.13	723	1330	$127.5^{0°}$	$208^{100°}$	$4^{20°}$ al.; s. NH_3; sl. s. et.
iodide, tri-	KI_3	419.81	dark blue, delq., mn.	3.498	45	d. 225	v. s.		s. KI, al.
iodoplatinate	K_2PtI_6	1034.70	cb.	5.18			s.		

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
manganate	K_2MnO_4	197.13	gn., rhb.		d. 190		d.		s. KOH
metabisulfite	$K_2S_2O_5$	222.32	mn., pl.		d. 150		$25^{0°}$	$120^{94°}$	sl. s. al.; i. et.
nitrate (saltpeter)	KNO_3	101.10	col., rhb., 1.5038	$2.11^{10.6°}$	tr. 129; 333	d. 400	$13.3^{0°}$	$246^{100°}$	$0.1^{30°}$ al.; i. et.
nitrite	KNO_2	85.10	pr.	1.915	297	d. 350	$281^{0°}$	$413^{100°}$	v. s. NH_3; sl. s. al.
oxalate	$K_2C_2O_4·H_2O$	184.23	wh., mn.	2.13	d.		$28.7^{0°}$	$83.2^{100°}$	
oxalate, acid	KHC_2O_4*	128.13	mn., 1.545	2.0	d.		$14.3^{50°}$	$48.1^{100°}$	
oxalate, acid	$KHC_2O_4·½ H_2O$	137.13	trimetric		d.		$2.2^{0°}$	$51.5^{100°}$	
oxide	K_2O	94.20	wh., cb.	$2.32\ \frac{20°}{4}$			Forms KOH	v. s.	s. al., et.
perchlorate	$KClO_4$	138.55	col., rhb., 1.4737	$2.524\ \frac{11°}{4}$	d. 400		$0.75^{0°}$	$21.8^{100°}$	$0.105^{20°}$ m. al.; i. et.
permanganate	$KMnO_4$	158.03	purple, rhb.	2.703	d. <240		$2.83^{0°}$	$32.35^{75°}$	s. H_2SO_4; d. al.
persulfate	$K_2S_2O_3$	190.32	wh., tri., 1.4669		d. <100		$1.77^{0°}$	$10^{40°}$	i. al.
phosphate, monobasic	KH_2PO_4	136.09	col., delq., tet., 1.5095	2.338	256		$14.8^{0°}$	$83.5^{90°}$	i. al.
phosphate, dibasic	K_2HPO_4	174.18	wh., delq.		d.		$33^{25°}$	v. s.	sl. s. al.
phosphate, tribasic	K_3PO_4	212.27	wh., rhb.	$2.564^{17°}$	1340		$193.1^{25°}$	v. s.	i. al.

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
phosphate, meta-	KPO_3	118.07	wh. pd.	$2.258^{14.5°}$	tr. 450; 798	1320	s.	s.	
phosphate, meta-	$K_4P_4O_{12}·2H_2O$	508.31	amor.	$2.264^{14.5°}$	$-2H_2O$, 100	d.	s.	83	s. a.
phosphate, pyro-	$K_4P_2O_7·3H_2O$	384.38	delq.	2.33	$-2H_2O$, 180	$-3H_2O$, 300	s.	v. s.	i. al.
phthalate, acid	$KHC_8H_4O_4$	204.22	wh. cr.	1.63	d.		$10.2^{25°}$	36	
platinocyanide	$K_2Pt(CN)_4·3H_2O$	431.39	yel., rhb., 1.62±	$2.45^{16°}$			sl. s.	v. s.	s. al., et.
silicate	K_2SiO_3	154.28	hyg. 1.521±		976		s.	s.	i. al.
silicate, tetra-	$K_2Si_4O_9·H_2O$	352.55	rhb., 1.530	2.417	d. 400		s.	s.	i. al.
sulfate (arcanite)	K_2SO_4	174.26	col., rhb., 1.4947	2.662	tr. 588		$7.35^{0°}$	$24.1^{100°}$	i. al., act., CS_2
sulfate, pyro-	$K_2S_2O_7$	254.32	col.	2.277	300		s.	d.	
sulfide, mono-	$K_2S·5H_2O$	200.34	rhb., delq.		60	$-3H_2O$, 150	s.		s. al., gly.; i. et.
sulfite	$K_2SO_3·2H_2O$	194.29	wh., rhb.		d.		100	>100	sl. s. al.; i. NH_3
sulfite, acid	$KHSO_3$	120.17	wh., mn.		d. 190		$45.5^{15°}$	$91.5^{75°}$	i. abs. al.
tartrate	$K_2C_4H_4O_6·½H_2O$	235.28	col., mn., 1.526	1.98		d.	$12.5^{17.5°}$	$278^{100°}$	sl. s. al.
tartrate, acid	$KHC_4H_4O_6$*	188.18	col., rhb.	1.956			$0.37^{0°}$	$6.1^{100°}$	s. a., alk.; i. al., ac.
thiocyanate	KCNS	97.18	col., delq., mn., 1.660±	1.886	172.3	d. 500	$177^{0°}$	$217^{20°}$	$20.8^{22°}$ act.; s. al.
thiosulfate	$K_2S_2O_3$	190.32	col., cb.		d. 400		$96.1^{0°}$	$311.2^{90°}$	

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
thiosulfate	$3K_2S_2O_3 \cdot H_2O$	588.99	delq., mn.	2.23	$-H_2O$, 180	d.			i. al.
Praseodymium	Pr	140.91	yel.	6.5^{20°	940		d.		
Radium	Ra	226.03	wh., met.	5?	960	1140	d. $+H_2$		d. a.
bromide	$RaBr_2$	385.83	wh., mn.	5.79	728	subl. 900	70^{20°	s.	s. al.
Radon (Niton)	Rn	222.02	gas	lq. 5.5; 111 (D)	−71	−62	51^{0° cc	8.5^{60° cc	
Rhenium	Re	186.21	hex.		3440				i. HF, HCl; s. H_2SO_4; HNO_3
Rhodium	Rh	102.91	gray-wh., cb.	12.5	1955	>2500	i.	i.	sl. s. aq. reg., a.
chloride	$RhCl_3$	209.26	red		d. 450	subl. 800±	i.	i.	v. sl. s. alk.; i. aq. reg., a.
chloride	$RhCl_3 \cdot 4H_2O$	281.33	dark red				v. s.		s. HCl, al.; i. et.
Rubidium	Rb	85.47	silv. wh.	lq. $1.475^{88.5}$; 1.53^{20°	38.5	700	d.		s. a., al.
Ruthenium	Ru	101.07	bk., porous	8.6	>1950		i.	i.	sl. s. aq. reg., a.
Ruthenium	Ru	101.07	gray, hex.	12.2^{20°	2450	>2700	i.	i.	
Samarium	Sm (also Sa)	150.36		7.7	>1300				
Scandium	Sc	44.96		2.5?	1200	2400			
Selenic acid	H_2SeO_4	144.97	hex. pr.	$2.950\ \frac{15^\circ}{4}$	58	260	1300^{30°	∞^{60°	s. H_2SO_4; d. al.; i. NH_3
Selenic acid	$H_2SeO_4 \cdot H_2O$	162.99	nd.	$2.627\ \frac{15^\circ}{4}$	26	205	v. s.		
Selenium	Se_8	631.68	red pd., amor., 2.92	4.26^{25°	50	688	i.	i.	s. CS_2, H_2SO_4, CH_2I_2

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
Selenium	Se_8	631.68	gray, trig., 3.00; red, hex.	4.80; 4.50	220	688	i.	i.	s. CS_2, H_2SO_4
Selenium	Se_8	631.68	steel gray	4.8^{25°	217	688	i.	i.	i. CS_2; s. H_2SO_4
Selenous acid	H_2SeO_3	128.97	hex.	$3.004\ \frac{15^\circ}{4}$	d.		90^{0°	400^{90°	v. s. al.; i. NH_3
Silicic acid, meta-	H_2SiO_3	78.10	amor., 1.41	2.1–2.3			i.	i.	s. alk.; i. NH_4Cl
Silicic acid, ortho-	H_4SiO_4	96.11	amor.	1.576^{17°			sl. s.	sl. s.	s. alk.; i. NH_4Cl
Silicon, crystalline	Si	28.09	gray, cb., 3.736	2.4^{20°	1420	2600	i.	i.	s. HNO_3 + HF, Ag; sl. s. Pb, Zn; i. HF
Silicon, graphitic	Si	28.09	cr.	2.0–2.5		2600	i.	i.	s. HNO_3 + HF, fused alk.; i. HF.
Silicon, amorphous	Si	28.09	brn., amor.	2		2600	i.	i.	s. HF, KOH
carbide	SiC	40.10	blue-bk., trig., 2.654	3.17	>2700	subl. 2200	i.	i.	s. fused alk.; i. a.
chloride, tri-	Si_2Cl_6	268.89	lf. or lq.	1.58^{0°	−1	144^{760mm}	d.		d. alk.
chloride, tetra-	$SiCl_4$	169.90	col., fuming lq., 1.412	1.50	−70	57.6	d.		d. conc. H_2SO_4, al.
fluoride	SiF_4	104.08	gas	3.57 (A)	−95.7	-65^{1810mm}	v. s. d.		s. HNO_3, al., et.
hydride (silane)	SiH_4	32.12	col. gas	lq. 0.68^{-185°	−185	-112^{760mm}	i.		i. al., et.; d. KOH
oxide, di- (opal)	$SiO_2 \cdot xH_2O$		iridescent, amor.	2.2	1600–1750	subl. 1750	i.	i.	s. HF, h. alk., fused $CaCl_2$

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
oxide, di- (cristobalite)	SiO_2	60.08	col., cb. or tet., 1.487	2.32	1710	2230	i.	i.	s. HF; i. alk.
oxide, di- (lechatelierite)	SiO_2	60.08		2.20		2230	i.	i.	s. HF; i. alk.
oxide, di- (quartz)	SiO_2	60.08	hex., 1.5442	$2.650^{20°}$	tr. <1425	2230	i.	i.	s. HF; i. alk.
oxide, di- (tridymite)	SiO_2	60.08	trig., rhb., 1.469	2.26	tr. 1670	2230	i.		s. HF; i. alk.
Silver	Ag	107.87	silv. met., cb.	$10.5^{20°}$	960.5	1950	i.	i.	s. HNO_3, h. H_2SO_4; i. alk.
bromide (bromyrite)	AgBr	187.77	pa. yel., cb., 2.252	$6.473\ \frac{25°}{4}$	434	d. 700	$0.00002^{20°}$	$0.00037^{100°}$	$0.51^{18°}$ NH_4OH; s. KCN, $Na_2S_2O_3$
carbonate	Ag_2CO_3	275.75	yel. pd.	6.077	218 d.		$0.003^{20°}$	$0.05^{100°}$	s. NH_4OH, $Na_2S_2O_3$; i. al.
chloride (cerargyrite)	AgCl	143.32	wh., cb., 2.071	5.56	455	1550	$0.000089^{0°}$	$0.00217^{100°}$	s. NH_4OH, KCN; sl. s. HCl
cyanide	AgCN	133.89	wh., 1.685±	3.95	$-(CN)_2$, 320		$0.000022^{0°}$		s. NH_4OH, KCN, HNO_3
nitrate (lunar caustic)	$AgNO_3$	169.87	col., rhb., 1.744	$4.352\ \frac{19°}{4}$	212	444 d.	$122^{0°}$	$952^{100°}$	s. gly.; v. sl. s. al.
Sodium	Na	22.99	silv. met, cb.	$0.97^{20°}$	97.5	880	d., forms NaOH		i. bz.; d. al.
acetate	$NaC_2H_3O_2$	82.03	wh., mn., 1.464	1.528	324		$46.5^{20°}$	$170^{100°}$	$2.1^{18°}$ al.
acetate	$NaC_2H_3O_2 \cdot 3H_2O$	136.08	wh., mn.	1.45	58	$-3H_2O$, 120	v. s.	v. s.	$7.8^{25°}$ abs. al.
aluminate	$NaAlO_2$	81.97	amor.		1650		s.	v. s.	i. al.
amide	$NaNH_2$	39.01	olive gn.		210	400	d.		d. al.

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
ammonium phosphate	$NaNH_4HPO_4{\cdot}4H_2O$	209.07	col., mn.	1.574	79 d.		16.7	100	i. al.
antimonate, meta-	$2NaSbO_3{\cdot}7H_2O$	511.60	cb.				$0.031^{12.8°}$		sl. s. al., NH_4 salts; i. ac.
arsenate	$Na_3AsO_4{\cdot}12H_2O$	424.07	hex., 1.4589	1.759	86.3		$26.7^{17°}$		1.67 al., $50^{15°}$ gly.
arsenate, acid (monobasic)	$NaH_2AsO_4{\cdot}H_2O$	181.94	rhb., 1.5535	2.535	d. 100		s.		
arsenate, acid (dibasic)	$Na_2HAsO_4{\cdot}7H_2O$*	312.01	col., mn., 1.4658	1.871	125	$-7H_2O$, 100	$61^{15°}$	v. s.	sl. s. al.
arsenate, acid (dibasic)	$Na_2HAsO_4{\cdot}12H_2O$	402.09	mn., 1.4496	1.72	28	$-12H_2O$, 100	$5.59^{0.1°}$	$140.7^{30°}$	sl. s. al.
arsenite, acid	Na_2HAsO_3	169.91	col.	1.87			v. s.		
benzoate	$NaC_7H_5O_2$	144.10	col. cr.				$62.5^{25°}$	$76.9^{100°}$	$2.3^{25°}$, $8.3^{78°}$ al.
bicarbonate	$NaHCO_3$	84.01	wh., mn., 1.500	2.20	$-CO_2$, 270		$6.9^{0°}$	$16.4^{60°}$	i. al.
bifluoride	$NaHF_2$	61.99	col. cr.		d.		$3.7^{20°}$	s.	
bisulfate	$NaHSO_4$	120.06	col., tri.	2.742	>315	d., $-H_2O$	$50^{0°}$	$100^{100°}$	d. al.; i. NH_3
bisulfite	$NaHSO_3$	104.06	col., mn., 1.526	1.48	d.		sl. s.	s.	i. al., act.
borate, tetra-	$Na_2B_4O_7$	201.22		2.367	741		$1.3^{0°}$	$8.79^{40°}$	i. al.
borate, tetra	$Na_2B_4O_7{\cdot}5H_2O$	291.30	col., rhb., 1.461	1.815			$22^{62°}$ (anh.)	$52.3^{100°}$ (anh.)	

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
borate, tetra- (borax)	$Na_2B_4O_7 \cdot 10H_2O$*	381.37	wh., mn., 1.4694	1.73	75	$-10H_2O$, 200	$1.3^{0.5}$ (anh.)	20.3^{80° (anh.)	s. gly.; i. abs. al.
bromate	$NaBrO_3$	150.89	col., cb.	$3.339^{17.5^\circ}$	381		27.5^{0°	90.9^{100°	i. al.
bromide	NaBr	102.89	col., cb., 1.6412	$3.205^{17.5^\circ}$	755	1390	90^{20°	121^{100°	sl. s. al.
bromide	$NaBr \cdot 2H_2O$	138.92	col., mn.	2.176	50.7		79.5^{0° (anh.)	118.3^{80° (anh.)	sl. s. al.
carbonate (soda ash)	Na_2CO_3	105.99	wh. pd., 1.535	2.533	851	d.	7.1^{0°	48.5^{104°	i. al., et.
carbonate	$Na_2CO_3 \cdot H_2O$	124.00	wh., rhb., 1.506–1.509	1.55	$-H_2O$, 100		s.	s.	s. gly.; i. al., et.
carbonate	$Na_2CO_3 \cdot 7H_2O$	232.10	rhb. or trig.	1.51	d. 35.1		s.	s.	
carbonate (sal soda)	$Na_2CO_3 \cdot 10H_2O$	286.14	wh., mn., 1.425	1.46			21.5^{0°	238^{30°	i. al.
carbonate, sesqui- (trona)	$Na_3H(CO_3)_2 \cdot 2H_2O$	226.03	wh., mn., 1.5073	2.112	d.		13^{0°	42^{100°	
chlorate	$NaClO_3$	106.44	wh., cb., or trig., 1.5151	2.490^{15°	248	d.	79^{0°	230^{100°	s. al.
chloride	NaCl	58.44	col., cb., 1.5443	2.163	800.4	1413	35.7^{0°	39.8^{100°	sl. s. al.; i. conc. HCl
chromate	Na_2CrO_4	161.97	yel., rhb.	2.723	392		32^{0°	126^{100°	
chromate	$Na_2CrO_4 \cdot 10H_2O$	342.13	yel., delq., mn.	1.483	19.9		v. s.	∞	sl. s. al.
citrate	$2Na_3C_6H_5O_7 \cdot 11H_2O$	714.31	wh., rhb.	$1.857\ \frac{23.5^\circ}{4}$	$-11H_2O$, 150	d.	91^{25°	250^{100°	i. al.
cyanide	NaCN	49.01	wh., cb., 1.452		563.7	1496	48^{10°	82^{35°	s. NH_3; sl. s. al.
dichromate	$Na_2Cr_2O_7 \cdot 2H_2O$	298.00	red, mn., 1.6994	2.52^{18°	$-2H_2O$, 84.6; 356 (anh.)	d. 400	238^{0°	508^{80°	

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
ferricyanide	$Na_3Fe(CN)_6 \cdot H_2O$	298.93	red, delq.				18.9^{0°	67^{100°	i. al.
ferrocyanide	$Na_4Fe(CN)_6 \cdot 10H_2O$	484.06	yel., mn.	1.458			17.9^{20° (anh.)	$63^{98.5^\circ}$ (anh.)	i. al.
fluoride (villiaumite)	NaF	41.99	tet., 1.3258	2.79	992		4^{0°	5^{100°	v. sl. s. al.
formate	$NaHCO_2$	68.01	wh., mn.	1.919	253		44^{0°	160^{100°	sl. s. al.; i. et.
hydride	NaH	24.00	silv. nd., 1.470	0.92	d. 800		d.		i. bz., CS_2, CCl_4, NH_3; s. molten metal
hydrosulfide	$NaSH \cdot 2H_2O$	92.09	col., delq., nd.		d.		s.	s.	s. al.; d. a.
hydrosulfide	$NaSH \cdot 3H_2O$	110.11	rhb.		22	d.	s.	s.	s. al.; d. a.
hydrosulfite	$Na_2S_2O_4 \cdot 2H_2O$	210.14	col. cr.		d.		22^{20°	d.	i. al.
hydroxide	NaOH	40.00	wh., delq.	2.130	318.4	1390	42^{0°	347^{100°	v. s. al., et., gly.; i. act.
hydroxide	$NaOH \cdot 3\frac{1}{2} H_2O$	103.05	mn.		15.5		s.	v. s.	
hypochlorite	NaOCl	74.44	pa. yel., in soln. only		d.		26^{0°	158^{56°	
iodide	NaI*	149.89	col., cb., 1.7745	3.667^{0°	651	1300	158.7^{0°	302^{100°	v. s. al., act.
iodide	$NaI \cdot 2H_2O$	185.92	col., mn.	2.448			v. s.	v. s.	v. s. NH_3
lactate	$NaC_3H_5O_3$	112.06	col., amor.		d.		v. s.	v. s.	s. al.; i. et.
nitrate (soda niter)	$NaNO_3$	84.99	col., trig., 1.5874	2.257	308	d. 380	73^{0°	180^{100°	s. NH_3; sl. s. gly., al.

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
nitrite	$NaNO_2$	69.00	pa. yel., rhb.	$2.168^{0°}$	271	d. 320	$72.1^{0°}$	$163.2^{100°}$	$0.3^{20°}$ et.; 0.3 abs. al.; $4.4^{20°}$ m. al.; v. s. NH_3
oxide	Na_2O	61.98	wh., delq.	2.27	subl.		Forms NaOH		d. al.
perborate	$NaBO_3 \cdot H_2O$	99.81	wh. pd.		d. 40		sl. s.	d.	s. gly., alk.
perchlorate	$NaClO_4$	122.44	rhb., 1.4617		482 d.		$170^{0°}$	$320^{100°}$	s. al.; 51 m. al.; 52 act.; i. et.
perchlorate	$NaClO_4 \cdot H_2O$	140.46	hex.	2.02	d. 130		$209^{15°}$	$284^{50°}$	s. al.
peroxide	Na_2O_2*	77.98	yel.-wh. pd.	2.805	d.		s. d.	d.	s. dil. a.
peroxide	$Na_2O_2 \cdot 8H_2O$	222.10	wh., hex.		d. 30		s. d.	d.	
phosphate, monobasic	$NaH_2PO_4 \cdot H_2O$*	137.99	col., rhb., 1.4852	2.040	$-H_2O$, 100	d. 200	$71^{0°}$	$390^{83°}$	i. al.
phosphate, monobasic	$NaH_2PO_4 \cdot 2H_2O$	156.01	col., rhb., 1.4629	1.91	60		$91.1^{0°}$	$308^{40°}$	
phosphate, dibasic	$Na_2HPO_4 \cdot 7H_2O$	268.07	col., mn., 1.4424	1.679	d.		$185^{40°}$	$2000^{100°}$	
phosphate, dibasic	$Na_2HPO_4 \cdot 12H_2O$	358.14	col., mn., 1.4361	1.52	34.6	$-12H_2O$, 180	$4.3^{0°}$	$76.7^{30°}$	i. al.
phosphate, tribasic	Na_3PO_4	163.94	wh.	$2.537^{17.5°}$	1340		$4.5^{0°}$	$77^{100°}$	
phosphate, tribasic	$Na_3PO_4 \cdot 12H_2O$*	380.12	wh., trig., 1.4458	1.62	73.4	$-11H_2O$, 100	$28.3^{15°}$	∞	i. CS_2
phosphate, meta-	$Na_4P_4O_{12}$	407.85	col.	2.476	616 d.		s.	s.	s. a., alk.

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
phosphate, pyro-	$Na_4P_2O_7$*	265.90	wh.	2.45	988		$2.26^{0°}$	$45^{96°}$	d. a.
phosphate, pyro-	$Na_4P_2O_7 \cdot 10H_2O$	446.06	mn., 1.4525	1.82	d.		$5.4^{0°}$	$93^{100°}$	i. al., NH_3
phosphate (pyrodisodium)	$Na_2H_2P_2O_7$	221.94	col., mn., 1.510	1.862	d. 220		$4.5^{0°}$	$21^{40°}$	
phosphate (pyrodisodium)	$Na_2H_2P_2O_7 \cdot 6H_2O$	330.03	col., mn., 1.4645	1.848			$6.9^{0°}$	$36^{40°}$	
potassium tartrate	$NaKC_4H_4O_6 \cdot 4H_2O$	282.22	rhb., 1.493	1.790	70 to 80	$-4H_2O$, 215	$26^{0°}$	$66^{26°}$	sl. s. al.
silicate, meta-	Na_2SiO_3	122.06	col., rhb., 1.520		1088		s.	s. d.	i. Na or K salts, al.
Sodium silicate, meta-	$Na_2SiO_3 \cdot 9H_2O$	284.20	rhb.		47	$-6H_2O$, 100	v. s.	v. s.	$29^{18°}$, aN NaOH
silicate, ortho-	Na_4SiO_4	184.04	col., hex., 1.530		1018		s.	s.	
silicofluoride	Na_2SiF_6	188.06	wh., hex., 1.312	2.679	d.		$0.44^{0°}$	$2.45^{100°}$	i. al.
stannate	$Na_2SnO_3 \cdot 3H_2O$	266.73	hex. tablets		d. 140		$50^{0°}$	$67^{50°}$	i. al., act.
sulfate (thenardite)	Na_2SO_4	142.04	col., rhb., 1.477	2.698	tr. 100 to mn.		$5^{0°}$	$42^{100°}$	i. al.
sulfate	Na_2SO_4	142.04	col., mn.		tr. 500 to hex.		$48.8^{40°}$	$42.5^{100°}$	d. HI; s. H_2SO_4
sulfate	Na_2SO_4	142.04	col., hex.		884		$19.4^{20°}$	$45.3^{60°}$	
sulfate	$Na_2SO_4 \cdot 7H_2O$	268.15	tet.				$44.9^{0°}$	$202.6^{26°}$	
sulfate (Glauber's salt)	$Na_2SO_4 \cdot 10H_2O$	322.19	col., mn., 1.396	1.464	32.4	$-10H_2O$, 100	$36^{15°}$	$412^{34°}$	i. al.

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
sulfide, mono-	Na_2S	78.04	pink or wh., amor.	1.856			$15.4^{10°}$	$57.3^{90°}$	sl. s. al.; i. et.
sulfide, tetra-	Na_2S_4	174.24	yel., cb.		275		s.	s.	s. al.
sulfide, penta-	Na_2S_5	206.30	yel.		251.8		s.	s.	s. al.
sulfite	Na_2SO_3	126.04	hex. pr., 1.565	$2.633\ ^{15°}_{4}$	d.		$13.9^{0°}$	$28.3^{84°}$	i. al., NH
sulfite	$Na_2SO_3 \cdot 7H_2O$	252.15	mn.	1.561	$-7H_2O$, 150	d.	$34.7^{2°}$	$67.8^{18°}$	i. al.
tartrate	$Na_2C_4H_4O_6 \cdot 2H_2O$	230.08	rhb.	1.818			$29^{6°}$	$66^{43°}$	i. al.
thiocyanate	NaCNS	81.07	delq., rhb., 1.625±		287		$110^{10°}$	$225^{100°}$	v. s. al.
thiosulfate	$Na_2S_2O_3$	158.11	mn.	1.667			$50^{0°}$	$231^{80°}$	
thiosulfate (hypo)	$Na_2S_2O_3 \cdot 5H_2O$*	248.18	mn. pr., 1.5079	1.685	d. 48.0		$74.7^{0°}$	$301.8^{60°}$	s. NH_3; v. sl. s. al.
tungstate	Na_2WO_4	293.82	wh., rhb.	4.179	692		$57.58^{0°}$	$97^{100°}$	
tungstate	$Na_2WO_4 \cdot 2H_2O$*	329.85	wh., rhb.	3.245	$-2H_2O$, 100		$88^{0°}$	$123.5^{100°}$	sl. s. NH_3; i. a., al.
tungstate, para-	$Na_6W_7O_{24} \cdot 16H_2O$	2097.05	wh., tri.	$3.987^{14°}$	$-16H_2O$, 300		8	d.	
uranate	Na_2UO_4	348.01	yel.				i.	i.	s. alk. carb., dil. a.
vanadate	$Na_3VO_4 \cdot 16H_2O$	472.15	col. nd.		866 (anh.)		v. s.	d.	i. al.
vanadate, pyro-	$Na_4V_2O_7$	305.84	hex.		654		s.		i. al.
Stannic chloride	$SnCl_4$	260.52	col., fuming lq.	2.226	−30.2	114.1	s.	d.	s. abs. al., act., NH_3; s. ∞ CS_2

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
oxide (cassiterite)	SnO_2	150.71	wh., tet., 1.9968	7.0	1127		i.	i.	s. conc. H_2SO_4; i. alk.; NH_4OH, NH_3
sulfate	$Sn(SO_4)_2 \cdot 2H_2O$	346.87	col., delq., hex.				v. s.	d.	s. dil. H_2SO_4, HCl; d. abs. al.
Stannous bromide	$SnBr_2$	278.52	yel., rhb.	5.12^{17°	215.5	620	s.	d.	s. C_6H_5N
chloride	$SnCl_2$	189.62	wh., rhb.		246.8	623	83.9^{0°	269.8^{15°	s. alk., abs. al., et.
chloride (tin salt)	$SnCl_2 \cdot 2H_2O$*	225.65	wh., tri.	$2.71^{15.5^\circ}$	37.7	d.	118.7^{0°	∞	s. tart. a., alk., al.
sulfate	$SnSO_4$	214.77	wh. cr.		$-SO_2$, 360		19^{19°	18^{100°	s. H_2SO_4
Strontium	Sr	87.62	silv. met.	2.6	800	1150	d.	Forms $Sr(OH)_2$	s. al., a.
acetate	$Sr(C_2H_3O_2)_2$	205.71	wh. cr.	2.099		d.	36.9^{0°	36.4^{97°	0.26^{15° m. al.
carbonate (strontianite)	$SrCO_3$	147.63	wh., rhb., 1.664	3.70	$1497^{60atm.}$	$-CO_2$, 1350	0.0011^{18°	0.065^{100°	s. a., NH_4 salts, aq. CO_2
chloride	$SrCl_2$	158.53	wh., cb., 1.6499	3.052	873		43.5^{0°	100.8^{100°	v. sl. s. act., abs. al.; i. NH_3
chloride	$SrCl_2 \cdot 6H_2O$*	266.62	wh., rhb., 1.5364	1.933^{17°	$-4H_2O$, 61	$-6H_2O$, 100	104^{0°	198^{40°	
hydroxide	$Sr(OH)_2$	121.63	wh., delq.	3.625	375		0.41^{0°	21.83^{100°	s. NH_4Cl
hydroxide	$Sr(OH)_2 \cdot 8H_2O$*	265.76	col., tet., 1.499	1.90	$-7H_2O$ in dry air		0.90^{0°	47.7^{100°	s. NH_4Cl; i. act.
nitrate	$Sr(NO_3)_2$*	211.63	col., cb., 1.5878	2.986	570		40^{0°	100^{89°	s. NH_3; 0.012 abs. al.
nitrate	$Sr(NO_3)_2 \cdot 4H_2O$	283.69	wh., mn.	2.2			62.2^{0°	124^{20°	i. HNO_3
oxide (strontia)	SrO	103.62	col., cb., 1.870	4.7	2430		Forms $Sr(OH)_2$		sl. s. al.; i. et.

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
peroxide	SrO_2	119.62	wh. pd.		d.		0.008^{20°	d.	s. al., NH_4Cl; i. act.
peroxide	$SrO_2 \cdot 8H_2O$	263.74	wh. cr.		$-8H_2O$, 100	d.	0.018^{20°	d.	s. al.; i. NH_4OH
sulfate (celestite)	$SrSO_4$	183.68	col., rhb., 1.6237	3.96	1580 d.		0.0113^{0°	0.0114^{32°	sl. s. a.; i. dil. H_2SO_4, al.
sulfate, acid	$Sr(HSO_4)_2$	281.76	col., granular		d.		d.		14^{70° H_2SO_4
Sulfamic acid	NH_2SO_3H	97.09	wh., rhb.	$2.03\ ^{12^\circ}_{4}$	205 d.		20^{0°	40^{70°	sl. s. al., act.; i. et.
Sulfur, amorphous	S	32.07	pa. yel. pd., 2.0–2.9	2.046	120	444.6	i.	i.	sl. s. CS_2
Sulfur, monoclinic	S_8	256.52	pa. yel., mn.	1.96	119.0	444.6	i.	i.	s. CS_2, al.
Sulfur, rhombic	S_8	256.52	pa. yel., rhb.	2.07	112.8	444.6	i.	i.	24^{0°, 181^{55° CS_2
Sulfur bromide, mono-	S_2Br_2	223.94	red, fuming lq.	2.635	−46	$54^{0.18mm}$	d.		
chloride, mono-	S_2Cl_2	135.04	red-yel. lq.	1.687	−80	138	d.		s. CS_2, et., bz.
chloride, di-	SCl_2	102.97	dark red fuming lq.	$1.621\ ^{15^\circ}_{15}$	−78	59	d.		d. al.
chloride, tetra-	SCl_4	173.88	yel.-brn. lq.		−30	d. > −20	d.		
oxide, di-	SO_2	64.06	col. gas	lq., 1.434^{0°; 2.264 (A)	−75.5	−10.0	22.8^{0°	4.5^{50°	s. H_2SO_4; al., ac.
oxide, tri-(α)	SO_3	80.06	col. pr.	lq., 1.923; 2.75 (A)	16.83	44.6	d.		s. H_2SO_4
oxide, tri-(β)	$(SO_3)_2$	160.13	col., silky, nd.	1.97^{20°	50		Forms H_2SO_4		s. H_2SO_4

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
Sulfuric acid	H_2SO_4*	98.08	col., viscous lq.	1.834 $\frac{18^\circ}{4}$	10.49	d. 340	∞	∞	d. al.
Sulfuric acid	$H_2SO_4 \cdot H_2O$	116.09	pr. or lq.	1.842 $\frac{15^\circ}{4}$	8.62	290	∞	∞	d. al.
Sulfuric acid	$H_2SO_4 \cdot 2H_2O$	134.11	col. lq.	1.650 $\frac{0^\circ}{4}$	−38.9	167	∞	∞	d. al.
Sulfuric acid, pyro-	$H_2S_2O_7$	178.14	cr.	1.9^{20°	35	d.	d.		d. al.
Sulfuric oxychloride	SO_2Cl_2	134.97	col. lq.	1.667 $\frac{20^\circ}{4}$	−54.1	69.1^{760mm}	d.		s. ac.; d. al.
Sulfurous oxybromide	$SOBr_2$	207.87	or.-yel. lq.	2.68^{18°	−50	68^{40mm}	d.		s. bz., CS_2, CCl_4; d. act.
oxychloride	$SOCl_2$	118.97	yel. fuming lq.	1.631	−104.5	75.6	d.		s. bz., chl.
Tantalum	Ta	180.95	bk.-gray, cb.	16.6	2850	>4100	i.	i.	s. fused alk., HF; i. HCl, HNO_3, H_2SO_4
Tellurium	Te	127.60	met., hex.	(α) 6.24; (β) 6.00	452	1390	i.	i.	s. H_2SO_4, HNO_3, KCN, KOH, aq. reg.; i. CS_2
Terbium	Tb	158.93							
Thallium	Tl	204.38	blue-wh., tet.	11.85	303.5	1650	i.	i.	s. HNO_3, H_2SO_4; i. NH_3
acetate	$TlC_2H_3O_2$	263.43	silky nd.	3.68	110		v. s.		v. s. al.
chloride, mono-	TlCl	239.84	wh., cb.	7.00	430	806	0.21^{0°	1.8^{100°	sl. s. HCl; i. al., NH_4OH
chloride, sesqui-	Tl_2Cl_3	515.13	yel., hex.	5.9	400–500	d.	0.26^{15°	1.9^{100°	
chloride, tri-	$TlCl_3$	310.74	hex. pl.		25	d.	v. s.		s. al., et.

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
chloride, tri-	$TlCl_3 \cdot 4H_2O$	382.80	nd.		37	$-4H_2O$, 100	$86.2^{17°}$	d.	s. al., et.
sulfate (ic)	$Tl_2(SO_4)_3 \cdot 7H_2O$	823.06	lf.		$-6H_2O$, 200	d.	d.	d.	s. dil. H_2SO_4
sulfate (ous)	Tl_2SO_4	504.83	col., rhb., 1.8671	6.77	632	d.	$2.70^{0°}$	$18.45^{100°}$	
sulfate, acid	$TlHSO_4$	301.45	trimorphous		115 d.				v. sl. s. dil. H_2SO_4
Thio, *cf.* sulfo or sulfur									
Thorium	Th	232.04	cb.	11.2	1845	>3000	i.	i.	s. HCl, H_2SO; sl. s. HNO_3; i. HF, alk.
oxide, di- (thorianite)	ThO_2	264.04	wh., cb.	9.69	>2800	4400	i.		s. h. H_2SO_4; i. alk.
sulfate	$Th(SO_4)_2$	424.16		$4.225^{17°}$			$0.74^{0°}$	$5.22^{50°}$	
sulfate	$Th(SO_4)_2 \cdot 9H_2O$	586.30	mn. pr.	2.77	$-9H_2O$, 400		sl. s.	sl. s.	
Thulium	Tm	168.93					i.	i.	
Tin	Sn	118.71	silv. met., tet.	7.31	231.85	2260	i.	i.	s. HCl, H_2SO_4, dil. HNO_3 h. aq KOH
Tin	Sn	118.71	gray, cb.	5.750	Stable −163 to +18	2260	i.	i.	s. a., h. alk. solns.
Tin salts, *cf.* stannic and stannous									
Titanic acid	H_2TiO_3	97.88	wh. pd.				i.	i.	s. alk.; v. sl. s. dil. a.; i. al.
Titanium	Ti	47.87	dark gray, cb.	$4.50^{17.5°}$	1800	>3000	i.	d.	s. a.

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
chloride, di-	$TiCl_2$	118.77	bk., delq.		Unstable in air		d.		i. CS_2, et., chl.
chloride, tri-	$TiCl_3$	154.23	vl., delq.		d. 440		s.	s.	
chloride, tetra-	$TiCl_4$*	189.68	col. lq.	lq., 1.726	−30	136.4	s.	d.	s. dil. HCl
oxide, di- (anatase)	TiO_2	79.87	brn. or bk., tet., 2.534–2.564	3.84			i.	i.	sl. s. alk.
oxide, di- (brookite)	TiO_2	79.87	brn. or bk., rhb., 2.586	4.17			i.	i.	
oxide, di- (rutile)	TiO_2	79.87	col. if pure, tet., 2.615	4.26	1640 d.	<3000	i.	i.	s. H_2SO_4, alk.
Tungsten	W	183.84	gray-bk., cb.	19.3	3370	5900	i.	i.	s. h. conc. KOH; sl. s. NH_3, HNO_3, aq. reg.
carbide	WC	195.85	gray pd., cb.	$15.7^{18°}$	2777	6000	i.	i.	s. F_2; i. a.
carbide	W_2C	379.69	iron gray	$16.06^{18°}$	2877	6000	i.	i.	s. h. HNO_3; sl. s. HCl, H_2SO_4
oxide, tri-	WO_3	231.84	yel., rhb.	7.16	>2130		i.	i.	s. alk.; i. a.
Tungstic acid (tungstite)	H_2WO_4	249.85	yel., rhb. 2.24	5.5	$-½H_2O$, 100; 1473		i.	sl. s.	s. HF, alk., NH_3
Uranic acid	H_2UO_4	304.04	yel. pd.	$5.926^{15°}$	$-H_2O$, 250 to 300		i.	i.	s. a., alk. carb.; i. alk.
Uranium	U	238.03	wh. cr.	$18.485\ \frac{13°}{4}$	1133	3500	i.	i.	s. a.; i. alk.
carbide	U_2C_3	512.09	cr.	11.28	2400		d.		d. a.

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
oxide, di- (uraninite)	UO_2	270.03	bk., rhb.	10.9	2176		i.	i.	s. HNO_3, conc. H_2SO_4
oxide (pitchblende)	U_3O_8	842.08	olive gn.	7.31	d.		i.	i.	s. HNO_3, H_2SO_4
sulfate (ous)	$U(SO_4)_2 \cdot 4H_2O$	502.22	gn., rhb.		$-4H_2O$, 300		$23^{11°}$	$9^{63°}$	s. dil. a.
Uranyl acetate	$UO_2(C_2H_3O_2)_2 \cdot 2H_2O$	424.15	yel., rhb.	$2.89^{15°}$	$-2H_2O$, 110		$9.2^{17°}$	d.	s. al., act.
carbonate (rutherfordine)	UO_2CO_3	330.04	tet.	5.6					
nitrate	$UO_2(NO_3)_2 \cdot 6H_2O$	502.13	yel., rhb., 1.4967	2.807	60.2	118	$170.3^{0°}$	$\infty^{60°}$	v. s. ac., al., et.; i. dil., alk.
sulfate	$UO_2SO_4 \cdot 3H_2O$	420.14	yel. cr.	$3.28^{16.5°}$	d. 100		$18.9^{13.2°}$	$230^{25°}$	4 al.; s. a.
Vanadic acid, meta-	HVO_3	99.95	yel. scales				i.		s. a., alk.; i. NH_3
Vanadic acid, pyro-	$H_4V_2O_7$	217.91	pa. yel., amor.				i.		s. a., alk., NH_4OH
Vanadium	V	50.94	lt. gray, cb.	5.96	1710	3000	i.	i.	s. HNO_3, H_2SO_4; i. aq., alk.
chloride, di-	VCl_2	121.85	gn., hex., delq.	$3.23^{18°}$			s.	d.	s. al., et.
chloride, tri-	VCl_3	157.30	pink, tabular, delq.	$3.00^{18°}$	d.		s.	d.	s. abs. al., et.
chloride, tetra-	VCl_4	192.75	red lq.	$1.816^{30°}$	−109	148.5^{755mm}	s. d.		s. abs. al., et., chl., ac.
oxide, di-	V_2O_2	133.88	lt. gray cr.	3.64	ign.		i.	i.	s. a.
oxide, tri-	V_2O_3	149.88	bk. cr.	$4.87^{\frac{18°}{4}}$	1970		sl. s.	s.	s. HNO_3, HF, alk.

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
oxide, tetra-	V_2O_4	165.88	blue cr.	4.399	1967		i.	i.	s. a., alk.
oxide, penta-	V_2O_5	181.88	red-yel., rhb.	3.357 $\frac{18^\circ}{4}$	800	d. 1750	0.8^{20°		s. a., alk.; i. abs. al.
oxychloride, mono-	VOCl	86.39	brn. pd.	2.824			i.		v. s. HNO_3
Vanadyl chloride	$(VO)_2Cl$	169.33	yel. cr.	3.64	d. in air		i.		s. HNO_3
chloride, di-	$VOCl_2$	137.85	gn., delq.	2.88^{13°			d.		s. abs. al., dil. HNO_3
chloride, tri-	$VOCl_3$	173.30	yel. lq.	1.829	<−15	127.19	s. d.		s. al., et., ∞Br_2
Water†	H_2O	18.02	col. lq., 1.33300^{20°; hex. solid, 1.309	1.00^{4° (lq.); 0.915^{0° (ice)	0	100			∞ al.; sl. s. et.
Water, heavy	D_2O	20.029	col. lq., 1.32844^{20°	1.107^{20°	3.82	101.42	∞	∞	∞ al.; sl. s. et.
Xenon	Xe	131.29	col. gas	lq., $3.06^{-109.1}$ 2.7^{-140° 4.53 (A)	−140	−109.1	24.2^{0° cc	7.3^{50° cc	
Ytterbium	Yb	173.04							
Yttrium	Y	88.91	dark gray, hex.	5.51	1490	2500	sl. d.	d.	v. s. dil. a., h. KOH
Zinc	Zn	65.41	silv. met., hex.	7.140	419.4	907	i.	i.	s. a., ac., alk.
acetate	$Zn(C_2H_3O_2)_2$	183.50	mn.	1.840	242	subl. in vac.	30^{25°	44.6^{100°	2.8^{25°, 166^{79° al.
acetate	$Zn(C_2H_3O_2)_2{\cdot}2H_2O$*	219.53	wh., mn., 1.494	1.735	237	$-2H_2O$, 100	40^{25°	66.6^{100°	v. s. al.
bromide	$ZnBr_2$	225.22	rhb.	4.219^{4°	394	650	390^{0°	670^{100°	v. s. NH_4OH, al., et.

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
carbonate	$ZnCO_3$	125.42	wh., trig., 1.818	4.42	$-CO_2$, 300		$0.001^{15°}$		s. a., alk., NH_4 salts; i. act., NH_3
chloride	$ZnCl_2$	136.32	wh., delq., 1.687, uniaxial	$2.91^{25°}_{4}$	283	732	$432^{25°}$	$615^{100°}$	$100^{12.5°}$ al.; v. s. et.; i. NH_3
cyanide	$Zn(CN)_2$	117.44	col., rhb.		d. 80		$0.0005^{18°}$	sl. s.	s. KCN, NH_3, alk.; i. al.
hydroxide	$Zn(OH)_2$	99.42	col., rhb.	3.053	d. 125		$0.00052^{18°}$		s. a., alk., NH_4OH
iodide	ZnI_2	319.22	cb.	$4.666^{14.2°}_{4}$	446	624	$430^{0°}$	$510^{100°}$	s. a., al., NH_3, aq. $(NH_4)_2CO_3$
nitrate	$Zn(NO_3)_2 \cdot 6H_2O$	297.51	col., tet.	$2.065^{14°}_{4}$	36.4	$-6H_2O$, 105	324.5	$\infty^{36.4°}$	v. s. al.
oxide (zincite)	ZnO	81.41	wh., hex., 2.004	5.606	>1800		$0.00042^{18°}$		s. a., alk., NH_4Cl; i. NH_3
oxide	ZnO	81.41	wh., amor.	5.47	>1800		$0.00042^{18°}$		
peroxide	ZnO_2	97.41	yel.	1.571	expl. 212		0.0022		i. NH_4OH; d. a.
phosphide	Zn_3P_2	258.17	steel gray, cb.	$4.55^{13°}_{4}$	>420	1100	i.		s. dil. a.
silicate	$ZnSiO_3$	141.49	hex. or rhb.; glass, 1.650	3.52	1437		i.		
sulfate (zincosite)	$ZnSO_4$	161.47	wh., rhb., 1.669	$3.74^{15°}_{4}$	d. 740		$42^{0°}$	$61^{100°}$	sl. s. al.; s. gly.
sulfate	$ZnSO_4 \cdot H_2O$	179.49	col.	$3.28^{15°}_{4}$	d. 238		s.	$89.5^{100°}$	
sulfate	$ZnSO_4 \cdot 6H_2O$	269.56	mn.	$2.072^{15°}_{4}$	$-5H_2O$, 70		s.	s.	sl. s. al.; i. act.; NH_3
sulfate (goslarite)	$ZnSO_4 \cdot 7H_2O$*	287.58	rhb., 1.4801	$1.966^{16.5°}$	tr. 39	$-7H_2O$, 280	$115.2^{0°}$	$653.6^{100°}$	sl. s. al.; i. act.; NH_3

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
sulfide (α) (wurzite)	ZnS	97.47	wh., hex., 2.356	4.087	1850[150atm.]	subl. 1185	0.00069[18°]	i.	v. s. a.; i. ac.
sulfide (β) (sphalerite)	ZnS	97.47	wh., cb.; glass (?) 2.18–2.25	4.102 $\frac{25^\circ}{4}$	tr. 1020		i.	i.	s. a.
sulfide (blende)	ZnS	97.47	wh., granular	4.04			i.	i.	v. s. a.; i. ac.
sulfite	$ZnSO_3 \cdot 2½ H_2O$	190.51	mn.		$-2½H_2O$, 100	d. 200	0.16	d.	s. H_2SO_3, NH_4OH; i. al.
Zirconium	Zr	91.22	cb., pd. ign. easily	6.4	1700	>2900	i.	i.	s. HF, aq. reg.; sl. s. a.
oxide, di- (baddeleyite)	ZrO_2	123.22	yel. or brn., mn., 2.19	5.49	2700		i.	i.	s. H_2SO_4, HF
oxide, di- (free from Hf)	ZrO_2	123.22	wh., mn.	5.73		4300	i.	i.	s. H_2SO_4, HF

*By N. A. Lange, Ph.D., Handbook Publishers, Inc., Sandusky, Ohio. Abridged from table of Physical Constants of Inorganic Compounds in *Lange's Handbook of Chemistry*.

*Usually the solution.

†See special tables.

‡Usual commercial form.

*Usual commercial form.

†The solubility of $CaCO_3$ in H_2O is greatly increased by increasing the amount of CO_2 in the H_2O.

*Usual commercial form.

†Also a soluble modification.

*Usual commercial form.

†Usual commercial form about 31 percent.

‡Usual commercial forms 3 or 30 percent.

*See also a table of alloys.

Name	Formula	Formula weight	Color, crystalline form, and refractive index	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts (Cold water)	Solubility in 100 parts (Hot water)	Solubility in 100 parts (Other reagents)
†Usual commercial form.									
*Usual commercial form.									
†See also Tables 2-28 and 2-280.									
*One commercial form 70 to 72 per cent.									
†Common commercial form 85 per cent H_3PO_4 in aqueous solution.									
*Usual commercial form.									
*Usual commercial form.									
*Usual commercial form.									
†*Cf.* special tables on water and steam, Tables 2-3, 2-4, and 2-5.									
NOTE: °F = 9/5°C + 32.									

Table 2-2 Physical Properties of Organic Compounds*

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts		
								Water	Alcohol	Ether
Abbreviations Used in the Table										
(A), density referred to air	cr., crystalline	i-, iso-, containing the group $(CH_3)_2CH$-	nd., needles	s-, sec-, secondary	v. s., very soluble					
al., ethyl alcohol	d., decomposes		o-, ortho	silv., silvery	v. sl. s., very slightly soluble					
amor., amorphous	d-, dextrorotatory	i., insoluble	or., orange	sl., slightly	wh., white					
aq., aqua, water	dl-, dextro-laevorotatory	ign., ignites	p-, para	subl., sublimes	yel., yellow					

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
brn., brown	et., ethyl ether	l-, laevorotatory	pd., powder	sym., symmetrical	(+), right rotation					
bz., benzene	expl., explodes	lf., leaflets	pet., petroleum ether	t-, tertiary	>, greater than					
c., cubic	gn., green	lq., liquid	pl., plates	tet., tetragonal	<, less than					
cc., cubic centimeter	h., hot	m-, meta	pr., prisms	tri., triclinic	∞, infinitely					
chl., chloroform	hex., hexagonal	mn., monoclinic	rhb., rhombic	uns., unsymmetrical						
col., colorless		n-, normal	s., soluble	v., very						

This table of the physical properties includes the organic compounds of most general interest. For the properties of other organic compounds, reference must be made to larger tables in *Lange's Handbook of Chemistry* (Handbook Publishers), *Handbook of Chemistry and Physics* (Chemical Rubber Publishing Co.), Van Nostrand's *Chemical Annual, International Critical Tables* (McGraw-Hill), and similar works.

The **molecular weights** are based on the atomic weight values in "Atomic weights of the Elements 2001," *PURE Appl. Chem.*, **75,** 1107, 2003. The **densities** are given for the temperature indicated and are usually referred to water at 4°C, *e.g.*, $1.028^{95/4}$ a density of 1.028 at 95°C referred to water at 4°C, the 4 being omitted when it is not clear whether the reference is to water at 4°C or at the temperature indicated by the upper figure. The melting and boiling points given have been selected from available data as probably the most accurate. The **solubility** is given in grams of the substance in 100 of the solvent. In the case of gases, the solubility is often expressed in some manner as "5^{10} cc." which indicates that, at 10°C, 5 cc. of the gas are soluble in 100 of the solvent.

Abietic acid	sylvic acid, abietinic acid	$C_{20}H_{30}O_2$	302.45	lf.		182		i.	v. s.	v. s.
Acenaphthene	naphthylene ethylene	$C_{10}H_6(CH_2)_2$	154.21	rhb./al.	$1.069^{95/95}$	95	278–9	i.	s. h.	s. chl.
Acetal	acetaldehyde diethylacetal	$CH_3CH(OC_2H_5)_2$	118.17	lq.	$0.821^{22/4}$		102.2	6^{25}	∞	∞
Acet-aldehyde	ethanal	CH_3CHO	44.05	col. lq.	$0.783^{18/4}$	−123.5	20.2	∞	∞	∞

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts		
								Water	Alcohol	Ether
-aldehyde, par-	paraldehyde	$(C_2H_4O)_3$	132.16	col. cr.	$0.994^{20/4}$	10.5–12	124.4^{752}	12^{13}	∞	∞
-aldehyde ammonia		$CH_3CHOHNH_2$	61.08	col. cr.		97	100–10 d.	v. s.	v. s.	sl. s.
-amide	ethanamide	CH_3CONH_2	59.07	col. cr.	1.159	81(69.4)	222	s.	s.	v. sl. s.
-anilide	antifebrin	$C_6H_5NHCOCH_3$	135.16	rhb./al.	1.21^4	113–4	305	0.5^6	21^{20}	7^{25}
-phenetidide (*o*-)	*o*-ethoxyacetanilide	$CH_3CONHC_6H_4OC_2H_5$	179.22	lf./al.		79	>250	i.	s.	
(*m*-)	acetyl-*m*-phenetidine	$CH_3CONHC_6H_4OC_2H_5$	179.22	lf./al.		96–7		sl. s.	s.	
-toluidide (*o*-)	N-tolylacetamide	$CH_3C_6H_4NHCOCH_3$	149.19	rhb.	1.168^{15}	110	296	0.86^{19}	s.	s.
(*p*-)	N-tolylacetamide	$CH_3C_6H_4NHCOCH_3$	149.19	rhb. or mn.	1.212^{15}	153	306–7	0.09^{22}	10^{25}	s.
Acetic acid	ethanoic acid, vinegar acid	CH_3CO_2H	60.05	col. lq.	$1.049^{20/4}$	16.7	118.1	∞	∞	∞
anhydride	acetyl oxide, acetic oxide	$(CH_3CO)_2O$	102.09	col. lq.	$1.082^{20/4}$	−73	139.6	12 c.	∞	∞
nitrile	methyl cyanide	CH_3CN	41.05	col. lq.	$0.783^{20/4}$	−41	81.6–2.0	∞	∞	∞
Acetone	propanone, dimethyl ketone	CH_3COCH_3	58.08	col. lq.	$0.792^{20/4}$	−94.6	56.5	∞	∞	∞
Acetonyl urea	dimethyl hydantoin	<NHCONHCOC>$(CH_3)_2$	128.13	tri./al.		175	subl.	s.	s.	s.
Acetophenone benzoyl hydride	methyl-phenyl ketone	$CH_3COC_6H_5$	120.15	lf.	$1.033^{15/15}$	20.5	202.3^{749}	i.	s.	s.

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts		
								Water	Alcohol	Ether
Acetyl-chloride	ethanoyl chloride	CH_3COCl	78.50	col. lq.	$1.105^{20/4}$	−112.0	51–2	d.	d.	∞
-phenylenediamine (-*p*)	amino-acetanilide (*p*)	$C_2H_3ONHC_6H_4NH_2$	150.18	nd./aq.		162		s. h.	v. s.	v. s.
Acetylene	ethyne; ethine	HC ⋮ CH	26.04	col. gas	(A) 0.906	-81.5^{891}	-84^{760}	100 cc.[18]	600 cc.[18]	
dichloride (*cis*)	1,2-dichloroethene	CHCl:CHCl	96.94	col. lq.	$1.291^{15/4}$	−80.5	60.3	0.35^{20}	∞	∞
(*trans*)	dioform	CHCl:CHCl	96.94	col. lq.	$1.265^{15/4}$	−50	48.4	0.63^{20}	∞	∞
Aconitic acid	equisetic acid; citridic acid	$C_3H_3(CO_2H)_3$	174.11	cr./aq.		192 d.		33^{15}	sl. s.	v. sl. s.
Acridine		C_6H_4 < (CH)(N) > C_6H_4	179.22	rhb./aq. al.		110–1	346	sl. s. h.	s.	s.
Acrolein ethylene aldehyde	acrylic aldehyde, propenal	CH_2:CH·CHO	56.06	col. lq.	$0.841^{20/4}$	−87.7	52.5	40	s.	s.
Acrylic acid	propenoic acid	CH_2:CH·CO_2H	72.06	col. lq.	$1.062^{16/4}$	12–13	141–2	∞	∞	
nitrile	vinyl cyanide	CH_2:CH·CN	53.06	col. lq.	0.811^{20}	−82	78–9	s.		
Adipic acid	hexandioc acid, adipinic acid	$(CH_2CH_2CO_2H)_2$	146.14	mn. pr.	$1.360^{25/4}$	151–3	265^{10}	1.4^{15}	v. s.	0.6^{15}
amide		$(CH_2CH_2CONH_2)_2$	144.17	cr. pd.		226–7		0.4^{12}		
nitrile	tetramethylene	$(CH_2CH_2CN)_2$	108.14	col. oil	$0.951^{19/19}$	1	295	v. sl. s.	s.	v. sl. s.
Adrenaline (1-) (3,4,1)	1-suprarenine	$C_6H_3(OH)_2(CHOHCH_2NHCH_3)$	183.20	col. pd.		d. 207–11		0.03^{20}	v. sl. s.	i.
Alanine (α) (*dl*-)		$CH_3CH(NH_2)CO_2H$	89.09	nd./aq.		295 d.	subl. >200	22^{17}	v. sl. s.	i.

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts		
								Water	Alcohol	Ether
Aldol acetaldol	2-hydroxybutyraldehyde	$CH_3CH(OH)CH_2COH$	88.11	col. lq.	$1.103^{20/4}$		83^{20}	∞	∞	s.
Alizarin	Anthraquinoic acid	$C_6H_4(CO)_2C_6H_2(OH)_2$	240.21	red rhb.		289–90	430	0.03^{100}	v. s.	v. s.
Allyl alcohol	propen-1-ol-3,propenyl alcohol	$CH_2{:}CH{\cdot}CH_2OH$	58.08	col. lq.	$0.854^{20/4}$	−129	96.6	∞	∞	∞
bromide	3-bromo-propene-1	$CH_2{:}CH{\cdot}CH_2Br$	120.98	lq.	$1.398^{20/4}$	−119.4	$70–1^{753}$	i.	∞	∞
chloride	3-chloro-propene-1	$CH_2{:}CH{\cdot}CH_2Cl$	76.52	col. lq.	$0.938^{20/4}$	−136.4	44.6	<0.1	∞	∞
thiocyanate (*i*)	mustard oil	$CH_2{:}CH{\cdot}CH_2NCS$	99.15	col. oil	$1.013^{20/4}$	−80	152	0.2	∞	∞
thiourea	thiosinamide	$CH_2{:}CH{\cdot}CH_2NHCSNH_2$	116.18	col. pr.	$1.219^{20/20}$	77–8		3^0	s.	v. sl. s.
Aluminum ethoxide		$Al(OCH_2CH_3)_3$	162.16	pd.	$1.142^{20/0}$	150–60	$200–5^{10}$	d.	i.	v. sl. s.
Amino-anthraquinone (α)		$C_6H_4(CO)_2C_6H_3NH_2$	223.23	red nd.		256	subl.	i.	s.	s.
(β)		$C_6H_4(CO)_2C_6H_3NH_2$	223.23	red nd.		302	subl.	i.	s.	i.
-azobenzene		$C_6H_5{\cdot}N{:}N{\cdot}C_6H_4NH_2$	197.24	yel. mn.		126–7	225^{120}	sl. s. h.	s. h.	s.
-benzoic acid (*m*-)		$H_2N{\cdot}C_6H_4{}_4CO_2H$	137.14	nd./aq.	$1.511^{4°}$	173–4		v. sl. s.	2^{10}	1.8^6
(*p*-)	aminodracylic acid	$H_2N{\cdot}C_6H_4{}_4CO_2H$	137.14	mn. pr.		187–8		0.3^{13}	11^{10}	8.2^6

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts		
								Water	Alcohol	Ether
Amino-diphenyl amine (*p*-)		$H_2N{\cdot}C_6H_4NH{\cdot}C_6H_5$	184.24	nd./aq. al.		67	354	sl. s.	s.	s.
-G-acid (2-) (6-,8-), Na_2 salt		$C_{10}H_5(NH_2)(SO_3Na)_2$	347.28					v. sl. s.		
- mono-potassium salt		$C_{10}H_5(NH_2)S_2O_6HK$	341.40					12.8^{20}		
-sodium salt		$C_{10}H_5(NH_2)S_2O_6HNa$	325.29					2.7^{18}		
-J-acid (2-) (5-,7-)		$C_{10}H_5(NH_2)(SO_3H)_2$	303.31					10.0^{20}		
- mono-potassium salt		$C_{10}H_5(NH_2)S_2O_6HK$	341.40					3.4^{18}		
- naphthol sulfonic (1-,2-,4-) (α-)		$C_{10}H_5OHNH_2SO_3H½H_2O$	248.26					v. s.		
(1-,8-,4-)		$NH_2(OH)C_{10}H_5SO_3H$	239.25					v. sl. s.		
- phenol (*o*-)	2-aminophenol	$H_2N{\cdot}C_6H_4{\cdot}OH$	109.13	col. nd.		173	subl.	1.7^{0}	4.3^{0}	v. s.
(*m*-)	3-aminophenol	$H_2N{\cdot}C_6H_4{\cdot}OH$	109.13	pr.		122–3		2.6^{0}	s.	sl. s.
(*p*-)	*p*-hydroxyaniline	$H_2N{\cdot}C_6H_4{\cdot}OH$	109.13	lf.		184–6 d.	subl.	1.1^{0}	4^{0}	i. bz.
- toluene sulfonic acid (1-,2-,3-)		$C_6H_3(CH_3)(NH_2)SO_3H$	187.22	nd.				0.97^{11}		
(1-,4-,2-)		$C_6H_3(CH_3)(NH_2)SO_3H{\cdot}H_2O$	205.23	mn.		d.		0.5^{20}	i.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts		
								Water	Alcohol	Ether
(1-,4-,3-)		$C_6H_3(CH_3)(NH_2)SO_3H·½H_2O$	196.22	nd.				0.47		
(1-,2-,5-)		$C_6H_3(CH_3)(NH_2)SO_3H·H_2O$	205.23	tri./aq.		$-H_2O$, 120		3^{11}	i.	
Amyl acetate (*n*-)		$CH_3CO_2CH_2(CH_2)_3CH_3$	130.18	col. lq.	$0.879^{20/20}$	−70.8	148.4^{737}	v. sl. s.	∞	∞
(*i*-)	common amyl acetate	$CH_3CO_2CH_2CH_2CH(CH_3)_2$	130.18	col. lq.	$0.876^{15/4}$		142^{757}	0.3^{15}	∞	∞
		$CH_3CO_2CH_2CH(CH_3)C_2H_5$	130.18	col. lq.	0.880^{13}		141–2	v. sl. s.	∞	∞
(*s*-)	α-Me-Bu-acetate	$CH_3CO_2CH(CH_3)CH_2C_2H_5$	130.18	col. lq.	0.922^{0}		133.5	sl. s.	∞	∞
(*s*-)	di Et-carbinol acetate	$CH_3CO_2CH(C_2H_5)_2$	130.18	col. lq.	$0.871^{20/4}$		133	sl. s.	∞	∞
(*t*-)		$CH_3CO_2C(CH_3)_2C_2H_5$	130.18	col. lq.	0.874^{19}		124.5^{749}	v. sl. s.	∞	∞
alcohol (*n*-) fusel oil,	pentanol-1	$CH_3(CH_2)_3CH_2OH$	88.15	col. lq.	$0.817^{20/20}$	−78.5	137.9	2.7^{22}	∞	∞
(*s*-,*n*-) methyl-propyl carbinol,	pentanol-2	$C_2H_5CH_2CH(OH)CH_3$	88.15	col. lq.	$0.810^{20/20}$		119.5	4^{20}	∞	∞
(prim.-,*i*-) isobutyl carbinol,	2-methyl-butanol-4	$(CH_3)_2CHCH_2CH_2OH$	88.15	col. lq.	$0.813^{15/4}$	−117.2	132.0	2^{14}	∞	∞

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
		$(C_2H_5)_2CHOH$	88.15	col. lq.	$0.815^{25/4}$		115.6	5.5^{30}	∞	∞
(*s*-,*i*-)	2-methyl-butanol-3	$(CH_3)_2CHCH(OH)CH_3$	88.15	col. lq.	0.819^{19}		113–4	2.8^{30}	∞	∞
(*t*-)	2-methyl-butanol-2	$(CH_3)_2C(OH)C_2H_5$	88.15	col. lq.	$0.809^{20/4}$	−11.9	102	sl. s.	s.	s.
		$(CH_3)_3CCH_2OH$	88.15	cr.		52–3	113–4	sl. s.	∞	∞
(*d*-)	active amyl alcohol	$C_2H_5CH(CH_3)CH_2OH$	88.15	col. lq.	$0.816^{20/4}$		128	3.6^{30}	∞	∞
-amine (*n*-)		$CH_3(CH_2)_4NH_2$	87.16	col. lq.	0.766^{19}	−55	103–4	s.	s.	s.
(*s*-,*n*-)		$(C_3H_7)(CH_3)CHNH_2$	87.16	col. lq.	$0.749^{20/4}$		91–2	∞	∞	∞
(*i*-)		$(CH_3)_2CH(CH_2)_2NH_2$	87.16	col. lq.	$0.751^{18/4}$		95	∞	∞	∞
(*t*-)		$(C_2H_5)(CH_3)_2CNH_2$	87.16	col. lq.	$0.731^{25/4}$	−105	77–8	∞	∞	∞
	1-NH_2-2-Me-butane	$C_2H_5CH(CH_3)CH_2NH_2$	87.16	col. lq.	0.755^{18}		95–6	∞	∞	∞
	3-amino pentane	$(C_2H_5)_2CHNH_2$	87.16	col. lq.	$0.749^{20/4}$		90–1	∞	∞	∞
	3-NH_2-2-Me-butane	$(CH_3)_2CHCH(CH_3)NH_2$	87.16	col. lq.	0.757^{18}		83–4	∞	∞	∞
aniline (*i*-)		$C_6H_5NHC_5H_{11}$	163.26	lq.	$0.928^{15/4}$		254.5	i.		
benzoate (*i*-)		$C_6H_5CO_2C_5H_{11}$	192.25	col. lq.	$0.992^{14/14}$		261^{746}	i.	∞	∞
bromide (*n*-)	1-bromopentane	$CH_3(CH_2)_3CH_2Br$	151.04	col. lq.	$1.218^{20/4}$	−95	129.7	i.	s.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
(*i*-)	4-Br-2-Me-butane	$(CH_3)_2CH(CH_2)_2Br$	151.04	col. lq.	$1.220^{17/15}$		120^{745}	0.02^{16}	s.	s.
(*t*-)	2-Br-2-Me-butane	$(CH_3)_2C(Br)C_2H_5$	151.04	lq.	$1.216^{19/0}$		108^{765}	i.	s.	s.
n-butyrate (*n*-)		$C_2H_5CH_2CO_2(CH_2)_4CH_3$	158.24	col. lq.	$0.871^{15/4}$	−73.2	186.4	0.05^{50}	∞	∞
(*i*-)		$C_2H_5CH_2CO_2{\cdot}C_5H_{11}$	158.24	col. lq.	$0.866^{19/15}$		178.6	i.	∞	∞
(*t*-)		$C_3H_7CO_2C(CH_3)_2C_2H_5$	158.24	col. lq.	$0.865^{15/0}$		164	sl. s.	∞	∞
i-butyrate (*i*-)		$(CH_3)_2CHCO_2C_5H_{11}$	158.24	lq.	$0.876^{0/4}$		168.8	i.	s.	s.
chloride (*n*-)	1-chloropentane	$CH_3(CH_2)_3CH_2Cl$	106.59	col. lq.	$0.878^{20/4}$	−99	108.4	i.	s.	s.
(*s*-)	2-chloropentane	$C_2H_5CH_2CHClCH_3$	106.59	lq.	$0.870^{20/4}$		96.7	i.	s.	s.
(*s*-)	3-chloropentane	$(C_2H_5)_2CHCl$	106.59	col. lq.	0.895^{21}		97.3	i.	∞	∞
(*i*-)	4-Cl-2-Me-butane	$(CH_3)_2CH(CH_2)_2Cl$	106.59	col. lq.	$0.893^{20/4}$		99.7^{758}	i.	s.	∞
(*s*-,*i*-)	3-Cl-2-Me-butane	$(CH_3)CHCHClCH_3$	106.59	lq.	0.883^{0}		91^{753}	i.	s.	s.
(*t*-)	2-Cl-2-Me-butane	$(CH_3)_2CClC_2H_5$	106.59	lq.	$0.871^{20/4}$	−72.9	85.7	i.	s.	s.
	1-Cl-2-Me-butane	$(CH_3)(C_2H_5)CHCH_2Cl$	106.59	lq.	$0.881^{17.5}$		98–9	i.	s.	s.
i-cyanide (*i*-)	iso-caproic iso-nitrile	$(CH_3)_2CH(CH_2)_2NC$	97.16	lq.			137–9	i.	s.	s.

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
formate (*n*-)		$HCO_2CH_2(CH_2)_3CH_3$	116.16	lq.	0.902^{0}	−73.5	132	v. sl. s.	∞	∞
(*i*-)		$HCO_2CH_2CH_2CH(CH_3)_2$	116.16	lq.	$0.882^{20/4}$	−93.5	123.5	0.3^{22}	∞	∞
iodide (*n*-)	1-iodopentane	$CH_3(CH_2)_3CH_2I$	198.05	lq.	$1.510^{20/4}$	−86	157.0	i.	s.	∞
(*i*-)	4-I-2-Me-butane	$(CH_3)_2CHCH_2CH_2I$	198.05	lq.	$1.515^{18/4}$		147^{765}	i.	∞	∞
(*s*-,*n*-)	2-iodopentane	$C_2H_5CH_2CHICH_3$	198.05	lq.	$1.507^{17/4}$		144–5	i.	∞	∞
(*t*-)	2-I-2-Me-butane	$(CH_3)_2CIC_2H_5$	198.05	lq.	$1.471^{19/15}$		127^{765}	i.	∞	∞
		$C_2H_5CH(CH_3)CH_2I$	198.05	lq.	$1.524^{20/4}$		148	i.	∞	∞
mercaptan (*n*-)	pentanthiol-1	$CH_3(CH_2)_3CH_2SH$	104.21	lq.	0.857^{20}		126^{767}	i.	∞	∞
(*n*-)	pentanthiol-3	$(C_2H_5)_2CHSH$	104.21	col. lq.			105	i.	∞	∞
(*i*-)	2-Me-butanthiol-4	$(CH_3)_2CH(CH_2)_2SH$	104.21	lq.	$0.835^{20/4}$		120	i.	∞	∞
phenol (*t*-)(*p*-)	pentaphen	$C_5H_{11}{\cdot}C_6H_4OH$	164.24	cr.		93	265–7	sl. s.	s.	s.
propionate (*n*-)		$C_2H_5CO_2(CH_2)_4CH_3$	144.21	lq.	$0.876^{15/4}$	−73.1	168.7	i.	∞	∞
(*i*-)		$C_2H_5CO_2(CH_2)_2CH(CH_3)_2$	144.21	col. lq.	$0.870^{20/4}$		160.2	0.1^{25}	∞	∞
(act.)		$C_2H_5CO_2C_5H_{11}$	144.21	col. lq.	$0.866^{20/4}$		58^{16}	v. sl. s.	∞	∞
salicylate (*n*-)		$HOC_6H_4CO_2C_5H_{11}$	208.25	lq.	1.065^{15}		265	i.	∞	∞

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts		
								Water	Alcohol	Ether
Amyl *i*-valerate (*i*)		$C_4H_9CO_2C_5H_{11}$	172.26	col. lq.	$0.858^{20/15}$		194	v. sl. s.	∞	∞
(*t*-)		$C_4H_9CO_2C_5H_{11}$	172.26	col. lq.	$0.861^{14/0}$		173–4	sl. s.	s.	s.
Amylene (*n*-)(α-)	pentene-1	$C_2H_5CH_2CH:CH_2$	70.13	lq.	0.644^{20}		30–1	i.	∞	∞
(*i*-)	2-methyl-butene-3	$(CH_3)_2CHCH:CH_2$	70.13	col. lq.	0.632^{15}	−135	20.5^{771}	i.	∞	∞
(α-)	2-methyl-butene-1	$(C_2H_5)(CH_3)C:CH_2$	70.13	col. lq.	$0.667^{0/0}$		$31–2^{758}$	i.	∞	∞
(-*n*)(β-)	pentene-2	$C_2H_5CH:CHCH_3$	70.13	col. lq.	$0.650^{20/4}$	−139	36.4	v. sl. s.	∞	∞
(*i*-)(β-)	2-methyl-butene-2	$(CH_3)_2C:CHCH_3$	70.13	col. lq.	$0.663^{19/4}$	−124	37–8	i.	s.	∞
Anethole (*p*-)	*p*-propenyl anisole	$CH_3CH:CH·C_6H_4OCH_3$	148.20	lf./al.	$0.991^{20/20}$	22.5	235.3	v. sl. s.	s.	∞
Anhydroformald-aniline	methylene aniline	$(CH_2NC_6H_5)_3$	315.41	pr./al.		143	185	i.	sl. s.	s.
Aniline	amino benzene, phenyl amine, cyanol	$C_6H_5NH_2$	93.13	col. oil	$1.022^{20/4}$	−6.2	184.4	3.6^{18}	∞	∞
hydrochloride	aniline salt, aniline chloride	$C_6H_5NH_2·HCl$	129.59	cr.	1.222^{4}	198	245	18^{15}	s.	i.
nitrate		$C_6H_5NH_2·HNO_3$	156.14	rhb.	1.356^{4}	d. 190		s.	s.	sl. s.
sulfate		$(C_6H_5NH_2)_2·H_2SO_4$	284.33	lf./al.	1.377^{4}	d.		5^{14}	sl. s.	i.
Anisal-acetone (*p*-)	MeO-benzalacetone	$CH_3OC_6H_4CH:CHCOCH_3$	176.21	lf./et.		73–4		i.	v. s.	v. s.
Anisic acid (*p*-)		$CH_3OC_6H_4CO_2H$	152.15	mn./aq.	1.385^{4}	184.2	275–80	0.03^{19}	v. s.	v. s.

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts		
								Water	Alcohol	Ether
aldehyde (*p*-)		$CH_3OC_6H_4CHO$	136.15	col. oil	$1.123^{20/4}$	2.5	247–8	v. sl. s.	∞	∞
Anisidine (*o*-)	2-amino-anisole	$CH_3OC_6H_4NH_2$	123.15	col. lq.	$1.098^{15/15}$	5.2	225	v. sl. s.	∞	∞
(*m*-)	MeO-aniline(*m*)	$CH_3OC_6H_4NH_2$	123.15	oil	$1.096^{20/4}$	<−12	251	v. sl. s.	s.	s.
(*p*-)	4-amino anisole	$CH_3OC_6H_4NH_2$	123.15	pl./aq.	$1.089^{55/55}$	57.2	243	s. h.	s.	s.
Anisole	methyl phenyl ether	$CH_3OC_6H_5$	108.14	col. lq.	$0.990^{22/4}$	−37.3	154–5	i.	s.	s.
Anthracene	paranaphthalene, anthracin green oil	$C_6H_4:(CH)_2:C_6H_4$	178.23	col. mn.	$1.25^{27/4}$	217–8	340–2	i.	1.5^{20}	
Anthramine (α)	α-amino-anthracene	$C_6H_4:(CH)_2:C_6H_3NH_2$	193.24	yel./al.		130±		i.	s.	
(β)	β-amino-anthracene	$C_6H_4:(CH)_2:C_6H_3NH_2$	193.24	yel./al.		238	subl.	i.	sl. s.	sl. s.
Anthranil		$C_6H_4:(NH)CO$	119.12	col. oil	$1.187^{15/4}$	<−18	d. >215	sl. s. h.	s.	s.
Anthranilic acid (*o*-)		$H_2NC_6H_4CO_2H$	137.14	col. rhb.		144–5	subl.	0.35^{14}	11^{10}	16^{7}
Anthrapurpurin (1-,2-,7-)		$C_{14}H_5O_2(OH)_3$	256.21	or. nd./al.		369	462	sl. s. h.	v. s. h.	sl. s.
Anthraquinone	diphenyleneketone, dihydrodiketoanthracene	$C_6H_4:(CO)_2:C_6H_4$	208.21	yel. rhb.	$1.438^{20/4}$	286	379–81	i.	0.05^{18}	v. sl. s.
disulfonate Na_2 (1-,5-)	ρ-anthraquinone disulfonate	$C_{14}H_6O_2(SO_3Na)_2{\cdot}5H_2O$	502.38	yel. lf.				v. s.	i.	i.

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts		
								Water	Alcohol	Ether
(1-,8-)	*x*-anthraquinone disulfonate	$C_{14}H_6O_2(SO_3Na)_2{\cdot}4H_2O$	484.36	yel. pr.				sl. s.		
(2-,6-)		$C_{14}H_6O_2(SO_3Na)_2{\cdot}7H_2O$	538.41	col. cr.				3.9^{20}		
(2-,7-)		$C_{14}H_6O_2(SO_3Na)_2{\cdot}4H_2O$	484.36	cr.				30.5^{20}	v. sl. s.	i.
sulfonate Na (1-)		$C_{14}H_7O_2SO_3Na$	310.26	yel. lf.				0.53^{20}	i.	i.
(2-)		$C_{14}H_7O_2SO_3Na$	310.26	silv. lf.				0.84^{25}	i.	i.
Anthrarufin (1-,5-)		$C_{14}H_6O_2(OH)_2$	240.21	yel. lf.		280	subl.	i.	sl. s.	s.
Antipyrene	1-ph-2,3-diMepyrazolone-5	$C_{11}H_{12}ON_2$	188.23	mn./aq.	$1.088^{113/4}$	113(109)	319^{174}	100^{25}	100	sl. s.
Apiole	1-allyl-2,5-diMeO-3,4 methylenedioxybenzene	$C_{12}H_{14}O_4$	222.24	col. nd.	$1.02^{20/4}$	30	294	i	s.	s.
Arabinose (α)(*d*- or *l*-)		$CH_2OH(CHOH)_3CHO$	150.13	rhb. pr.	$1.585^{20/4}$	159.5		46^{0}	$0.5^{9^{\circ}}$	i.
(*dl*-)		$CH_2OH(CHOH)_3CHO$	150.13			164.5		16.9^{10}		
Arachidic acid	eicosanoic acid	$CH_3(CH_2)_{18}CO_2H$	312.53	col. lf.		77	328	i.	s. h.	v. s.
Arsanilic acid (*p*-)		$H_2N{\cdot}C_6H_4.AsO_3H_2$	217.05	nd./aq.		232		v. s. h.	v. s. h.	i.
Asparagine (*l*-)		$HO_2C{\cdot}C_2H_3(NH_2){\cdot}CONH_2$	132.12	rhb.	$1.543^{15/4}$	227–35	d. 235	3.1^{28}	i. c.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts		
								Water	Alcohol	Ether
Aspirin (o-)		$CH_3CO_2 \cdot C_6H_4 \cdot CO_2H$	180.16	nd./aq.		135–6		1^{37}	s.	5^{20}
Atropic acid	α-phenyl acrylic acid	$C_6H_5C(:CH_2) \cdot CO_2H$	148.16	nd./aq.		106–7	267 d.	0.1 c.	s.	s.
Auramine	4,4'-dimethyl aminobenzo-phenomide	$[(CH_3)_2NC_6H_4]_2C:NH$	267.37	col./al.		136		i.	7^{20}	2.3^{20}
Aurine, coralline (4-,4'-)		$(HOC_6H_4)_2C:C_6H_4:O$	290.31	red		310 d.		i.	s.	s.
Azo-anisole (2-,2'-)	diMeO-azobenzene	$(CH_3O \cdot C_6H_4N:)_2$	242.27	or. pr.		153		i.	s.	s.
benzene	diphenyl diimide	$C_6H_5N:N \cdot C_6H_5$	182.22	or. mn.	$1.203^{20/4}$	68	297	i.	4.2^{20}	
Azoxybenzene		$(C_6H_5)_2N_2O$	198.22	yel. rhb.	$1.248^{20/20}$	36	d.	i.	11.4^{15}	
Barbituric acid	malonyl urea	$CO:(NHCO)_2:CH_2 \cdot 2H_2O$	164.12	col./aq.		d. 245		s. h.	sl. s.	s.
Benzal acetone	Me-cinnamyl ketone	$C_6H_5CH:CHCOCH_3$	146.19	pl.	$1.035^{20/20}$	41–2	260–2	i.	s.	s.
Benzaldehyde	artificial almond oil	C_6H_5CHO	106.12	col. lq.	$1.046^{20/4}$	−26	179	0.3	∞	∞
Benzamide		$C_6H_5CONH_2$	121.14	col. pr.	1.341	130	290	1.35^{25}	17^{25}	sl. s.
Benzanilide		$C_6H_5CONHC_6H_5$	197.23	lf./al.	1.31^4	163	$117–9^{10}$	i.	4^{30}	sl. s.
Benzene	benzol, phenyl hydride, cyclohexatriene	C_6H_6	78.11	col. lq.	$0.879^{20/4}$	5.5	80.1	0.07^{22}	s.	∞
sulfinic acid		$C_6H_5SO_2H$	142.18	pr./aq.		83–4	d. > 100	v. s. h.	v. s.	v. s.

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts		
								Water	Alcohol	Ether
sulfonic acid		$C_6H_5SO_3H$	158.18	col. nd.		65–6	d.	v. s.	v. s.	i.
sulfonic amide	benzene sulfonamide	$C_6H_5SO_2NH_2$	157.19	mn./aq.		156		0.43^{16}	v. s.	v. s.
sulfonic chloride	benzene sulfonyl chloride	$C_6H_5SO_2Cl$	176.62	cr.	$1.384^{15/15}$	14.5	251.5	i.	v. s.	s.
Benzidine (4-,4'-)		$NH_2{\cdot}C_6H_4{\cdot}C_6H_4{\cdot}NH_2$	184.24	cr./aq.		128–9	400^{740}	1 h.	1 h.	2
disulfonic acid (2-,2'-)		$(\cdot C_6H_3(NH_2)SO_3H)_2{\cdot}3H_2O$	398.41	pr./aq.		d. >175		0.09^{25}	i.	i.
(3-,3'-)		$(\cdot C_6H_3(NH_2)SO_3H)_2$	344.36					v. sl. s.		
Benzil	dibenzoyl	$C_6H_5CO{\cdot}COC_6H_5$	210.23	pr.	1.23^{15}	95	348 d.	i.	v. s.	v. s.
Benzoic acid		$C_6H_5CO_2H$	122.12	mn. pr.	$1.266^{15/4}$	121.7	249.2	0.2^{17}	46^{15}	66^{15}
anhydride		$(C_6H_5CO)_2O$	226.23	rhb./et.	$1.199^{15/4}$	42	360	i.	s.	s.
nitrile	phenyl cyanide	C_6H_5CN	103.12	col. lq.	$1.001^{25/6}$	−12.9	190.7	1^{100}	∞	∞
Benzoin (*dl*-)		$C_6H_5CO{\cdot}CHOHC_6H_5$	212.24	mn.		133–7	344^{768}	v. sl. s.	s. h.	sl. s.
Benzophenone	diphenyl ketone	$C_6H_5COC_6H_5$	182.22	col. rhb.	1.083^{54}	48.5	305.4	i.	6.5^{15}	15^{13}
Benzotrichloride	phenyl chloroform	$C_6H_5CCl_3$	195.47	col. lq.	1.380^{14}	−4.75	220.7	i.	s.	s.
Benzoyl-benzoic acid (*o*-)		$C_6H_5COC_6H_4CO_2H{\cdot}H_2O$	244.24	tri./aq.		93(128)		sl. s.		
-chloride		C_6H_5COCl	140.57	col. lq.	$1.212^{20/4}$	−0.5	197.2	d.	d. h.	∞

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
-peroxide		$(C_6H_5CO)_2O_2$	242.23	rhb./et.		108 d.	expl.	i.	s. h.	s.
Benzyl acetate		$CH_3CO_2CH_2C_6H_5$	150.17	col. lq.	1.057^{17}	−51.5	213.5	i.	∞	∞
alcohol	phenyl carbinol	$C_6H_5CH_2OH$	108.14	col. lq.	$1.043^{20/4}$	−15.3	204.7	4^{17}	∞	∞
amine	ω-amino toluene	$C_6H_5CH_2NH_2$	107.15	lq.	$0.982^{20/4}$		184.5	∞	∞	∞
aniline	phenyl-benzylamine	$C_6H_5CH_2NHC_6H_5$	183.25	mn. pr.	$1.065^{25/25}$	37–8	306^{750}	i.		s.
benzoate		$C_6H_5CO_2CH_2C_6H_5$	212.24	nd.	$1.12^{20/4}$	21	323–4	i.	∞	∞
butyrate		$C_2H_5CH_2CO_2CH_2C_6H_5$	178.23	col. lq.	$1.016^{16/18}$	238–40	i.	v. s.	v. s.	
chloride	ω-chlorotoluene	$C_6H_5CH_2Cl$	126.58	col. lq.	$1.100^{20/20}$	−39	179.4	i.	∞	∞
ether	dibenzyl ether	$(C_6H_5CH_2)_2O$	198.26	lq.	1.036^{16}		295–8	i.	s. h.	s.
formate		$HCO_2CH_2C_6H_5$	136.15	col. lq.	1.081^{23}	3.6	$202–3^{747}$	i.	s.	∞
propionate		$C_2H_5CO_2CH_2C_6H_5$	164.20	lq.	$1.036^{16/17}$		220–2	i.		
Berberonic acid (2-,4-,5-)		$C_5H_2N(CO_2H)_3{\cdot}2H_2O$	247.16	tri.		243		v. sl. s.	sl. s. h.	i.
Biuret	allophanamide	$NH(CONH_2)_2$	103.08	nd./al.		192–3 d.		1.3^{0}	s.	
Borneol (*dl*-)		$C_{10}H_{17}OH$	154.25	col. cr.	$1.011^{20/4}$	210.5	subl.	v. sl. s.		
(*d*- or *l*-)		$C_{10}H_{17}OH$	154.25	col. cr.	$1.011^{20/4}$	208–9	212–3	v. sl. s.	v. s.	v. s.
(iso-)		$C_{10}H_{17}OH$	154.25	col. cr.		212		i.		
Bornyl acetate (*d*-)		$CH_3CO_2C_{10}H_{17}$	196.29	rhb./pet.	0.991^{15}	29	226–7	i.	s.	s.

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts		
								Water	Alcohol	Ether
Bromo-aniline (*p*-)		$BrC_6H_4NH_2$	172.02	rhb.	1.8^{20}	63–4		i. c.	v. s.	v. s.
- benzene	phenyl bromide	C_6H_5Br	157.01	col. lq.	$1.495^{20/4}$	−30.6	156.2	i.	s.	∞
- camphor (3-)(*d*-)	α-bromocamphor	$BrC_{10}H_{15}O$	231.13	cr.	$1.449^{20/4}$	77–8	274	i.	20^{26}	v. s.
- diphenyl (*p*-)		$BrC_6H_4 \cdot C_6H_5$	233.10	cr./al.		90–1	310	i.	s.	34^{25}
- naphthalene (α-)	α-naphthyl bromide	$C_{10}H_7Br$	207.07	col. oil	$1.482^{20/4}$	5–6	281.1	i.	s.	∞
(β-)	β-naphthyl bromide	$C_{10}H_7Br$	207.07	lf./al.	1.605^{0}	59	281–2	i.	6^{20}	v. s.
- phenol (*o*-)		BrC_6H_4OH	173.01	col. lq.	1.553^{80}	5.6	194–5	s.	s.	∞
(*m*-)		BrC_6H_4OH	173.01	cr.		32–3	236–7		s.	s.
(*p*-)		BrC_6H_4OH	173.01	tet. cr.	1.588^{80}	63.5	238	1.4^{15}	v. s.	v. s.
- styrene (ω)(1)		$C_6H_5CH:CHBr$	183.05	lq.	$1.422^{20/4}$	7	221	i.	∞	∞
(2)		$C_6H_5CH:CHBr$	183.05	lq.	$1.427^{20/4}$	−7.5	108^{26}	i.	∞	∞
- toluene (*o*-)	*o*-tolyl bromide	$CH_3 \cdot C_6H_4Br$	171.03	col. lq.	$1.422^{20/4}$	−28	181.8	i.	s.	∞^{25}
(*m*-)		$CH_3 \cdot C_6H_4Br$	171.03	col. lq.	$1.410^{20/4}$	−39.8	183.7	i.	s.	s.
(*p*-)		$CH_3 \cdot C_6H_4Br$	171.03	cr./al.	$1.390^{20/4}$	28.5	184–5	i.	s.	∞^{25}
Bromoform	tribromo-methane	$CHBr_3$	252.73	col. lq.	$2.890^{20/4}$	8–9	150.5	0.1 c.	∞	∞
Butadiene (1-,2-)	methyl-allene	$CH_3CH:C:CH_2$	54.09	lq.			18–9	i.	∞	∞

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
(1-,3-)	erythrene	CH_2:CHCH:CH_2	54.09	col. gas	$0.621^{20/4}$	−108.9	−4.41	i.	∞	∞
Butadienyl acetylene		CH_2:$(CH)_2$:CH·C ⋮ CH	78.11	col. lq.	$0.773^{20/4}$		83–6	i.		
Butane	diethyl	CH_3CH_2 CH_2CH_3	58.12	col. gas	0.60^{0}	−135	−0.6	i.	s.	s.
(*i*-)	trimethyl-methane	$(CH_3)_2C$ HCH_3	58.12	col. gas	0.60^{0}	−145	−10	i.	s.	s.
Butyl acetate (*n*-)		$CH_3CO_2(CH_2)_2C_2H_5$	116.16	col. lq.	0.882^{20}	−76.3	125^{740}	0.7	∞	∞
(*s*-)		CH_3CO_2 $CH(CH_3)C_2H_5$	116.16	col. lq.	$0.865^{25/4}$		112^{744}	i.	∞	∞
(*i*-)		CH_3CO_2 $CH_2CH(CH_3)_2$	116.16	col. lq.	$0.871^{20/4}$	−98.9	118	0.6^{25}	∞	∞
(*tert*-)		CH_3CO_2 $C(CH_3)_3$	116.16	col. lq.	$0.866^{20/4}$		$95–6^{760}$	i.	∞	∞
alcohol (*n*-)	butanol-1	$C_2H_5CH_2$ CH_2OH	74.12	col. lq.	$0.810^{20/4}$	−79.9	117	9^{15}	∞	∞
(*s*-)	butanol-2	$C_2H_5CH(OH)CH_3$	74.12	col. lq.	$0.808^{20/4}$	−114.7	99.5	12.5^{20}	∞	∞
(*i*-)	2-methyl-propanol-1	$(CH_3)_2C$ HCH_2OH	74.12	col. lq.	$0.805^{17.5}$	−108	107–8	10^{15}	∞	∞
(*tert*-)	2-methyl-propanol-2	$(CH_3)_3C$ OH	74.12	lq.	0.779^{26}	25.5	82.9	∞	∞	∞
amine (*n*-)		$C_2H_5CH_2$ CH_2NH_2	73.14	col. lq.	$0.739^{25/4}$	−50	77.8	∞	∞	∞
(*s*-)		$C_2H_5CH(NH_2)CH_3$	73.14	col. lq.	$0.724^{20/4}$	−104	66^{772}	∞	∞	∞
(*i*-)		$(CH_3)_2C$ HCH_2NH_2	73.14	col. lq.	$0.732^{20/20}$	−85	68–9	∞	∞	∞

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
(*t*-)		$(CH_3)_3CNH_2$	73.14	col. lq.	$0.698^{18/4}$	−67.5	45.2		∞	
p-aminophenol (*N*)(*n*)		$C_4H_9NH\cdot C_6H_4\cdot OH$	165.23			71		i.		
(*N*)(*i*-)		$C_4H_9NH\cdot C_6H_4\cdot OH$	165.23			79		i.		
aniline (*n*-)		$C_4H_9NHC_6H_5$	149.23	lq.			235^{720}	i.	v. s.	v. s.
(*i*-)		$C_4H_9NHC_6H_5$	149.23	oil	$0.940^{20/4}$		231–2	0.01^{15}	v. s.	v. s.
arsonic acid (*n*-)		$C_4H_9AsO(OH)_2$	182.05	col. lf.		158–9		s.	s.	i.
benzoate (*n*-)		$C_6H_5CO_2C_4H_9$	178.23	col. oil	$1.005^{25/25}$	−22	249–50	i.	s.	s.
(*i*-)		$C_6H_5CO_2C_4H_9$	178.23	col. oil	$0.997^{25/25}$		241.5	i.	∞	∞
bromide (*n*-)	1-bromo-butane	$C_2H_5CH_2CH_2Br$	137.02	lq.	$1.277^{20/4}$	−112.4	101.6	0.06^{16}	∞	∞
(*s*-)	2-bromo-butane	$C_2H_5CH(Br)CH_3$	137.02	lq.	$1.251^{25/4}$	−112	91.3	i.		
(*i*-)	1-Br-2-Me-propane	$(CH_3)_2CHCH_2Br$	137.02	lq.	$1.258^{25/4}$	−118.5	91.5	0.06^{18}	∞	∞
(*t*-)	2-Br-2-Me-propane	$(CH_3)_3CBr$	137.02	lq.	$1.211^{20/4}$	−16.2	73.3	i.	∞	∞
butyrate (*n*-)(*n*-)		$C_2H_5CH_2CO_2CH_2CH_2C_2H_5$	144.21	col. lq.	$0.872^{20/20}$		165.7^{736}	i.	∞	∞
(*n*-)(*i*-)		$C_2H_5CH_2CO_2CH_2CH(CH_3)_2$	144.21	col. lq.	$0.863^{18/4}$		156.9	i.	∞	∞
(*i*-)(*i*-)		$(CH_3)_2CHCO_2CH_2CH(CH_3)_2$	144.21	col. lq.	$0.875^{0/4}$	−80.7	148–9	i.	∞	∞

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
caproate		$CH_3(CH_2)_4CO_2C_4H_9$	172.26	col. lq.	$0.882^{0/0}$		204.3	i.		
carbamate (*i*-)		$NH_2CO_2CH_2CH(CH_3)_2$	117.15	col. lf.	$0.956^{76/4}$	65	206–7	i.	s.	s.
cellosolve (*n*-)	2-BuO-ethanol-1	$C_4H_9OCH_2CH_2OH$	118.17	col. lq.	$0.903^{20/4}$		171.2	∞	∞	∞
chloride (*n*-)	1-chloro-butane	$C_2H_5CH_2CH_2Cl$	92.57	col. lq.	0.887^{20}	−123.1	77.9^{763}	0.07^{18}	∞	∞
(*s*-)	2-chloro-butane	$C_2H_5{\cdot}CHCl{\cdot}CH_3$	92.57	col. lq.	$0.871^{20/4}$	−131	67.8^{767}	i.	∞	∞
(*i*-)	1-Cl_2-2-Me-propane	$(CH_3)_2CHCH_2Cl$	92.57	col. lq.	0.884^{15}	−131.2	68.9	i.	∞	∞
(*t*-)	2-Cl_2-2-Me-propane	$(CH_3)_3CCl$	92.57	col. lq.	0.847^{15}	−26.5	51–2	i.	∞	∞
dimethyl benzene (*t*-)(1-,3-,5-)		$(CH_3)_3C{\cdot}C_6H_3{:}(CH_3)_2$	162.27	col. lq.			$200–2^{147}$	i.		
formate (*n*-)		$HCO_2CH_2CH_2C_2H_5$	102.13	lq.	0.911^{0}		106.9	v. sl. s.	∞	∞
(*s*-)		$HCO_2CH(CH_3)C_2H_5$	102.13	lq.	$0.882^{20/4}$		97	sl. s.	∞	∞
(*i*-)		$HCO_2CH_2CH(CH_3)_2$	102.13	lq.	$0.885^{20/4}$	−95.3	98.2	1.1^{22}	∞	∞
furoate (*n*-)		$OC_4H_3CO_2C_4H_9$	168.19	col. lq.	$1.056^{20/4}$		$118–20^{25}$	i.	∞	∞
iodide (*n*-)	1-iodo-butane	$C_2H_5CH_2CH_2I$	184.02	lq.	$1.617^{20/4}$	−103.5	129.9	i.	∞	∞
(*s*-)	2-iodo-butane	$C_2H_5CHICH_3$	184.02	lq.	1.595^{20}	−104	118–9	i.	∞	∞

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
(*i*-)	1-iodo-2-Me-propane	$(CH_3)_2CHCH_2I$	184.02	lq.	$1.606^{20/4}$	−90.7	120	i.	∞	∞
(*t*-)	2-iodo-2-Me-propane	$(CH_3)_3CI$	184.02	lq.	$1.370^{19/15}$	−34	99	i.	∞	∞
lactate (*n*-)		$CH_3CH(OH)CO_2C_4H_9$	146.18	col. lq.	0.968		$75–6^{6}$	sl. s.	∞	∞
mercaptan (*n*-)	butanthiol-1	$C_2H_5CH_2CH_2SH$	90.19	col. lq.	$0.837^{25/4}$	−116	97–8	sl. s.	v. s.	v. s.
(*i*-)	2-Me-propanthiol-1	$(CH_3)_2CHCH_2SH$	90.19	lq.	$0.836^{20/4}$	<−79	88	v. sl. s.	s.	s.
(*t*-)		$(CH_3)_3CSH$	90.19	lq.			65–7			
methacrylate (*n*-)		$CH_2{:}C(CH_3)CO_2C_4H_9$	142.20	lq.	$0.889^{15.6}$		155	i.		
(*i*-)		$CH_2{:}C(CH_3)CO_2C_4H_9$	142.20	lq.	$0.889^{15.6}$		155	i.		
phenol (*p*-)(*t*-)		$(CH_3)_3C{\cdot}C_6H_4{\cdot}OH$	150.22	nd./aq.	$0.908^{112/4}$	99	236–8	sl. s.	s.	s.
propionate (*n*-)		$C_2H_5CO_2C_4H_9$	130.18	col. lq.	0.883^{15}	−89.55	146	i.	∞	∞
(*s*-)		$C_2H_5CO_2C_4H_9$	130.18	col. lq.	$0.866^{20/4}$		132.5	i.	∞	∞
(*i*-)		$C_2H_5CO_2C_4H_9$	130.18	col. lq.	$0.888^{0/4}$	−71.4	136.8	i.	∞	∞
stearate (*n*-)		$CH_3(CH_2)_{16}CO_2C_4H_9$	340.58	col. lq.	$0.855^{25/25}$	27.5	$220–5^{25}$	0.3^{25}	s.	s.
(*i*-)		$CH_3(CH_2)_{16}CO_2C_4H_9$	340.58	wax		25		i.		
isothiocyanate (*n*-)	butyl mustard oil	$C_2H_5CH_2CH_2{\cdot}N{:}CS$	115.20	lq.	0.956^{11}		165^{724}	i.	s.	s.

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts		
								Water	Alcohol	Ether
(*i*-)	iso-Bu mustard oil	$(CH_3)_2CHCH_2{\cdot}N{:}CS$	115.20	lq.	$0.964^{14/4}$		162	i.	s.	s.
(*s*-)(*d*-)		$C_4H_9{\cdot}N{:}CS$	115.20	lq.	$0.943^{20/4}$		159–63	i.	s.	s.
(*t*-)		$(CH_3)_3C{\cdot}N{:}CS$	115.20	lq.	0.919^{10}	10.5	140^{770}	i.	s.	s.
valerate (*n*-)(*n*-)		$CH_3(CH_2)_3CO_2(CH_2)_3CH_3$	158.24	lq.	$0.870^{15/4}$	−93	186	v. sl. s.	∞	∞
(*i*-)(*n*-)		$(CH_3)_2CHCH_2CO_2(CH_2)_3CH_3$	158.24	lq.	$0.862^{25/4}$		168.8	i.	∞	∞
(*i*-)(*s*-)		$(CH_3)_2CHCH_2CO_2C_4H_9$	158.24	col. lq.	$0.848^{20/4}$		$163–4^{752}$	i.	∞	∞
(*i*-)(*i*-)		$C_4H_9CO_2C_4H_9$	158.24	col. lq.	$0.874^{0/4}$		168.7	i.	∞	∞
Butylene (α-)	butene-1	$C_2H_5CH{:}CH_2$	56.11	col. gas	0.6^{9}	−130	-5^{758}	i.	v. s.	v. s.
(β-)	butene-2	$CH_3CH{:}CHCH_3$	56.11	col. gas		−127	3^{746}			
Butyraldehyde (*n*-)		$CH_3CH_2CH_2CHO$	72.11	col. lq.	$0.817^{20/4}$	−99	75.7	4	∞	∞
(*i*-)	2-Me-propanol	$(CH_3)_2CHCHO$	72.11	col. lq.	$0.794^{20/4}$	−65.9	64^{757}	11^{20}	∞	∞
Butyric acid (*n*-)	butanoic acid	$C_2H_5CH_2CO_2H$	88.11	col. lq.	$0.964^{20/4}$	−4.7	163.5^{757}	∞	∞	∞
(*i*-)	2-Me-propanoic acid	$(CH_3)_2CHCO_2H$	88.11	col. lq.	$0.949^{20/4}$	−47	154.5	20^{20}	∞	∞
amide (*n*-)	*n*-butyramide	$C_2H_5CH_2CONH_2$	87.12	rhb.	1.032	115–6	216	16.3^{15}	s.	sl. s.
(*i*-)	iso-butyramide	$(CH_3)_2CHCONH_2$	87.12	mn. pl.	1.013	129–30	216–20	v. s.	s.	sl. s.
anhydride (*n*-)		$(C_2H_5CH_2CO)_2O$	158.19	col. lq.	$0.968^{20/20}$	−75	199.5	d.	d	∞

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts		
								Water	Alcohol	Ether
(*i*-)		$[(CH_3)_2CHCO]_2O$	158.19	col. lq.	$0.950^{25/4}$	−53.5	181.5^{734}	d.	d	∞
anilide (*n*-)	*n*-butyranilide	$C_3H_7CONHC_6H_5$	163.22	mn. pr.	1.134	92	189^{15}	i.	s.	s.
Caffeic acid (3-,4-)		$(HO)_2C_6H_3C_2H_2CO_2H$	180.16	yel./aq.		195–213	d.	s. h.	s.	sl. s.
Caffeine		$C_8H_{10}O_2N_4{\cdot}H_2O$	212.21	nd./al.	1.23^{19}	237	subl.	2	2	0.3
Camphene (*dl*-)		$C_{10}H_{16}$	136.23	cr.	0.822^{78}	50	160	i.	s.	s.
(*d*- or *l*-)		$C_{10}H_{16}$	136.23	cr.	$0.845^{50/4}$	42.7	159.6	i.	s.	s.
Camphor (*d*-)		$C_{10}H_{16}O$	152.23	trig.	$0.999^{9/9}$	178–9	209.1^{759}	0.1	120^{12}	v. s.
Camphoric acid (*d*-)		$C_8H_{14}(CO_2H)_2$	200.23	mn.	1.186	187		0.6^{12}	s.	
Cantharidine		$C_{10}H_{12}O_4$	196.20	cr.		212		0.003		
Capric acid	decanoic acid	$CH_3(CH_2)_8CO_2H$	172.26	col. nd.	0.889^{87}	31.5	268–70	0.003	s.	s.
Caproic acid (*n*-)	hexanoic acid	$CH_3(CH_2)_4CO_2H$	116.16	oily lq.	$0.922^{20/4}$	−1.5	202^{761}	1.1^{20}	s.	s.
(*i*-)	2-Me-pentanoic-5 acid	$(CH_3)_2CH(CH_2)_2{\cdot}CO_2H$	116.16	col. oil	$0.925^{20/4}$	−35	207.7	v. sl. s.	s.	s.
Caprylic acid (*n*-)	octanoic acid	$CH_3(CH_2)_6CO_2H$	144.21	col. lf.	$0.910^{20/4}$	16	237.5	0.07^{15}	s.	s.
Carbazole	diphenylenelimine, dibenzopyrrole	$(C_6H_4)_2NH$	167.21	lf.		244.8	354.8	i.	0.92^{14}	sl. s.
Carbitol	diethylene glycol mono-Et ether	$C_2H_5O(CH_2)_2O(CH_2)_2OH$	134.17	col. lq.	$0.990^{20/20}$		201.9	∞	v. s.	s.
Carbon disulfide		CS_2	76.14	col. lq.	$1.263^{20/4}$	−108.6	46.3	0.2^{0}	∞	∞

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
monoxide		CO	28.01	col. gas	$0.81^{-195/4}$	−207	−192	3.5^{0} cc.	s.	
suboxide		OC:C:CO	68.03	gas	1.114^{0}	−107	7^{761}	d.		s.
tetrabromide	tetrabromomethane	CBr_4	331.63	col. mn.	3.42	90.1(48)	189.5	0.02^{30}	s.	s.
tetrachloride	tetrachloromethane	CCl_4	153.82	col. lq.	$1.595^{20/4}$	−22.6	76.8	0.08^{20}	∞	∞
tetrafluoride	tetrafluoromethane	CF_4	88.00	gas			−128	sl. s.		
Carbonyl sulfide		COS	60.08	col. gas	1.24^{-87}	−138.2	-50.2^{760}	80^{14} cc.	s.	s.
Carminic acid		$C_{22}H_{20}O_{13}$	492.39	red pd.		d. 136		s.	s.	v. sl. s.
Carvacrol (1-,2-,4-)		$CH_3C_6H_3(OH)CH(CH_3)_2$	150.22	col. lq.	$0.977^{20/4}$	0.5	238	v. sl. s.	∞	∞
Carvacrylamine (2-,1-,4-)		$H_2NC_6H_3(CH_3)C_3H_7$	149.23	oil	0.994^{20}	−16	241	v. sl. s.	s.	s.
Carvone (*d*-)		$C_{10}H_{14}O$	150.22	col. lq.	$0.961^{20/4}$		230^{766}	i.	∞	∞
Cellosolve		$C_2H_5O(CH_2)_2OH$	90.12	col. lq.	$0.931^{20/4}$	−70	135.1	∞	∞	∞
acetate		$CH_3CO_2CH_2CH_2OC_2H_5$	132.16	col. lq.	$0.975^{20/4}$		156.3	22	∞	∞
Cellulose		$(C_6H_{10}O_5)x$	162.14	amor.	1.3–1.4		i.	i.	i.	
Cetyl acetate		$CH_3CO_2(CH_2)_{15}CH_3$	284.48	nd.	0.858^{20}	22–3	200^{15}	i.	v. sl. s. c.	
alcohol		$CH_3(CH_2)_{14}CH_2OH$	242.44	lf.	$0.818^{50/4}$	49–50	189.5^{15}	i.	s.	s.
Chloral		$CCl_3{\cdot}CHO$	147.39	col. lq.	$1.505^{25/4}$	−57	97.6^{768}	v. s.	∞	∞

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
	hydrate	$CCl_3{\cdot}CH(OH)_2$	165.40	mn. pr.	$1.619^{50/4}$	51.7	d. 98	474^{17}	v. s.	s.
Chloranil		OC:$(CCl{\cdot}CCl)_2$:CO	245.88	yel./bz.		290	subl.	i.	i. c.	i. c.
Chloretone		$Cl_3C{\cdot}C(OH)(CH_3)_2$	177.46	col. cr.		97	167	0.8 c.	111	s.
Chloro-acetanilide (*p*-)		$CH_3CONHC_6H_4Cl$	169.61	rhb.	1.385^{22}	175–6		sl. s.	s.	v. s.
	-acetic acid	$ClCH_2CO_2H$	94.50	col. cr.	$1.58^{20/20}$	61.2	189.5	v. s.	s.	s.
	-acetone	CH_3COCH_2Cl	92.52	col. lq.	1.162^{16}	−44.5	121	∞	∞	∞
	-acetophenone (ω-)	$C_6H_5COCH_2Cl$	154.59	rhb.	1.324^{15}	58–9	245–7	0.11	v. s.	v. s.
	-acetyl chloride	$ClCH_2COCl$	112.94	col. lq.	$1.498^{20/20}$		105	d.	d.	
	-aniline (*o*-)	$ClC_6H_4NH_2$	127.57	lq.	$1.213^{20/4}$	0	210.5	i.		s.
	(*m*-)	$ClC_6H_4NH_2$	127.57	lq.	$1.216^{20/4}$	−10.4	230^{767}	i.		s.
	(*p*-)	$ClC_6H_4NH_2$	127.57	rhb.	1.427^{19}	70–1	230–1	s. h.	s.	s.
	-anthraquinone (1-)	$C_6H_4(CO)_2C_6H_3Cl$	242.66	yel. nd.		162	subl.	i.	sl. s. h.	
	(2-)	$C_6H_4(CO)_2C_6H_3Cl$	242.66	nd./al.		208–9		i.		
	-benzaldehyde (*o*-)	ClC_6H_4CHO	140.57	nd.	1.29^{8}	11	208^{748}	v. sl. s.	v. s.	v. s.
	(*m*-)	ClC_6H_4CHO	140.57	pr.	1.250^{15}	17–8	213–4	v. sl. s.	v. s.	v. s.
	(*p*-)	ClC_6H_4CHO	140.57	pr.	1.196^{61}	47.8	213^{748}	s. h.	v. s.	v. s.
	-benzene	C_6H_5Cl	112.56	col. lq.	$1.107^{20/4}$	−45.2	132.1	0.049^{20}	∞	∞
	-benzoic acid (*o*-)	$ClC_6H_4CO_2H$	156.57	mn./aq.	$1.544^{25/4}$	141–2		0.208^{25}	s.	s.

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
	(*m*-)	$ClC_6H_4CO_2H$	156.57	pr.	$1.496^{25/4}$	158		0.041^{25}	s.	s.
	(*p*-)	$ClC_6H_4CO_2H$	156.57	tri.	1.541^{24}	242–3	subl.	0.008^{25}	s.	s.
	-buta-1,3-diene (2-)	$CH_2{:}CCl{\cdot}CH{:}CH_2$	88.54	col. lq.	$0.958^{20/20}$		59.4	v. sl. s.	∞	∞
	(1-)	$CH_2{:}CH{\cdot}CH{:}CHCl$	88.54	col. lq.	$0.965^{20/20}$		69	v. sl. s.	∞	∞
	-buta-1,2-diene (4-)	$CH_2{:}C{:}CH{\cdot}CH_2Cl$	88.54	col. lq.	$0.991^{20/20}$		88	d.		
	-dimethylhydantoin	—$C(CH_3)_2N(Cl)CON(Cl)CO$—	197.02		$1.5^{20/20}$	130		0.21^{25}		
	-dinitrobenzene (α) (1-,2-)(4-)	$ClC_6H_3(NO_2)_2$	202.55	cr./et.		39(36)	315 d.	i.	v. s. h.	v. s.
	(α)(1-,3-)(4-)	$ClC_6H_3(NO_2)_2$	202.55	rhb./et.	1.697^{22}	53(43)	315 d.	i.	s. h.	s.
	-diphenyl (*o*-)	$C_6H_5{\cdot}C_6H_4Cl$	188.65	cr.		34	267–8	i.		
	(*m*-)	$C_6H_5{\cdot}C_6H_4Cl$	188.65	cr.		89	284–5	i.		
	(*p*-)	$C_6H_5{\cdot}C_6H_4Cl$	188.65	lf.		77.5	282	i.		
	-hydroquinone	$ClC_6H_3(OH)_2$	144.56	mn.		106	263 sl. d.	v. s.	v. s.	v. s.
	-naphthalene (α-)	$C_{10}H_7Cl$	162.62	col. lq.	$1.194^{20/4}$	−20	259.3	i.	s.	∞
	(β-)	$C_{10}H_7Cl$	162.62	lf./al.	1.266^{16}	56–7	264^{751}	i.	v. s.	v. s.
	-nitrobenzene (*o*-)	$ClC_6H_4NO_2$	157.55	mn. nd.	$1.305^{80/4}$	32.5	245.5^{753}	i.	s. h.	s.
	(*m*-)	$ClC_6H_4NO_2$	157.55	yel./al.	$1.343^{50/4}$	44.4(24)	235.6	i.	v. s. h.	v. s.
	(*p*-)	$ClC_6H_4NO_2$	157.55	mn. pr.	1.298^{91}	83–4	242^{761}	i.	v. s. h.	v. s.
	-nitrotoluene (2-,4-)	$CH_3C_6H_3(NO_2)(Cl)$	171.58	cr.	1.256^{80}	38.2	240^{718}	i.		

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
(2-,6-)		$CH_3C_6H_3(NO_2)(Cl)$	171.58	cr.		37.5	238	i.		
-phenol (*o*-)		ClC_6H_4OH	128.56	col. lq.	$1.241^{18/15}$	7(0)	175–6	2.85^{20}	s.	s.
(*m*-)		ClC_6H_4OH	128.56	nd.	1.268^{25}	32–3	214	2.60^{20}	s.	s.
(*p*-)		ClC_6H_4OH	128.56	nd.	$1.306^{20/4}$	41–3	217	2.71^{20}	v. s.	v. s.
-propionic acid (α) (dl-)		$CH_3{\cdot}CHCl{\cdot}CO_2H$	108.52	col. lq.	1.306^{9}	<−20	186	∞	∞	∞
-toluene (*o*-)		$CH_3{\cdot}C_6H_4Cl$	126.58	col. lq.	$1.082^{20/4}$	−34	159.5	i.	s.	∞
(*m*-)		$CH_3{\cdot}C_6H_4Cl$	126.58	col. lq.	$1.072^{20/4}$	−47.8	161.6	i.	s.	∞
(*p*-)		$CH_3{\cdot}C_6H_4Cl$	126.58	col. lq.	$1.070^{20/4}$	7.5	162.2	i.	s.	∞
Chloroform		$CHCl_3$	119.38	col. lq.	1.489^{20}	−63.5	61.2	0.82^{20}	∞	∞
Chlorophyll (α-)		$C_{55}H_{72}O_5N_4Mg$	893.49			d.	i.	s.		
Chloropicrin		Cl_3CNO_2	164.38	lq.	$1.651^{23/4}$	−64	112.3^{766}	0.17^{18}	s.	s.
Cholesterol		$C_{27}H_{45}OH{\cdot}H_2O$	404.67	rhb./al.	1.067	149–51	subl.	0.26^{20}	1.1^{17}	18
Chrysene		$C_{18}H_{12}$	228.29	col. rhb.		253–4	448	i.	0.1^{16}	v. sl. s.
Chrysoidine (2-,4-)		$C_6H_5{\cdot}N{:}N{\cdot}C_6H_3(NH_2)_2$	212.25	yel. cr.		117.5		sl. s. h.	s.	s.
Chrysophanic acid		$C_{14}H_5(OH)_2(CH_3)O_2$	254.24	yel./al.		195	subl.	i. c.	s. h.	sl. s.
Cinchomeronic acid (3-,4-)		$C_5H_3N(CO_2H)_2$	167.12	cr./HCl		258–9 d.	subl. d.	v. sl. s.	sl. s.	i.
Cineole, eucalyptole		$C_{10}H_{18}O$	154.25	col. oil	0.927^{20}	1.5	176–7	1.9^{15}	∞	∞
Cinnamic acid (*cis*-)		$C_6H_5CH{:}CHCO_2H$	148.16	mn. pr.	1.284^{4}	68	125^{19}			
(*trans*-)		$C_6H_5CH{:}CHCO_2H$	148.16	mn. pr.	1.245	133	300	0.04^{18}	24^{20}	v. s.

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
	aldehyde	$C_6H_5CH:CHCHO$	132.16	lq.	$1.110^{20/20}$	−7.5	252 sl. d.	v. sl. s.	s.	∞
Cinnamyl alcohol		$C_6H_5CH:CHCH_2OH$	134.18	nd.	$1.040^{35/35}$	33	257.5	sl. s.	v. s.	v. s.
	cinnamate	$C_8H_7CO_2C_9H_9$	264.32	nd. or pr.	$1.085^{16.5}$	44		i.	4 c.	33
Citraconic acid (*cis*-)		$CH_3C(CO_2H):CHCO_2H$	130.10	nd.	1.617	92–3		360^{25}	s.	s.
Citral (α)		$C_9H_{15}CHO$	152.23	col. oil	$0.890^{17/4}$		229	i.	∞	∞
Citric acid		$C_3H_4(OH)(CO_2H)_3$	192.12	cr.	$1.542^{20/4}$	153	d.	207.7^{25}	76^{15}	2^{15}
Citronellal (*d*-)		$C_9H_{17}·CHO$	154.25	col. oil	$0.855^{17.5}$		204–8	v. sl. s.	∞	∞
Citronellol (*d*-)		$C_{10}H_{20}O$	156.27	col. oil	$0.848^{20/4}$		224–5	v. sl. s.	∞	∞
Coniine (*d*-)(2-)		$C_3H_7·C_5H_{10}N$	127.23	col. lq.	0.847^{17}	−2	166–7	1.1	v. s.	v. s.

Name	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
Coumaric acid (*o*-)	$HOC_6H_4CH:CHCO_2H$	164.16	nd./aq.		207–8	subl.	sl. s. c.	s.	v. sl. s.
(*p*-)	$HOC_6H_4CH:CHCO_2H$	164.16	cr./aq.		206–7 d.		s. h.	v. s. h.	v. s.
Coumarin	$C_9H_6O_2$	146.14	rhb./et.	$0.935^{20/4}$	70	290–1	0.3 c.	v. s.	s.
Coumarone	C_8H_6O	118.13	oil	$1.078^{15/15}$	<−18	173–4	i.		s.
Creatine	$C_4H_9N_3O_2·H_2O$	149.15	mn./aq.		295		1.4^{18}	0.01^{17}	i.
Creatinine	$C_4H_7N_3O$	113.12	mn.		260 d.		8.7^{16}	1^{16}	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
Creosol (3-,1-,4-)	$CH_3O{\cdot}C_6H_3(CH_3)OH$	138.16	pr.	$1.092^{20/20}$	5.5	$221–2^{765}$	v. sl. s.	∞	∞	
Cresidine (1-,2-,4-)	$CH_3(NH_2)C_6H_3{\cdot}OCH_3$	137.18	nd./pet.		93–4	235	v. sl. s.	s.	s.	
Cresol (*o*-)	$CH_3C_6H_4OH$	108.14	cr.	$1.048^{20/4}$	30.8	190.8	2.5	$∞^{30}$	$∞^{30}$	
(*m*-)	$CH_3C_6H_4OH$	108.14	lq.	$1.034^{20/4}$	10.9	202.8	0.5	∞	∞	
(*p*-)	$CH_3C_6H_4OH$	108.14	pr.	$1.035^{20/4}$	35–6	202	1.8	$∞^{36}$	$∞^{36}$	
Cresyl benzoate (*o*-)	$C_6H_5CO_2C_6H_4CH_3$	212.24	lq.			308	i.			
(*m*-)	$C_6H_5CO_2C_6H_4CH_3$	212.24	cr.		55	314	i.			
(*p*-)	$C_6H_5CO_2C_6H_4CH_3$	212.24	cr.		71.5	316	i.			
Crotonic acid (α-)	$CH_3CH{:}CHCO_2H$	86.09	col. mn.	$0.964^{79.7}$	72	189	8.3^{15}			
acid (β-)(*cis*-)	$CH_3CH{:}CHCO_2H$	86.09	nd.	$1.031^{15/4}$	15.5	170–1 d.	$∞^{25}$	s.		
aldehyde (α)	$CH_3CH{:}CHCHO$	70.09	col. lq.	$0.853^{20/20}$	−69	102.2	18	∞	∞	
Cumene	$C_6H_5CH(CH_3)_2$	120.19	col. lq.	$0.862^{20/4}$	−96.9	152.5	i.	∞	∞	
Cumic acid (*p*-)	$(CH_3)_2CH{\cdot}C_6H_4CO_2H$	164.20	tri.	1.162^{4}	116–7	subl.	0.02^{25}	s.	s.	
Cumidine (*p*-)	$(CH_3)_2CH{\cdot}C_6H_4NH_2$	135.21	lq.	0.953	<−20	225^{761}	i.			
Cyanamide	$H_2N{\cdot}CN$	42.04	col. nd.	$1.073^{48/4}$	44–5	140^{19}	v. s.	v. s.	v. s.	
Cyanic acid	HOCN or HNCO	43.02	gas	1.140^{0}	−80	-64^{0}	sl. s.		s.	
Cyanoacetic acid	$CH_2(CN)CO_2H$	85.06	col. lq.		65–6	$108^{0.2}$	s.	s.	s.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
Cyanogen	$(CN)_2$	52.03	col. gas	0.866^{17}	−34.4	−21	450^{20} cc.	2300^{20} cc.	500^{20} cc.	
bromide	BrCN	105.92	nd.	$2.015^{20/4}$	52	61.3^{750}	s.	s.	s.	
chloride	ClCN	61.47	gas	1.222^{0}	−6.5	12.5–13	2500^{20} cc.	v. s.	5000^{20} cc.	
Cyanuric acid	$C_3H_3O_3N_3{\cdot}2H_2O$	165.10	mn./aq.	$1.768^{0/4}$	>360	d.	0.27^{17}	0.1^{22}		
Cyclo-butane	$CH_2 < (CH_2)_2 > CH_2$	56.11	col. gas	$0.703^{0/4}$	−50	$11–12^{726}$	i.	v. s.		
-heptane	$CH_2 < (CH_2CH_2CH_2)_2 >$	98.19	oil	$0.810^{20/4}$	−12	118–20	i.			
-hexane	$CH_2 < (CH_2CH_2)_2 > CH_2$	84.16	col. lq.	$0.779^{20/4}$	6.5	80–1	i.	∞	∞	
-hexanol	$CH_2 < (CH_2CH_2)_2 > CHOH$	100.16	col. nd.	$0.962^{20/4}$	23.9	160–1	3.6^{20}	s.	s.	
-hexanone	$CH_2 < (CH_2CH_2)_2 > CO$	98.14	col. oil	$0.947^{19/4}$	−45	155–6	s.	s.	s.	
-hexene	$(\cdot CH_2\cdot CH_2CH{:})_2$	82.14	lq.	$0.810^{20/4}$	−103.7	83.3	v. sl. s.	v. s.	v. s.	
-hexyl acetate	$CH_3CO_2C_6H_{11}$	142.20	oil	$0.985^{0/4}$		174^{750}	i.	∞	∞	
amine	$CH_2 < (CH_2CH_2)_2 > CHNH_2$	99.17	col. lq.	$0.865^{20/0}$		134	i.	s.		
bromide	$CH_2 < (CH_2CH_2)_2 > CHBr$	163.06	col. lq.	$1.324^{20/20}$		165^{714}	i.	s.	s.	
chloride	$CH_2 < (CH_2CH_2)_2 > CHCl$	118.60	col. lq.	$0.977^{18/4}$	−43.9	142	i.		∞	
-pentadiene (1-,3-)	$CH_2 < (CH{:}CH)_2 >$	66.10	col. lq.	$0.805^{19/4}$	−85	41–2	i.	∞	∞	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
-pentane	CH_2 < $(CH_2CH_2)_2$ >	70.13	col. oil	$0.745^{20/4}$	−93.3	49–50	i.			
-pentanone	< $(CH_2CH_2)_2$ > CO	84.12	col. oil	0.948^{20}	−58.2	129–30	v. sl. s.			
-propane	< $CH_2CH_2CH_2$ >	42.08	col. gas	0.720^{-79}	−126.6	-34^{749}	i.	s.	s.	
Cymene (*o*-)	$CH_3{\cdot}C_6H_4CH(CH_3)_2$	134.22	col. lq.	$0.875^{20/4}$		177	i.	s.	s.	
(*m*-)	$CH_3{\cdot}C_6H_4CH(CH_3)_2$	134.22	col. lq.	0.862^{20}	<−25	175–6	i.	s.	s.	
(*p*-)	$CH_3{\cdot}C_6H_4CH(CH_3)_2$	134.22	col. lq.	$0.857^{20/4}$	−73.5	176–7	i.	s.	s.	
Cystine (*l*-)	$[{\cdot}SCH_2CH(NH_2)CO_2H]_2$	240.30	pl.		d. 258–61		0.01^{19}	i.		
Dambose	$C_6H_6(OH)_6$	180.16	mn./aq.	1.752	253	319^{15}	2^{12}	i.	i.	
Decahydronaphthalene (*cis*-)	$C_{10}H_{18}$	138.25	lq.	$0.895^{18/4}$	−51	193.3	i.	s.	s.	
(*trans*-)	$C_{10}H_{18}$	138.25	lq.	$0.872^{20/4}$	−32	185.3	i.	s.	s.	
Decane (*n*-)	$CH_3(CH_2)_8CH_3$	142.28	col. lq.	0.730^{2}	−29.7	174.0	i.	∞	∞	
Decyl alcohol	$CH_3(CH_2)_8CH_2OH$	158.28	col. oil	$0.830^{20/4}$	7	232.9	i.	s.		
Dextrin	$(C_6H_{10}O_5)x$	162.14	amor.	1.038			s.	i.	i.	
Diacetone alcohol	$(CH_3)_2C(OH){\cdot}CH_2COCH_3$	116.16	lq.	0.931^{25}	−47	167.9	∞	∞	∞	
Diamino-benzophenone (4-,4'-)	$H_2NC_6H_4COC_6H_4NH_2$	212.25	yel. nd.		237–9		sl. s. h.	s.	s.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
-diphenylamine (4-,4'-)	$H_2NC_6H_4NHC_6H_4NH_2$	199.25	lf./aq.		158	d.	sl. s.	s.	s.	
-diphenylmethane (4-,4'-)	$H_2NC_6H_4CH_2C_6H_4NH_2$	198.26	nd./aq.		93–4	249–53[15]	sl. s. c.	s.	s.	
-diphenylurea (4-,4'-)	$(H_2NC_6H_4NH)_2CO$	242.28	cr.		subl. 310		v. sl. s.			
Diamylamine (*i*-)	$[(CH_3)_2CHCH_2CH_2]_2NH$	157.30	col. lq.	$0.767^{21/4}$	−44	188–90	sl. s.	s.	∞	
ether (*n*-)	$(C_2H_5CH_2CH_2CH_2)_2O$	158.28	col. lq.	$0.774^{20/4}$	−69	190	i.	∞	∞	
(*i*-)	$[(CH_3)_2CH(CH_2)_2]_2O$	158.28	col. lq.	$0.777^{20/4}$		173.4	i.	∞	∞	
Diamyl ketone (*i*-)	$[(CH_3)_2CHCH_2CH_2]_2CO$	170.29	yel. oil	$0.821^{25/4}$	14.6	228	i.	s.	s.	
phthalate (*n*-)	$C_6H_4(CO_2C_5H_{11})_2$	306.40	col. lq.			204–6[11]				
(*i*-)	$C_6H_4(CO_2C_5H_{11})_2$	306.40	col. lq.	1.03		225[40]	i.	s.	s.	
tartrate (*i*-)	$(HOCH{\cdot}CO_2C_5H_{11})_2$	290.35	lq.	$1.063^{15/4}$		195[16]	i.			
Dianisidine (*o*-) (4-,3-)$_2$	$[NH_2(OCH_3)C_6H_3{\cdot}]_2$	244.29	col. lf.		131.5		i.	s.	s.	
Diazoaminobenzene	$C_6H_5N{:}N{\cdot}NHC_6H_5$	197.24	yel. lf.		96–8	expl.	i.	s. h.	v. s.	
-aminotoluene (2-,2'-)	$C_7H_7N{:}N{\cdot}NHC_7H_7$	225.29	or. cr.		51		0.05			
-methane	$CH_2{:}N_2$	42.04	gas		−145	−23	d.		s.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
Dibenzothiazyl-disulfide (2-,2'-)	$(C_6H_4NSC)_2S_2$	332.49	cr.	1.50	180	d.	i.			
Dibensoyl methane	$(C_6H_5CO)_2CH_2$	224.25	rhb./al.		78	219–21^{18}	i.	4.4^{20}	s.	
Dibensyl-amine	$(C_6H_5CH_2)_2NH$	197.28	col. oil	1.028$^{25/25}$	−26	268–71^{250}	i.	s.	s.	
-aniline	$C_6H_5N(CH_2C_6H_5)_2$	273.37	pr./al.		70–1	>300	i.	v. s. h.	s.	
ketone	$(C_6H_5CH_2)_2CO$	210.27	cr.		34–5	330.6	i.			
phthalate (*o*-)	$C_6H_4(CO_2CH_2C_6H_5)_2$	346.38	pr./al.		42–3	274^{12}	v. sl. s.	s.	s.	
succinate	$(\cdot CH_2CO_2CH_2C_6H_5)_2$	298.33	lf./al.		45–6	238^{14}	i.	s.	s.	
Dibromo-benzene (*o*-)	$C_6H_4Br_2$	235.90	col. lq.	1.956$^{20/4}$	1.8	221–2	i.	s.	s.	
(*m*-)	$C_6H_4Br_2$	235.90	col. lq.	1.952$^{20/4}$	−6.9	219^{755}	i.	s.	s.	
(*p*-)	$C_6H_4Br_2$	235.90	pl./al.	2.261^{18}	87–8	218.6^{758}	i.	1.6	71^{25}	
-diphenyl (4-,4'-)	$BrC_6H_4\cdot C_6H_4Br$	312.00	mn. pr.	1.897	164–5	355–60	i.	v. sl. s. h.		
Dibutyl-adipate (*n*-)	$(\cdot CH_2CH_2CO_2C_4H_9)_2$	258.35	col. lq.	0.965$^{20/4}$	−38	183^{14}	i.	∞	∞	
(*i*-)	$(\cdot CH_2CH_2CO_2C_4H_9)_2$	258.35	col. lq.	0.950^{25}	−20	278–80	i.			
-amine (*n*-)	$(C_2H_5CH_2CH_2)_2NH$	129.24	col. lq.	0.768$^{20/20}$		159^{761}	∞	∞	∞	
(*i*-)	$[(CH_3)_2CHCH_2]_2NH$	129.24	col. lq.	0.741$^{25/4}$	−70	139–40	v. sl. s.	s.	s.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
-*p*-amino phenol (*s*-)	$(C_4H_9)_2N{\cdot}C_6H_4OH$	221.34	lq.			170^{10}	i.			
-aniline (*n*-)	$C_6H_5N(C_4H_9)_2$	205.34	lq.			262.8	i.	∞	∞	
carbonate (*n*-)	$CO(OC_4H_9)_2$	174.24	col. lq.	$0.924^{20/4}$		207^{740}	i.	s.		
(*i*-)	$CO(OC_4H_9)_2$	174.24	col. lq.	0.919^{15}		190	i.			
(*s*-)	$CO(OC_4H_9)_2$	174.24	col. lq.			178–80				
ether (*n*-)	$(C_2H_5CH_2CH_2)_2O$	130.23	lq.	$0.769^{20/20}$	−98	142.4	<0.05	∞	∞	
(*i*-)	$[(CH_3)_2CHCH_2]_2O$	130.23	lq.	0.762^{15}		122.5	i.	∞	∞	
(*s*-)	$[C_2H_5(CH_3)CH]_2O$	130.23	lq.	0.756^{21}		121	i.	∞	∞	
ketone (*n*-)	$(C_2H_5CH_2CH_2)_2CO$	142.24	lq.	$0.827^{18/4}$	−5.9	187.7	i.	s.	v. s.	
(*i*-)	$[(CH_3)_2CHCH_2]_2CO$	142.24	oil	$0.805^{21/4}$		168.1	<0.06	∞	∞	
malate (*l*-)(*n*-)	$C_2H_4O(CO_2C_4H_9)_2$	246.30	lq.	$1.038^{20/4}$		$170–1^{18}$	v. sl. s.			
oxalate (*n*-)	$(\cdot CO_2C_4H_9)_2$	202.25	col. lq.	$0.986^{20/4}$	−29.6	245.5	i.	s.	s.	
phthalate (*n*-)	$C_6H_4(CO_2C_4H_9)_2$	278.34	col. lq.	1.045^{21}		340	0.04^{25}	∞	∞	
tartrate (*d*-)(*n*-)	$(CHOHCO_2C_4H_9)_2$	262.30	pr.	1.098^{15}	22–2.5	$200–3^{18}$	i.			
(*d*-)(*i*-)	$(CHOHCO_2C_4H_9)_2$	262.30	cr.	$1.031^{75/4}$	73–4	323–5	v. sl. s.			

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
Dichloro-acetic acid	$Cl_2CH{\cdot}CO_2H$	128.94	lq.	$1.560^{25/25}$	9.7(−4)	194.4	∞	∞	∞	
- acetone (αα-)	$Cl_2CHCOCH_3$	126.97	lq.	1.234^{15}		120	v. sl. s.	s.	s.	
- aniline (2-,5-)	$Cl_2C_6H_3NH_2$	162.02	nd.		50	251	v. sl. s.	s.	s.	
- anthraquinone (1-,3-)	$C_6H_4:(CO)_2:C_6H_2Cl_2$	277.10	yel. nd.		208–9		i.	i.		
(1-,4-)	$C_6H_4:(CO)_2:C_6H_2Cl_2$	277.10	yel. nd.		187.5		i.	v. sl. s.	v. sl. s.	
(1-,5-)	$C_6H_3Cl:(CO)_2:C_6H_3Cl$	277.10	yel. nd.		251		i.	sl. s.		
(1-,6-)	$C_6H_3Cl:(CO)_2:C_6H_3Cl$	277.10	yel. nd.		203–4		i.			
(1-,8-)	$C_6H_3Cl:(CO)_2:C_6H_3Cl$	277.10	yel. nd.		202–3		i.	sl. s.		
(2-,3-)	$C_6H_4:(CO)_2:C_6H_2Cl_2$	277.10	yel. nd.		268–70		i.	sl. s.		
(2-,6-)	$C_6H_3Cl:(CO)_2:C_6H_3Cl$	277.10	yel. nd.		282		i.			
(2-,7-)	$C_6H_3Cl:(CO)_2:C_6H_3Cl$	277.10	yel. nd.		210–11		i.			
- benzene (*o*-)	$C_6H_4Cl_2$	147.00	col. lq.	$1.305^{20/4}$	−17.6	179	i.	∞	∞	
(*m*-)	$C_6H_4Cl_2$	147.00	col. lq.	$1.288^{20/4}$	−24.8	172^{766}	i.	s.	s.	
(*p*-)	$C_6H_4Cl_2$	147.00	col. mn.	1.458^{21}	53	174^{764}	i.	v. s.	v. s.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
-butane (*n*-)(1-,4-)	$ClCH_2(CH_2)_2CH_2Cl$	127.01	lq.		−38.7	161–3				
-diphenyl (4-,4'-)	$ClC_6H_4{\cdot}C_6H_4Cl$	223.10	pr.	$1.442^{0/4}$	148	315–9	i.	v. sl. s.	4^{25}	
-ethane (1-,2-)	$ClCH_2{\cdot}CH_2Cl$	98.96	col. lq.	$1.256^{20/20}$	−35.3	83.7	0.9^{0}	∞	∞	
-naphthalene (β-) (1-,4-)	$C_{10}H_6Cl_2$	197.06	nd./al.	$1.300^{76/4}$	67–8	$286–7^{740}$	i.	v. sl. s.		
(γ-)(1-,5-)	$C_{10}H_6Cl_2$	197.06	lf./al.		107	subl.	i.	s.	s.	
-nitrobenzene (2-,5-)	$Cl_2C_6H_3NO_2$	192.00	tri./al.	1.669^{22}	54.6	266	i.	v. s. h.		
-pentane (1-,5-)	$ClCH_2(CH_2)_3CH_2Cl$	141.04	col. lq.	$1.094^{25/4}$		180–1	i.	s.	s.	
-phenol (2-,4-)	$Cl_2C_6H_3OH$	163.00	nd.	$1.383^{60/25}$	45	209–10	0.45^{20}	v. s.	v. s.	
Dichloramine T (*p*-)	$CH_3C_6H_4SO_2NCl_2$	240.11	cr.		83		sl. s.			
Dicyandiamide	$H_2N{\cdot}C(:NH){\cdot}NH{\cdot}CN$	84.08	mn. pl.	1.40^{14}	207–8	d.	2.3^{18}	1.3^{18}	0.01^{18}	
Diethanolamine	$HN(CH_2CH_2OH)_2$	105.14	pr.	$1.097^{20/4}$	28	270^{748}	∞	∞	v. sl. s.	
Diethyl adipate	$(\cdot CH_2CH_2CO_2C_2H_5)_2$	202.25	col. lq.	$1.009^{20/4}$	−21	$239–41^{761}$	0.43^{80}	s.	s.	
-amine	$(C_2H_5)_2NH$	73.14	col. lq.	$0.712^{15/15}$	−38.9	55.5^{759}	v. s.	∞	∞	
-aminophenol (*m*-)	$(C_2H_5)_2N{\cdot}C_6H_4{\cdot}OH$	165.23	rhb.		78	276–80	s.			

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts		
								Water	Alcohol	Ether
-aniline	$(C_2H_5)_2NC_6H_5$	149.23	oil	$0.934^{20/4}$	−34.4	216	1.4^{12}	s.	s.	
sulfonic acid (*m*-)	$(C_2H_5)_2NC_6H_4SO_3H$	229.30	cr.		270 d.		s.			
carbonate	$OC(OC_2H_5)_2$	118.13	col. lq.	$0.975^{20/4}$	−43	126^{759}	i.	∞	∞	
diethyl malonate	$(C_2H_5)_2C(CO_2C_2H_5)_2$	216.27	col. lq.	$0.985^{20/4}$		230	i.	∞	∞	
Diethyl dimethyl malonate	$(CH_3)_2C(CO_2C_2H_5)_2$	188.22	col. lq.	$0.994^{25/25}$		196.7	i.	∞	∞	
glutarate	$CH_2(CH_2CO_2C_2H_5)_2$	188.22	syrup	1.025^{21}	−24	237	0.88^{20}	v. s.	s.	
ketone	$(C_2H_5)_2CO$	86.13	col. lq.	$0.816^{19/4}$	−42	101.7	4.7^{20}	∞	∞	
malonate	$CH_2(CO_2C_2H_5)_2$	160.17	col. lq.	$1.055^{20/4}$	−49.8	198.9	2.08^{20}	∞	∞	
-malonic acid	$(C_2H_5)_2C(CO_2H)_2$	160.17	pr./aq.		125	d. 170–80	65^{16}	v. s.	v. s.	
-naphthyl amine (α-)	$C_{10}H_7N(C_2H_5)_2$	199.29	col. oil	1.005		285–90	i.	∞	∞	
(β-)	$C_{10}H_7N(C_2H_5)_2$	199.29	col. oil	1.026		318	i.	∞	∞	
oxalate	$(\cdot CO_2C_2H_5)_2$	146.14	col. lq.	$1.079^{20/4}$	−40.6	186	v. sl. s.	∞	∞	
phthalate (*o*-)	$C_6H_4(CO_2C_2H_5)_2$	222.24	col. lq.	$1.121^{25/25}$		298–9	i.	∞	∞	
sulfate	$O_2S(OC_2H_5)_2$	154.18	col. lq.	$1.172^{25/4}$	−25	210	i.	s.	∞	
sulfide	$(C_2H_5)_2S$	90.19	col. lq.	$0.837^{20/4}$	−99.5	$92–3^{754}$	0.31^{20}	∞	∞	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
tartrate (*d*-)	$(CHOH{\cdot}CO_2C_2H_5)_2$	206.19	lq.	$1.204^{20/4}$	17	280	sl. s.	∞	∞	
-toluidine (*o*-)	$CH_3{\cdot}C_6H_4{\cdot}N(C_2H_5)_2$	163.26	lq.			208–9[755]	i.	s.	s.	
(*m*-)	$CH_3{\cdot}C_6H_4{\cdot}N(C_2H_5)_2$	163.26	lq.			231–2	i.	s.	s.	
(*p*-)	$CH_3{\cdot}C_6H_4{\cdot}N(C_2H_5)_2$	163.26	lq.	$0.924^{15.5}$		228–9	i.			
Diethyleneglycol dinitrate	$O(CH_2CH_2ONO_2)_2$	196.12	lq.	$1.377^{25/4}$	−11.3		i.			
Difluorodichloromethane	F_2CCl_2	120.91	gas	1.486^{-30}	−155	−29.2	5.7 cc.[26]	s.	s.	
Diglycerol	$[(HO)_2C_3H_5]_2O$	166.17	lq.			220–30[10]	s. h.		i.	
Dihydroxy-dinaphthyl (α-)	$(HO{\cdot}C_{10}H_6{\cdot})_2$	286.32	pl./al.		300		i.	s.	v. s.	
(-2,-2',-1,-1')	$(HO{\cdot}C_{10}H_6{\cdot})_2$	286.32	nd./al.		218	subl.	i.	s.	v. s.	
-diphenyl (4-,4'-)	$(HO{\cdot}C_6H_4{\cdot})_2$	186.21	rhb./al.	1.25	270–2	subl.	sl. s.	v. s.	v. s.	
-ethyl formal (β-)	$CH_2(OCH_2CH_2OH)_2$	136.15	lq.	1.154^{25}	−5.3	264	∞			
-naphthalene (1-,5-)	$C_{10}H_6(OH)_2$	160.17	pr./aq.		258–60	d.	sl. s.	s.	v. s.	
(1-,8-)	$C_{10}H_6(OH)_2$	160.17	nd.		140		sl. s. h.		v. s.	
Dimethoxy-benzene (*p*-)	$(CH_3O)_2C_6H_4$	138.16	lf.	$1.053^{55/55}$	56	212.6	v. sl. s.	v. s.	v. s.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts		
								Water	Alcohol	Ether
-diphenyl amine (4-,4'-)	$HN(C_6H_4OCH_3)_2$	229.27	cr.		103		i.			
-ethyl adipate	$(CH_2)_4(CO_2C_2H_4OCH_3)_2$	262.30	lq.	$1.075^{15.6}$		$145–50^{2}$	5			
Dimethyl adipate	$[(CH_2)_2CO_2CH_3]_2$	174.19	col. lq.	$1.063^{20/4}$	10–1	115^{18}	i.			
-amine	$(CH_3)_2NH$	45.08	col. lq.	$0.680^{0/4}$	−96	7.4	v. s.	s.	s.	
-aminoazobenzene (*p*-)	$C_6H_5N{:}N{\cdot}C_6H_4N(CH_3)_2$	225.29	yel./al.		116–7	d.	i.	s.	s.	
-aminoethanol	$(CH_3)_2NCH_2CH_2OH$	89.14	col. lq.	$0.887^{20/4}$		135^{756}	∞			
-aminophenol (*m*-)	$(CH_3)_2NC_6H_4OH$	137.18	nd.		85	265–8	sl. s. h.	s.	s.	
-aniline	$(CH_3)_2NC_6H_5$	121.18	yel. lq.	$0.956^{20/4}$	2.5	193	i.	s.	s.	
sulfonic acid (*m*-)	$(CH_3)_2NC_6H_4SO_3H$	201.24	cr.		d. 266		s.			
(*p*-)	$(CH_3)_2NC_6H_4SO_3H{\cdot}H_2O$	219.26	pr.		257		s. h.	v. sl. s.	v. sl. s.	
carbonate	$OC(OCH_3)_2$	90.08	col. lq.	$1.070^{20/4}$	0.5	89–90	i.	∞	∞	
ether	CH_3OCH_3	46.07	gas		−138.5	−23.7	3700 cc.[18]	s.	s.	
-formamide	$HCON(CH_3)_2$	73.09	lq.	0.945^{25}	−58.3	152.8	∞			
fumarate	$(:CHCO_2CH_3)_2$	144.13	col. tri.		102	192	i.	sl. s.	sl. s.	
glutarate	$(CH_2)_3(CO_2CH_3)_2$	160.17	lq.	$1.089^{15.6}$	−37	130^{50}				

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts		
								Water	Alcohol	Ether
glyoxime	$(CH_3{\cdot}C{:}NOH)_2$	116.12	col. cr.		240–6		0.06^{20}	v. s.	v. s.	
-naphthalene (1-,4-)	$C_{10}H_6(CH_3)_2$	156.22	lq.	$1.016^{20/4}$	<–18	264–6	i.			
(2-,3-)	$C_{10}H_6(CH_3)_2$	156.22	lf./al.		104	265^{767}	i.	sl. s.		
-naphthylamine (α-)	$C_{10}H_7N(CH_3)_2$	171.24	col. oil	1.042^{20}		274.5^{711}	i.	s.	s.	
(β-)	$C_{10}H_7N(CH_3)_2$	171.24	col. cr.	$1.039^{70/70}$	46	304–5	i.	s.	s.	
oxalate	$(\cdot CO_2CH_3)_2$	118.09	col. mn.	1.148^{54}	54	163.3	6	s.	s.	
phthalate (*o*-)	$C_6H_4(CO_2CH_3)_2$	194.18	col. lq.	$1.189^{25/25}$		280^{734}	0.43			
sulfate	$(CH_3O)_2SO_2$	126.13	col. oil	$1.352^{0/4}$	–26.8	188.3	v. sl. s.	∞	∞	
sulfide	$(CH_3)_2S$	62.13	oil	$0.846^{21/4}$	–83.2	37.3	i.	s.	s.	
tartrate (*d*-)	$(CHOH{\cdot}CO_2CH_3)_2$	178.14	cr.	$1.328^{20/4}$	61.5	280	s.	200^{15}		
-vinyl-ethenyl carbinol	$(CH_3)_2COH{\cdot}C\vdots C{\cdot}CH{:}CH_2$	110.15	lq.	$0.887^{20/4}$		150	6^{20}			
Dinaphthyl (αα-)	$C_{10}H_7{\cdot}C_{10}H_7$	254.33	lf./al.		160	$240–4^{12}$	i.	s. h.	s.	
-methane (αα'-)	$(C_{10}H_7)_2CH_2$	268.35	pr./al.		109	>360	i.	0.8 c.	v. s.	
(β,β'-)	$(C_{10}H_7)_2CH_2$	268.35	nd./al.		92		i.	s.		
Dinitro-anisole (1-)(2-,4-)	$CH_3OC_6H_3(NO_2)_2$	198.13	col. mn.	1.341^{20}	94–5		sl. s. h.	1.5^{20}		

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
-benzene (*o*-)	$C_6H_4(NO_2)_2$	168.11	col. mn.	1.59^{18}	117–8	319^{774}	0.01 c.	1.9^{21}		
(*m*-)	$C_6H_4(NO_2)_2$	168.11	col. rhb.	$1.575^{20/4}$	89.8	300–2	0.3^{99}	3^{20}		
(*p*-)	$C_6H_4(NO_2)_2$	168.11	col. mn.	1.625^{18}	173–4	299^{777}	0.18^{100}	0.18^{21}		
sulfonic acid (2-,4-)(1-)	$(NO_2)_2C_6H_3SO_3H\cdot 3H_2O$	302.22	pr.		106–8		s.	s.	v. sl. s.	
-benzoic acid (2-,4-)	$(NO_2)_2C_6H_3CO_2H$	212.12	cr./aq.		179–80		1.85^{25}	s.		
(3-,5-)	$(NO_2)_2C_6H_3CO_2H$	212.12	mn. pr.		204–5	subl.	s h.	v. s.	sl. s.	
-benzophenone (4-,4'-)	$(NO_2C_6H_4)_2CO$	272.21	col. nd.		189		i.			
-diphenyl (4-,4'-)	$(NO_2C_6H_4)_2$	244.20	nd./al.	1.445	233		i.	1.5^{20}		
(2-,4'-)	$(NO_2C_6H_4)_2$	244.20	mn.	1.474	93.5		i.	v. s. h.		
-naphthalene (1-,5-)	$C_{10}H_6(NO_2)_2$	218.17	nd.		216	subl.	i.			
(1-,8-)	$C_{10}H_6(NO_2)_2$	218.17	rhb.		170–2	d.	i.	0.2 c.		
Dinitrophenol (2-,3-)	$(NO_2)_2C_6H_3OH$	184.11	yel. mn.	1.681^{20}	144–5		sl. s.	v. s. h.	v. s.	
(2-,4-)	$(NO_2)_2C_6H_3OH$	184.11	yel. rhb.	1.683^{24}	114–5	subl.	0.5 c.	4^{20}	v. s. h.	
(2-,6-)	$(NO_2)_2C_6H_3OH$	184.11	yel. rhb.		63–4		s. h.	s. h.	s.	
-salicylic acid (3-,5-)	$(NO_2)_2C_6H_2(OH)CO_2H\cdot H_2O$	246.13	pl./aq.		173 d.		s. c.	v. s.	v. s.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
-stilbene (4-,4'-)	$(NO_2C_6H_4CH:)_2$	270.24	yel. lf.		210–6		i.	v. sl. s.	v. sl. s.	
-toluene (2-,4-)	$(NO_2)_2C_6H_3CH_3$	182.13	nd.	1.321^{71}	70	300	0.03^{22}	1.2^{15}	9^{16}	
(3-,4-)	$(NO_2)_2C_6H_3CH_3$	182.13	nd.	1.259^{111}	60–1		i.			
(3-,5-)	$(NO_2)_2C_6H_3CH_3$	182.13	mn. pr.	1.277^{111}	92–3	subl.	sl. s.	s. h.	s.	
Dioxane	$O<(CH_2{\cdot}CH_2)_2>O$	88.11	col. lq.	$1.033^{20/4}$	9.5–10.5	101.1	∞	s.	s.	
Dipentene	$C_{10}H_{16}$	136.23	col. lq.	0.865^{18}		178	i.			
Diphenyl	$C_6H_5{\cdot}C_6H_5$	154.21	col. mn.	$0.992^{73/4}$	69–70	254.9	i.	10^{20}	6.6^{20}	
-amine	$C_6H_5NHC_6H_5$	169.22	col. mn.	$1.160^{20/20}$	52.9	302	0.03^{25}	$56^{19.5}$	s.	
carbonate	$CO(OC_6H_5)_2$	214.22	nd./al.	1.272^{14}	80	302–6	i.	v. s.	s.	
-chloroarsine	$(C_6H_5)_2AsCl$	264.58	rhb.	1.583^{40}	43–4	d. 327	0.2 d.	20	s.	
-ethane	$(C_6H_5CH_2{\cdot})_2$	182.26	col. pr.	$0.978^{50/50}$	52–3	284	i.	s.	v. s.	
ether	$C_6H_5OC_6H_5$	170.21	col. rhb.	1.073^{20}	27	259	v. sl. s.	s.	∞	
guanidine	$(C_6H_5NH)_2C:NH$	211.26	mn./al.		147–8	d. > 170	v. sl. s.	9^{20}	sl. s.	
-methane	$(C_6H_5)_2CH_2$	168.23	col. pr.	$1.001^{26/4}$	26–7	265	i.	v. s.	v. s.	
phenylenediamine (*p*-)	$(C_6H_5NH)_2C_6H_4$	260.33	cr.		152		i.			
succinate	$(\cdot CH_2CO_2C_6H_5)_2$	270.28	lf./al.		122–3	330	i.		s.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
sulfide	$(C_6H_5)_2S$	186.27	col. lq.	$1.119^{15/15}$	<–40	296–7	i.	s. h.	∞	
sulfone	$(C_6H_5)_2SO_2$	218.27	nd./aq.	$1.248^{25/4}$	128–9	379	sl. s. h.	s. h.		
urea (uns.)	$(C_6H_5)_2NCONH_2$	212.25	rhb.	1.276	189		v. sl. s.	s.	s.	
Diphenylene oxide	$(C_6H_4)_2O$	168.19	lf./al.		86–7	287–8	i.	s. h.	v. s.	
Dipropyl adipate (*n*-)	$(\cdot CH_2CH_2CO_2C_3H_7)_2$	230.30	col. lq.	$0.979^{20/4}$	–20.3	$143–5^{10}$	i.	s.	s.	
-amine (*n*-)	$(C_2H_5CH_2)_2NH$	101.19	col. lq.	$0.739^{20/4}$	–39.6	110–1	s.	∞	∞	
(*i*-)	$[(CH_3)_2CH]_2NH$	101.19	col. lq.	0.722^{22}	–61	83.5^{743}	s.	s.		
aniline (*n*-)	$C_6H_5N(C_3H_7)_2$	177.29	yel. oil	0.910^{20}		245.4	i.	s.	s.	
carbonate (*n*-)	$CO(OCH_2C_2H_5)_2$	146.18	col. lq.	0.968^{22}		168.2	v. sl. s.			
ether (*n*-)	$(C_2H_5CH_2)_2O$	102.17	col. lq.	$0.744^{21/0}$	–122	91	sl. s.	∞	∞	
(*i*-)	$[(CH_3)_2CH]_2O$	102.17	col. lq.	$0.725^{21/0}$	–60	69	0.2	∞	∞	
ketone (*n*-)	$(C_2H_5CH_2)_2CO$	114.19	col. lq.	$0.822^{20/4}$	–32.6	144.2	0.43	∞	∞	
(*i*-)	$[(CH_3)_2CH]_2CO$	114.19	col. lq.	$0.806^{20/4}$		123.7	v. sl. s.	∞	∞	
oxalate (*n*-)	$(CO_2CH_2C_2H_5)_2$	174.19	col. lq.	$1.038^{0/0}$	–51.7	213.5	d. h.			
(*i*-)	$[CO_2CH(CH_3)_2]_2$	174.19	col. lq.			190				
Disalicylal ethylene diamine	$[HOC_6H_4CH{:}NCH_2\cdot]_2$	268.31	cr.	1.34	125–6		0.03^{28}			

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts		
								Water	Alcohol	Ether
Ditolyl guanidine (*o*-)	$(C_7H_7NH)_2C{:}NH$	239.32	cr.	$1.10^{20/4}$	178–9		v. sl. s.	s. h.	s.	
Divinyl acetylene	$(H_2C{:}CH{\cdot}C\vdots)_2$	78.11	lq.	$0.776^{20/4}$		85	i.			
Docosane (*n*-)	$CH_3(CH_2)_{20}CH_3$	310.60	cr.	$0.778^{44/4}$	44.5	224.5^{15}	i.	4 h.	v. s.	
Dodecane (*n*-)	$CH_3(CH_2)_{10}CH_3$	170.33	lq.	$0.751^{20/4}$	−9.6	214.5	i.	v. s.	v. s.	
Dulcitol	$CH_2OH(CHOH)_4CH_2OH$	182.17	mn.	1.466^{15}	189	$290–5^{3}$	3.2^{15}	v. sl. s.	i.	
Durene (1-,2-,4-,5-)	$(CH_3)_4C_6H_2$	134.22	mn.	$0.838^{81/4}$	79–80	193–5	i.	s.	s.	
Elaidic acid	$C_8H_{17}CH{:}CH(CH_2)_7CO_2H$	282.46	lf./al.	$0.851^{79/4}$	51–2	288^{100}	i.	v. s.	v. s.	
Eosine	$C_{20}H_8O_5Br_4$	647.89	col. cr.				i.	s.		
Ephedrine (*l*-)	$C_6H_5CHOHCH(CH_3)NHCH_3$	165.23	cr./et.		40	255	5	500	s.	
Epichlorhydrin (α-)	$C_2H_3O{\cdot}CH_2Cl$	92.52	lq.	$1.183^{25/25}$	−25.6	117^{756}	<5	∞	∞	
Epidichlorohydrin (α-)	$CH_2{:}CCl{\cdot}CH_2Cl$	110.97	col. lq.	1.204^{25}		94	i.	∞	∞	
Erythritol (*dl*-)	$CH_2OH(CHOH)_2CH_2OH$	122.12	tet. pr.	$1.451^{20/4}$	126	329–31	60	sl. s. c.	i.	
tetranitrate	$C_4H_6(ONO_2)_4$	302.11	lf./al.		61	expl.	i. c.	s.	s.	
Ethane	CH_3CH_3	30.07	col. gas	0.546^{-88}	−172	−88.6	4.7 cc.^{20}	150 cc.		
Ethanolamine	$HOCH_2CH_2NH_2$	61.08	col. oil	1.022^{20}	10.5	171^{757}	∞	∞	1	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts		
								Water	Alcohol	Ether
formamide	HCONHCH$_2$CH$_2$OH	89.09	lq.	1.169^{25}	<–40	d.	∞			
Ether	(CH$_3$CH$_2$)$_2$O	74.12	col. lq.	0.708$^{25/4}$	–116.3	34.6	7.5^{20}	∞		
Ethyl abietate	C$_{19}$H$_{29}$CO$_2$C$_2$H$_5$	330.50	lq.	1.020$^{20/20}$		200^{4}	i.			
acetate	CH$_3$CO$_2$C$_2$H$_5$	88.11	col. lq.	0.901$^{20/4}$	–82.4	77.1	8.5^{15}	∞	∞	
acetoacetate	CH$_3$COCH$_2$CO$_2$C$_2$H$_5$	130.14	col. lq.	1.025$^{20/4}$	–45	180^{755}	13^{17}	∞	∞	
alcohol	CH$_3$CH$_2$OH	46.07	col. lq.	0.789$^{20/4}$	–112	78.4	∞		∞	
-amine	C$_2$H$_5$NH$_2$	45.08	col. lq.	0.689$^{15/15}$	–80.6	16.6	∞	∞	∞	
hydrochloride	C$_2$H$_5$NH$_2$·HCl	81.54	mn.	1.216	108–9		240^{17}	v. s.	i.	
aniline	C$_6$H$_5$NHC$_2$H$_5$	121.18	lq.	0.963$^{20/4}$	–63.5	204	i.	∞	∞	
sulfonic acid (*m*-)	C$_2$H$_5$NHC$_6$H$_4$SO$_3$H	201.24	nd./aq.		d. 294		2.15^{15}			
anisate (*p*-)	CH$_3$OC$_6$H$_4$CO$_2$C$_2$H$_5$	180.20	lq.	1.103$^{25/25}$	7–8	269–70	i.	s.	s.	
anthranilate (*o*-)	NH$_2$C$_6$H$_4$CO$_2$C$_2$H$_5$	165.19	cr.	1.117$^{20/4}$	13	266–8	v. sl. s.	s.	s.	
benzene	C$_6$H$_5$·C$_2$H$_5$	106.17	col. lq.	0.867$^{20/4}$	–94.4	136.2	0.01^{15}	∞	∞	
benzoate	C$_6$H$_5$CO$_2$C$_2$H$_5$	150.17	col. lq.	1.052$^{15/15}$	–34.6	211–2	0.08^{20}	∞	∞	
-benzyl-aniline	C$_6$H$_5$N(C$_2$H$_5$)CH$_2$C$_6$H$_5$	211.30	yel. oil	1.034$^{18.5}$		285^{10}	i.	18	∞	
bromide	C$_2$H$_5$Br	108.97	col. lq.	1.431$^{20/4}$	–117.8	38.4	1.06^{0}	∞	∞	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
butyrate (*n*-)	$C_2H_5CH_2CO_2C_2H_5$	116.16	col. lq.	$0.879^{20/4}$	−93.3	120–1	0.68^{25}	∞	∞	
(*i*-)	$(CH_3)_2CHCO_2C_2H_5$	116.16	col. lq.	$0.871^{20/4}$	−88.2	110–1	sl. s.	∞	∞	
caprate (*n*-)	$CH_3(CH_2)_8CO_2C_2H_5$	200.32	lq.	0.859^{28}	−20	244.6^{758}	0.002^{20}	∞	∞	
Ethyl caproate (*n*-)	$CH_3(CH_2)_4CO_2C_2H_5$	144.21	col. lq.	$0.873^{20/20}$	−67.5	$165–6^{736}$	i.	∞	∞	
caprylate (*n*-)	$CH_3(CH_2)_6CO_2C_2H_5$	172.26	col. lq.	0.878^{17}	−45	$207–8^{753}$	i.	∞	∞	
chloride	CH_3CH_2Cl	64.51	col. lq.	$0.917^{6/6}$	−139	13	0.45^{0}	∞	∞	
chloroacetate	$ClCH_2CO_2C_2H_5$	122.55	col. lq.	$1.159^{20/4}$	−26	144	i.	∞	∞	
chlorocarbonate	$ClCO_2CH_2CH_3$	108.52	col. lq.	$1.138^{20/4}$	−80.6	94–5	d.	∞	∞	
cinnamate (*trans*-)	$C_6H_5CH:CHCO_2C_2H_5$	176.21	col. lq.	$1.049^{20/4}$	12	271	i.	∞	∞	
cyanoacetate	$CH_2(CN)CO_2C_2H_5$	113.11	col. lq.	$1.062^{20/4}$	−22.5	208^{753}	2^{25}	∞	∞	
formate	$HCO_2CH_2CH_3$	74.08	col. lq.	$0.923^{20/4}$	−79	54^{760}	11^{18}	∞	∞	
furoate (α)	$OC_4H_3CO_2C_2H_5$	140.14	lf.	$1.117^{21/4}$	34	195^{766}	i.	∞	∞	
heptoate	$CH_3(CH_2)_5CO_2C_2H_5$	158.24	col. lq.	$0.872^{20/20}$	−66.1	187–8	0.029^{20}	∞	∞	
hypochlorite	$ClOCH_2CH_3$	80.51	yel. lq.	$1.013^{-6/4}$	expl.	36^{752}			∞	
iodide	CH_3CH_2I	155.97	col. lq.	$1.933^{20/4}$	−105	72.4	0.4^{20}	∞	∞	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
lactate	$CH_3CH(OH)CO_2C_2H_5$	118.13	oil	$1.030^{25/4}$		155	∞	∞	∞	
laurate	$CH_3(CH_2)_{10}CO_2C_2H_5$	228.37	oil	$0.868^{13/4}$	−10.7	269	i.	s.	∞	
mercaptan	CH_3CH_2SH	62.13	lq.	$0.839^{20/4}$	−121	36–7	1.5	s.	s.	
methacrylate	$CH_2:C(CH_3)CO_2C_2H_5$	114.14	col. lq.	$0.913^{15.6}$		118	i.	s.	s.	
naphthylamine (α-)	$C_{10}H_7NHC_2H_5$	171.24	oil	$1.060^{20/4}$		303^{723}	i.	s.	s.	
naphthyl ether (α-)	$C_{10}H_7OC_2H_5$	172.22	cr.	$1.061^{20/20}$	5.5	276.4	i.	s.	s.	
nitrate	$C_2H_5ONO_2$	91.07	col. lq.	$1.100^{25/4}$	−102	87–8	1.3^{55}	∞	∞	
nitrite	C_2H_5ONO	75.07	lq.	$0.900^{15.5}$		17	v. sl. s.	∞	∞	
oleate	$C_{17}H_{33}CO_2C_2H_5$	310.51	oil	0.867^{25}	<−15	$216–8^{15}$	i.	∞	∞	
palmitate	$CH_3(CH_2)_{14}CO_2C_2H_5$	284.48	col. nd.	$0.858^{25/4}$	24–5	191^{10}	i.	s.	s.	
pelargonate	$CH_3(CH_2)_7CO_2C_2H_5$	186.29	col. lq.	$0.866^{17.5}$	−44.5	$227–8^{757}$	i.	∞	∞	
propionate	$CH_3CH_2CO_2C_2H_5$	102.13	col. lq.	$0.891^{20/4}$	−72.6	99.1	2.4^{20}	∞	∞	
salicylate (o-)	$HOC_6H_4CO_2C_2H_5$	166.17	col. lq.	$1.136^{15/4}$	1.3	233–4	i.	∞	∞	
stearate	$CH_3(CH_2)_{16}CO_2C_2H_5$	312.53	col. cr.	$0.848^{36.3}$	33.4(31)	201^{10}	i.	s.	s.	
toluate (o-)	$CH_3{\cdot}C_6H_4CO_2C_2H_5$	164.20	lq.	$1.032^{25/25}$	<−10	227	i.	∞	∞	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts		
								Water	Alcohol	Ether
(*m*-)	$CH_3{\cdot}C_6H_4CO_2C_2H_5$	164.20	lq.	$1.030^{20/20}$		231^{750}	i.	∞	∞	
toluene sulfonate (*p*-)	$CH_3{\cdot}C_6H_4SO_3C_2H_5$	200.25	pr./al.	$1.166^{48/4}$	33–4	221.3	i.	s.	s.	
toluidine (*o*-)	$CH_3{\cdot}C_6H_4NHC_2H_5$	135.21	lq.	$0.948^{25/4}$	<–15	215–6	i.			
(*p*-)	$CH_3{\cdot}C_6H_4NHC_2H_5$	135.21	lq.	$0.942^{25/4}$		217	i.			
urea	$C_2H_5NH{\cdot}CO{\cdot}NH_2$	88.11	nd.	1.213^{18}	92		v. s.	80	i.	
valerate (*n*-)	$CH_3(CH_2)_3CO_2C_2H_5$	130.18	col. lq.	0.877^{20}	–91.2	145.5	0.24^{25}	∞	∞	
(*i*-)	$(CH_3)_2CH(CH_2)CO_2C_2H_5$	130.18	col. lq.	$0.867^{20/4}$	–99.3	135	0.17^{20}	∞	∞	
Ethylal	$CH_2(OC_2H_5)_2$	104.15	lq.	$0.824^{25/4}$	–66.5	89	9^{18}	∞	∞	
Ethylene	$H_2C{:}CH_2$	28.05	col. gas	$0.57^{-102/4}$	–169	–103.9	26 cc.^{0}	360 cc.	s.	
bromide	$BrCH_2{\cdot}CH_2Br$	187.86	col. lq.	$2.180^{20/4}$	10	131.5	0.43^{80}	∞	∞	
bromohydrin	$BrCH_2{\cdot}CH_2OH$	124.96	col. lq.	$1.772^{20/4}$		150.3	sl. s.	s.		
chlorobromide	$ClCH_2{\cdot}CH_2Br$	143.41	lq.	1.689^{19}	–16.6	106.7	0.69^{80}			
chlorohydrin	$ClCH_2{\cdot}CH_2OH$	80.51	col. lq.	$1.213^{20/4}$	–69	128.8	∞	∞	∞	
diamine	$H_2NCH_2{\cdot}CH_2NH_2$	60.10	col. lq.	$0.900^{20/20}$	8.5	117.2	∞	∞	0.3	
oxide	$<(CH_2)_2>O$	44.05	lq.	$0.887^{7/4}$	–111.3	13.5^{747}	∞	∞	v. s.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
Ethylidene diacetate	$CH_3CH(O_2CCH_3)_2$	146.14	col. lq.	1.061^{12}	18.85	168^{740}	sl. s.	∞		
Eugenol (1-,4-,3-)	$C_3H_5{\cdot}C_6H_3(OH)OCH_3$	164.20	oil	$1.070^{15/15}$	10.3	253.5	v. sl. s.	∞	∞	
(*i*-)(1-,3-,4-)	$C_3H_5{\cdot}C_6H_3(OCH_3)OH$	164.20	oil	$1.091^{15/15}$	−10	267.5	v. sl. s.	∞	∞	
Fenchyl alcohol (*dl*-)	$C_{10}H_{17}OH$	154.25	col. cr.	0.935^{40}	35	201	sl. s.			
(*d*-)(α-)	$C_{10}H_{17}OH$	154.25	col. pr.	$0.964^{20/4}$	45–7	201–2	sl. s.	s.	s.	
(*i*-)(*l*-)	$C_{10}H_{17}OH$	154.25	col. cr.	0.961	61–2	201–2	i.			
Ferric dimethyl-dithiocarbamate	$Fe[SSCN(CH_3)_2]_3$	416.49	cr.		d. 100–30	ign. >150	v. sl. s.			
Fluorene	$(C_6H_4)_2>CH_2$	166.22	cr./al.	$1.203^{0/4}$	115–6	293–5	i.	s. h.	s.	
Fluorescein	$C_{20}H_{12}O_5$	332.31	yel. red		d. > 290		v. sl. s. h.	s. h.		
Fluoro-dichloromethane	$FCHCl_2$	102.92	gas	1.426^{0}	−127	14.5	i.	s.	s.	
-trichloromethane	Cl_3CF	137.37	col. lq.	$1.494^{17.2}$		24.9	i.	∞	∞	
Formaldehyde	HCHO	30.03	gas	0.815^{-20}	−92	−21	v. s.	v. s.	v. s.	
(*m*-)	$(CH_2O)_3$	90.08	wh.	1.17^{65}	64	114.5^{759}	21^{25}	s.	s.	
(*p*-)	$(CH_2O)_x{\cdot}xH_2O$	(30.03)	amor.		150–60	subl.	$20–30^{18}$	i.	i.	
Formamide	$HCONH_2$	45.04	lq.	$1.139^{20/4}$	2	193	∞	∞	v. sl. s.	
Formanilide	$HCONHC_6H_5$	121.14	mn.	$1.147^{15/15}$	47	216^{120}	sl. s.	v. s.	s.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
Formic acid	HCO_2H	46.03	col. lq.	$1.220^{20/4}$	8.6	100.8	∞	∞		
Fructose	$CH_2OH(CHOH)_3COCH_2OH$	180.16	nd./aq.	$1.669^{17.5}$	95–105		v. s.	8^{18}		
Fuchsin	$C_{20}H_{19}N_3HCl$	337.85	red	1.22	d. >200		0.3	s.	i.	
Fulminic acid	C:NOH	43.02								
Fumaric acid (*trans*-)	$HO_2CCH:CHCO_2H$	116.07	col. pr.	$1.635^{20/4}$	286–7	290	0.7^{17}	5.8^{30}	0.7^{25}	
Furfural	$C_4H_3O·CHO$	96.08	lq.	$1.159^{20/4}$	−38.7	161.7^{760}	9.1^{13}	∞	∞	
Furfuran	C_4H_4O	68.07	col. lq.	$0.937^{20/4}$		$31–2^{756}$	i.	s.	s.	
Furfuryl acetate	$CH_3CO_2CH_2C_4H_3O$	140.14	col. oil	$1.118^{20/4}$		175–7	i.	s.	s.	
alcohol	$C_4H_3O·CH_2OH$	98.10	oil	$1.129^{25/4}$		169.5^{752}	∞	s.	s.	
butyrate	$C_3H_7CO_2CH_2·C_4H_3O$	168.19	col. lq.	$1.053^{20/4}$		212–3	v. sl. s.	s.	∞	
propionate	$C_2H_5CO_2CH_2·C_4H_3O$	154.16	col. lq.	$1.109^{20/4}$		195–6	v. sl. s.	s.	∞	
Furoic acid	$C_4H_3O·CO_2H$	112.08	mn. pr.		133–4	230–2	3.6^{15}	s.	s.	
G-acid, K salt (2-)(6-,8-)	$HOC_{10}H_5(SO_3K)_2$	380.48	cr.				8^{25}			
Na salt (2-)(6-,8-)	$HOC_{10}H_5(SO_3Na)_2$	348.26	cr.				34^{20}			
Galactose (*d*-)(α-)	$C_5H_{11}O_5·CHO$	180.16	pr.		165.5		10.3^{0}	0.6^{40}		
Gallic acid (3-,4-,5-)	$(HO)_3C_6H_2CO_2H·H_2O$	188.13	mn./aq.	$1.694^{4/4}$	d. 220		1^{13}	28^{15}	2.5^{15}	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
Gamma acid (2-,8-,6-)	$C_{10}H_5(NH_2)(OH)SO_3H$	239.25	cr.							
Geraniol	$C_9H_{15}CH_2OH$	154.25	col. lq.	0.883^{15}	<−15	230	i.	∞	∞	
Glucose (*d*-)(α-)	$C_5H_{11}O_5 \cdot CHO$	180.16	rhb.	1.544^{25}	146		$82^{17.5}$	sl. s.	i.	
(*d*-)(β-)	$C_6H_{12}O_6 \cdot H_2O$	198.17	cr.	$1.562^{18/4}$	150		154^{15}			
Glucuronic acid	$CHO(CHOH)_4CO_2H$	194.14	cr.		154	d.	v. s.			
Glutam(in)ic acid (*dl*-)	$[\cdot CHNH_2(CH_2)_2\cdot](CO_2H)_2$	147.13	cr./aq.	1.460	199 d.		1.5^{20}	v. sl. s.	v. sl. s.	
Glutaric acid	$CH_2(CH_2CO_2H)_2$	132.11	col. cr.	1.429^{15}	97.5	200^{20}	63.9^{20}	v. s.	v. s.	
Glycerol	$CH_2OH \cdot CHOH \cdot CH_2OH$	92.09	col. lq.	$1.260^{50/4}$	17.9	290	∞	∞	i.	
acetate (mono-)	$C_5H_{10}O_4$	134.13	col. oil	$1.20^{20/4}$		158^{165}	v. s.	v. s.	sl. s.	
(di-)	$(CH_3CO_2)_2C_3H_5OH$	176.17	col. lq.	$1.178^{15/15}$	40	$175–6^{40}$	s.	s.	sl. s.	
nitrate (mono-)(α-)	$CH_2OH \cdot CHOH \cdot CH_2NO_3$	137.09	col. pr.	1.40^{15}	58–9	155–60	70^{15}	v. s.	v. sl. s.	
(β-)	$CH_2OH \cdot CHNO_3 \cdot CH_2OH$	137.09	lf.	1.40^{15}	54	155–60		v. s.	sl. s.	
dinitrate (1-,3-)	$CHOH(CH_2ONO_2)_2$	182.09	oil	1.47^{15}	<−30	$146–8^{15}$		v. s.	v. s.	
Glyceryl triacetate	$(CH_3CO_2)_3C_3H_5$	218.20	col. lq.	$1.161^{17/4}$	−78	258–9	7.17^{15}	∞	∞	
tribenzoate	$(C_6H_5CO_2)_3C_3H_5$	404.41	nd.	1.228^{12}	75–6	d.	i.	s. h.	s.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
tributyrate	$(C_2H_5CH_2CO_2)_3C_3H_5$	302.36	col. lq.	$1.032^{20/4}$	<−75	305–9	i.	s.	s.	
tricaprate	$[CH_3(CH_2)_8CO_2]_3C_3H_5$	554.84	col. cr.	$0.921^{40/4}$	31(25)		i.	s. h.	v. s.	
tricaproate	$[CH_3(CH_2)_4CO_2]_3C_3H_5$	386.52	col. lq.	$0.987^{20/4}$	−25		i.	s.	s.	
tricaprylate	$[CH_3(CH_2)_6CO_2]_3C_3H_5$	470.68	col. lq.	$0.954^{20/4}$	8.3(−21)		i.	s.	s.	
trilaurate	$[CH_3(CH_2)_{10}CO_2]_3C_3H_5$	639.00	col. nd.	$0.894^{60/4}$	45–6		i.	sl. s. c.	v. s.	
trimyristate	$[CH_3(CH_2)_{12}CO_2]_3C_3H_5$	723.16	lf.	$0.885^{60/6}$	56.5		i.	s.		
trinitrate	$CH_2NO_3·CHNO_3·CH_2NO_3$	227.09	yel. oil	1.601^{15}	13.3(2)	160^{15}	0.18^{20}	50^{20}	∞	
trinitrite	$CH_2NO_2·CHNO_2·CH_2NO_2$	179.09	yel. lq.	$1.291^{10/16}$		150 sl. d.	d.	d.	s.	
trioleate	$(C_{17}H_{33}CO_2)_3C_3H_5$	885.43	col. oil	0.915^{15}	−4	240^{18}	i.	sl. s.	v. s.	
tripalmitate	$[CH_3(CH_2)_{14}CO_2]_3C_3H_5$	807.32	col. nd.	$0.866^{80/4}$	65.1	$310–20^{0.1}$	i.	0.004^{21}	v. s.	
tristearate	$[CH_3(CH_2)_{16}CO_2]_3C_3H_5$	891.48	col. pr.	$0.862^{80/4}$	70.8(55)		i.	s. h.	s. h.	
Glycide	$C_2H_3O·CH_2OH$	74.08	col. lq.	$1.114^{16/16}$		166 sl. d.	∞	∞	∞	
Glycine, Glycocoll	$NH_2CH_2·CO_2H$	75.07	mn.	1.161	232–6 d.		23 c.	0.1 c.	i.	
Glycol	$CH_2OH·CH_2OH$	62.07	col. lq.	$1.113^{19/4}$	−15.6	197.4	∞	∞	1.0	
diacetate	$(CH_3CO_2CH_2·)_2$	146.14	col. lq.	$1.109^{14/4}$	−31	190.5	14.3^{22}	∞	∞	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
dibenzoate	$(C_6H_5CO_2CH_2\cdot)_2$	270.28	rhb./et.		73–4	>360	i.		s.	
dibutyrate	$(C_3H_7CO_2CH_2\cdot)_2$	202.25	col. lq.	1.024^{0}		240	i.	v. s.	v. s.	
dicaprylate	$(C_7H_{15}CO_2CH_2\cdot)_2$	314.46	lq.		22		i.			
diformate	$(HCO_2CH_2\cdot)_2$	118.09	lq.			174	v. sl. s.			
dilaurate	$(C_{11}H_{23}CO_2CH_2\cdot)_2$	426.67	amor.		52–4	188^{20}	i.	v. s.	v. s.	
dinitrate	$(O_2NO\cdot CH_2\cdot)_2$	152.06	yel. lq.	$1.482^{21/2}$	−20	expl. 114	0.92^{25}	s.	∞	
dinitrite	$(ONO\cdot CH_2\cdot)_2$	120.06	lq.	1.216^{0}	<−15	96–8	i.	s. d.	s.	
dipalmitate	$(C_{15}H_{31}CO_2CH_2\cdot)_2$	538.89	nd.		71–2	$260^{0.1}$	i.	s.	s.	
dipropionate	$(C_2H_5CO_2CH_2\cdot)_2$	174.19	lq.	1.045^{25}		211–2	sl. s.	∞	∞	
ether	$(HO\cdot CH_2CH_2)_2O$	106.12	lq.	$1.118^{20/20}$	−10.5	244.8	∞	∞	i.	
formal	$<O\cdot CH_2CH_2OCH_2>$	74.08	lq.	$1.060^{20/4}$		75–6	∞			
formate (mono-)	$HCO_2CH_2CH_2OH$	90.08	lq.	$1.199^{15/4}$		180	∞			
Glycolic acid	$HOCH_2CO_2H$	76.05	nd./aq.		79(63)	d.	∞	90^{25}	v. s.	
Guaiacol (o-)	$CH_3O\cdot C_6H_4OH$	124.14	pr.	$1.140^{15/15}$	28.3	205	1.7^{15}	v. s.	v. s.	
Guanidine	$NH{:}C(NH_2)_2$	59.07	col. cr.		50		v. s.	s.		

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
H-acid, Na salt (1-,8-,3-,6-)	$C_{10}H_8O_7NS_2Na{\cdot}1½H_2O$	368.32	cr.				0.17^{20}			
Heptacosane (*n*-)	$CH_3(CH_2)_{25}CH_3$	380.73	col. cr.	$0.780^{60/4}$	59.5	270^{15}	i.			
Heptane (*n*-)	$CH_3(CH_2)_5CH_3$	100.20	col. lq.	$0.684^{20/4}$	−90.6	98.4^{760}	0.005^{15}	sl. s.	∞	
(*i*-)	$(CH_3)_2CH(CH_2)_3CH_3$	100.20	col. lq.	$0.679^{20/4}$	−118.2	90.0	i.	s.	∞	
	$C_3H_7{\cdot}CH(CH_3){\cdot}C_2H_5$	100.20	col. lq.	$0.687^{20/4}$	−119.4	91.8	i.	s.	∞	
	$(CH_3)_3C{\cdot}CH_2{\cdot}C_2H_5$	100.20	col. lq.	$0.674^{20/4}$	−125	79.1	i.	s.	∞	
	$[(CH_3)_2CH]_2CH_2$	100.20	col. lq.	$0.675^{20/4}$	−119.4	80.8	i.	s.	∞	
	$(CH_3)_2C(C_2H_5)_2$	100.20	col. lq.	$0.693^{20/4}$	−135.0	86.0	i.	s.	∞	
	$(C_2H_5)_3CH$	100.20	col. lq.	$0.698^{20/4}$	−118.7	93.5	i.	s.	∞	
	$(CH_3)_3C{\cdot}CH(CH_3)_2$	100.20	col. lq.	$0.690^{20/4}$	−25	80.8	i.	s.	∞	
Heptoic acid	$CH_3(CH_2)_5CO_2H$	130.18	col. lq.	0.918^{20}	−10	221−2	0.25^{15}	s.	s.	
aldehyde	$CH_3(CH_2)_5CHO$	114.19	col. lq.	$0.850^{20/\ell}$	−42	155	0.02^{20}	∞	∞	
Heptyl acetate (*n*-)	$CH_3CO_2CH_2(CH_2)_5CH_3$	158.24	col. lq.	$0.874^{16/16}$		191.5^{759}	i.	s.	s.	
alcohol (*n*-)	$CH_3(CH_2)_5CH_2OH$	116.20	col. lq.	$0.824^{20/4}$	−34	175^{756}	0.18^{25}	∞	∞	
	$[(CH_3)_2CH]_2CHOH$	116.20	col. lq.	$0.829^{20/4}$		140	v. sl. s.	∞	∞	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
	$(C_2H_5{\cdot}CH_2)_2CHOH$	116.20	lq.	$0.820^{20/4}$	−37	156	i.	s.	s.	
mercaptan	$CH_3CH(SH){\cdot}C_5H_{11}$	132.27	lq.	0.835^{20}		$174–5^{765}$	i.			
Hexachloro-benzene	C_6Cl_6	284.78	mn.	2.044^{24}	228–31	309^{742}	i.	v. sl. s. h.	s. h.	
-ethane	$CCl_3{\cdot}CCl_3$	236.74	rhb.	$2.091^{20/4}$	186–7	186^{777}	0.005^{22}	v. s.	v. s.	
Hexacosane (*n*-)	$CH_3(CH_2)_{24}CH_3$	366.71	cr.	$0.779^{57/4}$	56.6	262^{15}	i.	v. sl. s.		
Hexadecane (*n*-)	$CH_3(CH_2)_{14}CH_3$	226.44	lf.	$0.774^{20/4}$	18.5	287.5	i.	∞	∞	
Hexaethylbenzene	$C_6(C_2H_5)_6$	246.43	pr./al.	$0.831^{130/4}$	130	298.3	i.	0.75^{25}	8^{25}	
Hexamethylbenzene	$C_6(CH_3)_6$	162.27	pl./al.		166	265	i.	0.2^{0}	v. s.	
Hexamethylene-diamine	$NH_2(CH_2)_6NH_2$	116.20	lf.		42	204–5	v. s.	s.		
-diisocyanate	$OCN(CH_2)_6NCO$	168.19	lq.	1.04^{28}		$143–4^{20}$	d.	d.		
-glycol	$HO(CH_2)_6OH$	118.17	nd./aq.		42	250	s.	s.	sl. s. h.	
tetramine	$(CH_2)_6N_4$	140.19	col. rhb.		subl.		81^{12}	3	v. sl. s.	
Hexane (*n*-)	$CH_3(CH_2)_4CH_3$	86.18	col. lq.	$0.659^{20/4}$	−94	69	0.014^{15}	50^{33}	∞	
(*i*-)	$(CH_3)_2CH(CH_2)_2CH_3$	86.18	lq.	$0.654^{20/4}$	−153.7	60.2	i.		s.	
(neo-)	$(CH_3)_3C{\cdot}C_2H_5$	86.18	lq.	$0.649^{20/20}$	−98.2	49.7	i.		s.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts		
								Water	Alcohol	Ether
	$(CH_3)_2CH{\cdot}CH(CH_3)_2$	86.18	lq.	$0.662^{20/4}$	−129.8	58.0^{760}	i.		s.	
	$(C_2H_5)_2CHCH_3$	86.18	lq.	$0.664^{20/4}$	−118	63.2	i.		s.	
Hexyl acetate (*n*-)	$CH_3CO_2(CH_2)_5CH_3$	144.21	col. lq.	$0.890^{0/0}$		169.2	i.	v. s.	v. s.	
alcohol (*n*-)	$CH_3(CH_2)_4CH_2OH$	102.17	col. lq.	$0.820^{20/20}$	−51.6	157.2	0.6^{20}	∞	∞	
	$(CH_3)_2CH{\cdot}C(CH_3)_2OH$	102.17	lq.	$0.821^{20/0}$	−14	120–1	v. sl. s.	∞	∞	
	$(CH_3)_2COH{\cdot}CH_2C_2H_5$	102.17	lq.	$0.809^{20/4}$	−107	123^{762}	v. sl. s.	∞	∞	
formate (*n*-)	$HCO_2CH_2(CH_2)_4CH_3$	130.18	lq.	0.898^{0}		153.6		∞	∞	
resorcinol (2-,4-)	$CH_3(CH_2)_5C_6H_3(OH)_2$	194.27	col. nd.		68–70	179^{7}	0.05	v. s.	s.	
Hippuric acid	$C_6H_5CONHCH_2CO_2H$	179.17	rhb.	$1.371^{20/4}$	187–8	d.	0.4^{20}	s. h.	0.25^{18}	
Histidine (*l*-)	$C_6H_9O_2N_3$	155.15	lf./aq.		d. 287		s.	v. sl. s.	i.	
Homophthalic acid (*o*-)	$HO_2C{\cdot}C_6H_4{\cdot}CH_2CO_2H$	180.16	cr./aq.		175–80		s. h.	v. s.	sl. s.	
Hydracrylic acid	$HOCH_2CH_2CO_2H$	90.08	syrup			d.				
Hydrocyanic acid	HCN	27.03	lq.	0.697^{18}	−12	25–6	∞	∞	∞	
-quinone (*p*-)	$C_6H_4(OH)_2$	110.11	cr.	1.332^{15}	170.3	285^{730}	6^{15}	v. s.	v. s.	
Hydroxybenzaldehyde (*p*-)	$HO{\cdot}C_6H_4{\cdot}CHO$	122.12	nd./aq.	1.129^{130}	116–7	subl.	1.38^{31}			

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
-benzanilide (*o*-)	$HO{\cdot}C_6H_4{\cdot}CONHC_6H_5$	213.23	pr./al.		135	d.	v. sl. s. h.	s.	s.	
-quinoline (2-)(α-)	$C_9H_6N{\cdot}OH$	145.16	pr./al.		199–200	subl.	s. h.	v. s.	v. s.	
(8-)(*o*-)	$C_9H_6N{\cdot}OH$	145.16	pr.		75–6	266.6^{752}	v. sl. s. c.	s.	sl. s.	
Indigo	$[C_6H_4(CO)(NH)C:]_2$	262.26	cr.	1.35	390–2	subl.	i.	i.	i.	
White	$C_{16}H_{12}O_2N_2$	264.28	gray				i.	s.	s.	
Indole	C_8H_7N	117.15	lf./aq.		52	253–4	s. h.	s. h.	s.	
Indoxyl	C_8H_6NOH	133.15	yel. pr.		85	110	s.	s.	s.	
Iodobenzene	C_6H_5I	204.01	col. lq.	$1.824^{25/4}$	−28.5	188.6	0.034^{20}	s.	∞	
-phenol (*p*-)	IC_6H_4OH	220.01	nd./aq.	1.857^{112}	93–4	d.	sl. s.	v. s.	v. s.	
Iodoform	HCI_3	393.73	yel. hex.	4.008^{17}	119	subl.	0.01^{25}	1.5^{17}	13.6^{25}	
Ionone (α-)	$C_{10}H_{16}:CHCOCH_3$	192.30	col. oil	0.930^{20}		136.1^{17}	sl. s.	∞	∞	
(β-)	$C_{10}H_{16}:CHCOCH_3$	192.30	col. oil	0.944^{20}		140^{18}	sl. s.	∞	∞	
Irone (β-)	$C_{14}H_{22}O$	206.32	col. oil	0.939^{20}		144^{16}	v. sl. s.	v. s.	v. s.	
Isatin	$C_6H_4<(CO)(N)>COH$	147.13	yel. red		200–1	subl.	s. h.	v. s. h.	sl. s.	
Isoprene	$CH_2:CH{\cdot}C(CH_3):CH_2$	68.12	col. lq.	$0.681^{20/4}$	−120	34	i.	∞	∞	
Ketene	$H_2C:CO$	42.04	col. gas		−151	−56	d.	d.	s.	
Koch acid (1-)(3-,6-,8-)	$C_{10}H_4(NH_2)S_3O_9HNa_2$	427.34	cr.				7.2^{20}			

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
Lactic acid (*dl*-)	$CH_3CH(OH)CO_2H$	90.08	hyg.	$1.249^{15/4}$	16.8	122^{14}	∞	∞	∞	
anhydride	$C_6H_{10}O_5$	162.14	yel. oil			d. 250	v. sl. s.	s.	s.	
Lactide (*dl*-)	$C_6H_8O_4$	144.13	tri./al.	$0.862^{10/4}$	124.5	255^{757}	v. sl. s.	v. sl. s. c.		
Lactose	$C_{12}H_{22}O_{11}·H_2O$	360.31	col. rhb.	1.525^{20}	202	d.	17^{10}	i.	i.	
Lauric acid	$CH_3(CH_2)_{10}CO_2H$	200.32	col. nd.	$0.869^{50/4}$	48(44)	225^{100}	i.	s.	s.	
Laurone	$[CH_3(CH_2)_{10}]_2CO$	338.61	pl.	$0.809^{69/4}$	69–70		i.	i. c.		
Lauryl alcohol	$CH_3(CH_2)_{10}CH_2OH$	186.33	lf.	$0.831^{24/4}$	24	255–9	i.	s.	s.	
Lead tetraethyl	$Pb(CH_2CH_3)_4$	323.44	col. lq.	$1.659^{18/4}$	−136	152^{291}	i.	sl. s.	∞	
tetramethyl	$Pb(CH_3)_4$	267.34	col. lq.	$1.995^{20/4}$	−27.5	110^{760}	i.	∞	∞	
Lepidine (*py*-4)	$C_9H_6N·CH_3$	143.19	lq.	1.086^{20}	9–10	261–3	sl. s.	∞	∞	
Leucine (*l*-)	$(CH_3)_2CHCH_2CH(NH_2)CO_2H$	131.17	cr.	1.293^{18}	295	subl.	2.2^{18}			
Levulinic acid	$CH_3CO(CH_2)_2CO_2H$	116.12	lf.	$1.140^{20/20}$	33.5	245–6	v. s.	v. s.	v. s.	
Limonene (*d*- or *l*-)	$C_{10}H_{16}$	136.23	lq.	$0.842^{20/4}$	−96.9	177	i.	∞	∞	
Linalool (*d*- or *l*-)	$C_{10}H_{17}OH$	154.25	col. oil	0.868^{20}		198–200	v. sl. s.	s.	∞	
Linalyl acetate	$CH_3CO_2C_{10}H_{17}$	196.29	col. lq.	0.895^{20}		220^{762} d.	v. sl. s.	∞	∞	
Linoleic acid	$C_{17}H_{31}CO_2H$	280.45	yel. oil	$0.903^{18/4}$	−9.5	$229–30^{16}$	i.	∞	∞	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
Maleic acid	$HO_2C{\cdot}CH:CH{\cdot}CO_2H$	116.07	mn.	1.609	130.5	135 d.	79^{25}	70^{30}	8^{25}	
anhydride	$<(\cdot CHCO)_2>O$	98.06	cr.	1.5	57–60	202	16.3^{80}			
Malic acid (*dl*-)	$HO_2CCH_2CH(OH)CO_2H$	134.09	col. cr.	$1.601^{20/4}$	128–9	150 d.	144^{26}	v. s.	v. s.	
(*d*- or *l*-)	$HO_2CCH_2CH(OH)CO_2H$	134.09	col. cr.	$1.595^{20/4}$	99–100	140 d.	v. s.	v. s.	8.4^{15}	
Malonic acid	$H_2C(CO_2H)_2$	104.06	col. tri.	1.631^{15}	130–5 d.		138^{16}	42^{25}	8^{15}	
Maltose	$C_{12}H_{22}O_{11}{\cdot}H_2O$	360.31	col. nd.	1.540^{17}	d.		108^{25}	v. sl. s. c.	i.	
Mandelic acid (*dl*-)	$C_6H_5CH(OH)CO_2H$	152.15	rhb./aq.	$1.300^{20/4}$	118.1	d.	16^{20}	s.	s.	
Mannitol (*d*-)	$CH_2OH(CHOH)_4CH_2OH$	182.17	col. rhb.	$1.489^{20/4}$	166	$290–5^{3}$	13^{14}	0.01^{14}	i.	
Mannose (*d*-)	$CH_2OH(CHOH)_4CHO$	180.16	rhb.	$1.539^{20/4}$	132		248^{17}	v. sl. s.	i.	
Margaric acid	$CH_3(CH_2)_{15}CO_2H$	270.45	col. pl.	0.853^{60}	60–1	227^{100}	i.	32^{28}	v. s.	
Mellitic acid	$C_6(CO_2H)_6$	342.17	nd./al.		286–8	d.	v. s.	v. s.		
Menthol (l-)(α-)	$C_{10}H_{19}OH$	156.27	col. cr.	$0.890^{15/15}$	42–3	212	0.04 c.	v. s.	v. s.	
Mercapto-benzothiazole (2-)	$<C_6H_4N:C(SH)S>$	167.25	nd.	$1.42^{20/4}$	179	d.	i.	s.	sl. s.	
-thiazoline (2-)	$<CH_2N:C(SH)SCH_2>$	119.21	cr.	1.50	106		1.6^{60}			
Mercuric cyanide	$Hg(CN)_2$	252.62	cr.	4.003^{22}	d. 320		12.5^{15}			

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts		
								Water	Alcohol	Ether
fulminate	$Hg(ONC)_2 \cdot \frac{1}{2}H_2O$	293.63	cr./aq.	4.4	expl.		0.07^{12}	s.		
Mesityl oxide	$(CH_3)_2C:CHCOCH_3$	98.14	lq.	$0.858^{20/4}$	−59	130^{750}	3^{20}	∞	∞	
Mesitylene (1-,3-,5-)	$C_6H_3(CH_3)_3$	120.19	col. lq.	$0.865^{20/4}$	−45(−52)	164.8	i.	s.	∞	
Metanilic acid (*m*-)	$H_2NC_6H_4SO_3H$	173.19	col. nd.		d.		2^{15}	v. sl. s.	v. sl. s.	
Methane	CH_4	16.04	gas	0.415^{-16}_{4}	−182.6	−161.4	0.4^{20} cc.	47^{20} cc.	104^{10} cc.	
Methoxy-methoxy ethanol	$CH_3(OCH_2)_2CH_2OH$	106.12	lq.	1.038^{25}	<−70	167.5	∞			
Methyl acetate	$CH_3CO_2CH_3$	74.08	col. lq.	$0.924^{20/4}$	−98.7	57.1	33^{22}	∞	∞	
acrylic acid (α-)	$CH_2:C(CH_3)CO_2H$	86.09	pr.	$1.015^{20/4}$	15–16	161–3	s. h.	∞	∞	
alcohol	CH_3OH	32.04	col. lq.	$0.792^{20/4}$	−97–8	64.7	∞	∞	∞	
-amine	CH_3NH_2	31.06	col. gas	0.699^{-11}	−92.5	-6.7^{758}	v. s.	v. s.		
-amine hydrochloride	$CH_3NH_2 \cdot HCl$	67.52	pl./al.	1.23	226–8	230^{15}	v. s.	23 h.	i.	
aniline	$C_6H_5NHCH_3$	107.15	lq.	$0.989^{20/4}$	−57	195.5	0.01^{25}	s.	∞	
anthracene (α-)	$C_6H_4:(CH)_2:C_6H_3CH_3$	192.26	lf./al.	$1.047^{99.4}$	86		i.			
(β-)	$C_6H_4:(CH)_2:C_6H_3CH_3$	192.26	col. lf.	$1.181^{0/4}$	207		i.	v. sl. s.	v. sl. s.	
anthranilate (*o*-)	$NH_2C_6H_4CO_2CH_3$	151.16	col. lq.	$1.168^{19/4}$	24	135.5^{15}	sl. s.	s.	s.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
anthraquinone (2-)	$C_6H_4:(CO)_2:C_6H_3CH_3$	222.24	col. nd.		176–7	subl.	i.	s.	s.	
benzoate	$C_6H_5CO_2CH_3$	136.15	col. lq.	$1.087^{25/25}$	−12.5	198–9	0.02^{30}	∞	∞	
benzylaniline	$C_6H_5N(CH_3)CH_2C_6H_5$	197.28	lq.		9.2	305–6	i.	s.	s.	
bromide	CH_3Br	94.94	gas	$1.732^{0/0}$	−93	4.5^{758}	v. sl. s.	s.	s.	
butyrate (*n*-)	$CH_3(CH_2)_2CO_2CH_3$	102.13	col. lq.	$0.898^{20/4}$	<−95	102.3	1.7	∞	∞	
(*i*-)	$(CH_3)_2CHCO_2CH_3$	102.13	col. lq.	$0.891^{20/4}$	−84.7	92.6	v. sl. s.	∞	∞	
caprate	$CH_3(CH_2)_8CO_2CH_3$	186.29	lq.		−18	223–4	i.	∞	∞	
caproate (*n*-)	$CH_3(CH_2)_4CO_2CH_3$	130.18	col. lq.	$0.904^{0/0}$		149.5	i.	∞	∞	
caprylate	$CH_3(CH_2)_6CO_2CH_3$	158.24	col. lq.	0.887^{18}	−40	192–4	i.	∞	∞	
cellosolve	$CH_3OCH_2CH_2OH$	76.09	col. lq.	$0.965^{20/4}$		124–5	∞	∞	∞	
chloride	CH_3Cl	50.49	gas	0.952^{0}	−97.7	−24	280^{16} cc.	v. s.	v. s.	
chloroacetate	$ClCH_2CO_2CH_3$	108.52	col. lq.	$1.236^{20/4}$	−32.7	130^{740}	v. sl. s.	∞	∞	
chloroformate	$ClCO_2CH_3$	94.50	col. lq.	1.236^{15}		71–2	d.	∞	∞	
cinnamate	$C_6H_5CH:CHCO_2CH_3$	162.19	cr.	$1.042^{36/0}$	33.4	263	i.	v. s.	v. s.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
cyclohexane	$CH_2 < (CH_2CH_2)_2 > CHCH_3$	98.19	col. lq.	$0.769^{20/4}$	−126.3	101	i.	s.	s.	
ethyl carbonate	$CH_3O{\cdot}CO{\cdot}OC_2H_5$	104.10	lq.	1.002^{27}	−14.5	109.2	i.	∞	∞	
ethyl ketone	$CH_3.CO{\cdot}C_2H_5$	72.11	col. lq.	$0.805^{20/4}$	−85.9	79.6	35^{10}	∞	∞	
ethyl oxalate	$CH_3OCO{\cdot}CO_2C_2H_5$	132.11	lq.	$1.156^{0/0}$		173.7	i.	v. s.	v. s.	
formate	HCO_2CH_3	60.05	lq.	$0.974^{20/4}$	−99.8	32	30^{20}	∞		
furoate	$C_4H_3O{\cdot}CO_2CH_3$	126.11	col. lq.	$1.179^{21/4}$		181.3	i.	∞	∞	
glucamine	$CH_2OH(CHOH)_4CH_2NHCH_3$	195.21								
glycolate	$HOCH_2CO_2CH_3$	90.08	lq.	1.168^{18}		151.2				
heptoate	$CH_3(CH_2)_5CO_2CH_3$	144.21	lq.	$0.881^{15/4}$		172–3	i.			
hypochlorite	$ClOCH_3$	66.49	gas			12^{726}				
iodide	CH_3I	141.94	col. lq.	$2.279^{20/4}$	−64.4	42.4	1.8^{15}	∞	∞	
lactate	$CH_3CH(OH)CO_2CH_3$	104.10	lq.	1.090^{19}		144.8	∞	s.	s.	
laurate	$CH_3(CH_2)_{10}CO_2CH_3$	214.34	lq.		5	148^{18}	i.			
mercaptan	CH_3SH	48.11	gas	0.896^{0}	−121	5.8^{752}	s.	v. s.	v. s.	
methacrylate	$CH_2:C(CH_3)CO_2CH_3$	100.12	lq.	$0.950^{15.6}$	−48	100.3	i.			

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
myristate	$CH_3(CH_2)_{12}CO_2CH_3$	242.40	cr./al.		18–9	295^{715}	i.			
naphthalene (α-)	$C_{10}H_7CH_3$	142.20	oil	$1.025^{14/4}$	−19	244.6	i.	v. s.	v. s.	
(β-)	$C_{10}H_7CH_3$	142.20	mn.	$0.994^{40/4}$	35–6	241–2	i.	v. s.	v. s.	
nitrate	CH_3ONO_2	77.04	lq.	1.203^{25}	expl.	65	sl. s.	s.	s.	
nitrite	CH_3ONO	61.04	gas	0.991^{15}		−12		s.	s.	
nonyl ketone (*n*-)	$CH_3(CH_2)_8COCH_3$	170.29	col. oil	$0.828^{20/20}$	13.5	228	i.	s.	s.	
oleate	$C_{17}H_{33}CO_2CH_3$	296.49	oil	0.879^{18}		$190–1^{10}$	i.	∞	∞	
orange	$(CH_3)_2NC_6H_4N_2C_6H_4SO_3Na$	327.33	red pd.				0.2 c.			
palmitate	$CH_3(CH_2)_{14}CO_2CH_3$	270.45	col. cr.		30–1	196^{15}	i.	s.	s.	
phosphine	CH_3PH_2	48.02	gas			-14^{759}	i.	sl. s.		
propionate	$CH_3CH_2CO_2CH_3$	88.11	col. lq.	$0.915^{20/4}$	−87.5	79.7	0.5^{20}	∞	∞	
propyl ketone (*n*-)	$CH_3COCH_2CH_2CH_3$	86.13	col. lq.	$0.812^{15/15}$	−77.8	102	v. sl. s.	∞	∞	
salicylate (*o*-)	$HO{\cdot}C_6H_4CO_2CH_3$	152.15	col. lq.	$1.182^{25/25}$	−8.3	222.2	0.07^{30}	∞	∞	
stearate	$CH_3(CH_2)_{16}CO_2CH_3$	298.50	col. cr.		38–9	215^{15}	i.	s.	s.	
toluate (*o*-)	$CH_3{\cdot}C_6H_4CO_2CH_3$	150.17	col. lq.	1.073^{15}	<−50	213	i.	∞	∞	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
(*m*-)	$CH_3{\cdot}C_6H_4CO_2CH_3$	150.17	col. lq.	1.066^{15}		215	i.			
(*p*-)	$CH_3{\cdot}C_6H_4CO_2CH_3$	150.17	cr.		33–4	217	i.	v. s.	v. s.	
Methyl toluidine (*o*-)	$CH_3{\cdot}C_6H_4NHCH_3$	121.18	lq.	0.973^{15}		206–7	i.	∞	∞	
(*m*-)	$CH_3{\cdot}C_6H_4NHCH_3$	121.18	lq.			206–7	i.	∞	∞	
(*p*-)	$CH_3{\cdot}C_6H_4NHCH_3$	121.18	lq.	$0.935^{55/4}$		211^{761}	i.	∞	∞	
valerate (*n*-)	$CH_3(CH_2)_3CO_2CH_3$	116.16	lq.	$0.895^{15/4}$	−91	127.3	v. sl. s.	∞	∞	
(*i*-)	$(CH_3)_2CHCH_2CO_2CH_3$	116.16	col. lq.	$0.881^{20/4}$		116.7^{764}	v. sl. s.	∞	∞	
vinyl ketone	$CH_3COCH{:}CH_2$	70.09	lq.	$0.836^{20/4}$		81	>85			
Methylal	$HCH(OCH_3)_2$	76.09	col. lq.	$0.866^{15/4}$	−104.8	42–3	33	∞	∞	
Methylene-bis-(phenyl-4-isocyanate)	$(OCN{\cdot}C_6H_4)_2CH_2$	250.25	lq.	1.222^{30}		$210–2^{13}$	d.	d.		
bromide	CH_2Br_2	173.83	col. lq.	$2.495^{20/4}$	−52.8	98.5^{756}	1.17^{0}	∞	∞	
chloride	CH_2Cl_2	84.93	col. lq.	$1.336^{20/4}$	−96.7	40–1	2^{20}	∞	∞	
dianiline	$(C_6H_5NH)_2CH_2$	198.26	cr.		65	208–9 d.	i.	s.	s.	
iodide	CH_2I_2	267.84	col. lq.	$3.325^{20/4}$	5.7	180 d.	1.4^{20}	∞	∞	
Michler's hydrol (*p*-,*p*'-)	$[(CH_3)_2NC_6H_4]_2CHOH$	270.37	gn.		96–7		i.	s. h.	s.	
ketone	$[(CH_3)_2NC_6H_4]_2CO$	268.35	lf./al.		174	>360 d.	i.	sl. s.	v. sl. s.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
Morphine	$C_{17}H_{19}O_3N{\cdot}H_2O$	303.35	pr./al.	1.317	254 d.		0.02^{20}	sl. s.	s.	
Mucic acid	$(\cdot CHOHCHOHCO_2H)_2$	210.14	pd.		206–14		0.33^{14}	i.	i.	
Mustard gas	$(ClCH_2{\cdot}CH_2)_2S$	159.08	oil	$1.275^{20/4}$	13–4	217	0.07^{25}	s.	s.	
Myricyl alcohol	$C_{31}H_{63}OH(?)$	452.84	cr.	0.777^{95}	88		i.	v. sl. s.	v. s.	
Myristic acid	$CH_3(CH_2)_{12}CO_2H$	228.37	col. lf.	$0.853^{70/4}$	57–8	250.5^{100}	i.	v. s.	v. s.	
Myristyl alcohol	$CH_3(CH_2)_{12}CH_2OH$	214.39	cr.	$0.824^{38/4}$	38	167^{15}	<0.02	sl. s.	s.	
Naphthalene	$C_{10}H_8$	128.17	pl./al.	$1.145^{20/4}$	80.2	217.9	0.003^{25}	9.5^{20}	v. s.	
disulfonic acid (1-,5-)	$C_{10}H_6(SO_3H)_2$	288.30	lf.		d.		102^{20}	s.	i.	
(1-,6-)	$C_{10}H_6(SO_3H)_2$	288.30	cr.		d. 125		164^{20}	s.	i.	
sulfonic acid (α-)	$C_{10}H_7SO_3H{\cdot}2H_2O$	244.26	cr.		90		v. s.	v. s.	sl. s.	
(β-)	$C_{10}H_7SO_3H{\cdot}H_2O$	226.25	cr.		125		77^{30}			
Naphthasultam (1-,8-)	$C_{10}H_7O_2NS$	205.23	nd.		177–8		s. h.	sl. s.	s.	
disulfonate Na (1-,8-)	$C_{10}H_5O_8NS_3Na_2{\cdot}2H_2O$	445.35	cr.				v. s.			
(2-,4-)	$C_{10}H_4O_8NS_3Na_3{\cdot}8½H_2O$	584.43	lf.				v. s.	sl. s.		
Naphthoic acid (α-)	$C_{10}H_7CO_2H$	172.18	nd.		160–1	300	v. sl. s. h.	s. h.	s.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
(β-)	$C_{10}H_7CO_2H$	172.18	mn.	$1.077^{100/4}$	184	>300	0.007^{25}	s.	s.	
Naphthol (α-)	$C_{10}H_7OH$	144.17	mn.	1.224^{4}	96	278–80	sl. s. h.	v. s.	v. s.	
(β-)	$C_{10}H_7OH$	144.17	mn.	1.217^{4}	122–3	285–6	0.074^{25}	v. s.	v. s.	
sulfonic acid (α-) (1-,2-)	$HO{\cdot}C_{10}H_6SO_3H$	224.23	pl./aq.		>250		v. s. h.		i.	
(β-)(2-,6-)	$HO{\cdot}C_{10}H_6SO_3H$	224.23	lf.		125		v. s.	v. s.		
Naphthyl acetate (α-)	$CH_3CO_2C_{10}H_7$	186.21	nd./al.		46–9		sl. s. h.	s.	s.	
(β-)	$CH_3CO_2C_{10}H_7$	186.21	nd./al.		69–70		i.	s.	s.	
amine (α-)	$C_{10}H_7NH_2$	143.19	rhb.	$1.123^{25/25}$	50	300.8	0.17 c.	v. s.	v. s.	
(β-)	$C_{10}H_7NH_2$	143.19	lf./aq.	$1.061^{98/4}$	111–2	306.1	v. s. h.	s.	s.	
amine hydrochloride (α-)	$C_{10}H_7NH_2{\cdot}HCl$	179.65	nd.			subl.	3.8^{20}	s.	s.	
(β-)	$C_{10}H_7NH_2{\cdot}HCl$	179.65	lf.				v. s.	v. s.		
amine sulfonic acid (1-,4-)	$NH_2{\cdot}C_{10}H_6{\cdot}SO_3H$	223.25	nd.		d.		0.2^{100}	i.	i.	
(1-,5-)	$NH_2{\cdot}C_{10}H_6{\cdot}SO_3H{\cdot}H_2O$	241.26	cr.				sl. s.			
(1-,7-)	$NH_2{\cdot}C_{10}H_6{\cdot}SO_3H{\cdot}H_2O$	241.26	cr.				0.46^{25}			
(1-,8-)	$NH_2{\cdot}C_{10}H_6{\cdot}SO_3H{\cdot}H_2O$	241.26	cr.				0.42^{100}			

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
(2-,5-)	$NH_2 \cdot C_{10}H_6 \cdot SO_3H$	223.25	cr.				0.08			
(2-,6-)	$NH_2 \cdot C_{10}H_6 \cdot .SO_3H \cdot H_2O$	241.26	cr.				0.38^{100}			
(2-,7-)	$NH_2 \cdot C_{10}H_6 \cdot SO_3H \cdot H_2O$	241.26	cr.				0.28^{100}			
isocyanate (α-)	$C_{10}H_7N:CO$	169.18	col. lq.	1.18		269–70	d.	s.	s.	
Nicotine	$C_{10}H_{14}N_2$	162.23	oil	$1.009^{20/4}$	<–80	246^{730}	s.	∞	∞	
Nicotinic acid (3-)	$C_5H_4NCO_2H$	123.11	nd./al.		235.2	subl.	s. h.	s. h.	v. sl. s.	
(*i*-)(4-)	$C_5H_4NCO_2H$	123.11	nd./aq.		317	d.	s. h.	sl. s. h.	v. sl. s.	
Nitro-acetanilide (*p*-)	$CH_3CONHC_6H_4NO_2$	180.16	rhb.		215–6		s. h.	s.	s.	
-acetophenone (*m*-)	$CH_3COC_6H_4NO_2$	165.15	nd.		80–1	202	i.	s.		
-aminoanisole (4-,1-,2-)	$NO_2 \cdot C_6H_3(OCH_3)NH_2$	168.15	red nd.	1.207^{156}	118		i.	s.		
(5-,1-,2-)	$NO_2 \cdot C_6H_3(OCH_3)NH_2$	168.15	yel. nd.	1.211^{156}	139–40					
(3-,1-,4-)	$NO_2 \cdot C_6H_3(OCH_3)NH_2$	168.15	red		123		sl. s.	s.	s.	
-aminophenol (4-,2-,1-)	$NO_2 \cdot C_6H_3(NH_2)OH$	154.12	or. pr.		142–3		sl. s. c.	v. s.	v. s.	
-aniline (*o*-)	$NO_2 \cdot C_6H_4NH_2$	138.12	yel. rhb.	1.442^{15}	71.5	284.1	s. h.	v. s.	v. s.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
(*m*-)	$NO_2{\cdot}C_6H_4NH_2$	138.12	yel. rhb.	1.43	114	306.4	0.11^{20}	7.1^{20}	7.9^{20}	
(*p*-)	$NO_2{\cdot}C_6H_4NH_2$	138.12	yel. mn.	1.437^{14}	146–7	331.7	0.08^{19}	5.8^{20}	6.1^{20}	
-anisole (*o*-)	$CH_3OC_6H_4NO_2$	153.14	col. cr.	$1.254^{20/4}$	9.4	272–3	0.17^{30}	∞	∞	
(*p*-)	$CH_3OC_6H_4NO_2$	153.14	pr./al.	1.233^{20}	54	274	0.06^{30}	v. s.	v. s.	
-anthraquinone (α-)	$C_6H_4:(CO)_2:C_6H_3NO_2$	253.21	nd.		230	270^{7}	i.	sl. s.	v. sl. s.	
-anthraquinone sulfonic acid (1-,5-)	$NO_2{\cdot}C_{14}H_6O_2{\cdot}SO_3H$	333.27	yel. cr.				s.	i.	i.	
-benzal chloride (*m*-)	$NO_2{\cdot}C_6H_4{\cdot}CHCl_2$	206.03	mn.		65		i.	v. s. h.	v. s.	
-benzaldehyde (*m*-)	$NO_2{\cdot}C_6H_4CHO$	151.12	nd./aq.		58	164^{23}	1.95^{112}	v. s. h.	v. s.	
Nitro-benzene	$C_6H_5NO_2$	123.11	yel. lq.	$1.205^{18/4}$	5.7	210.9	0.19^{20}	v. s.	∞	
-benzidine (2-)	$NH_2C_6H_4C_6H_3(NH_2)NO_2$	229.23	red nd.		143		sl. s. h.			
-benzoic acid (*o*-)	$NO_2{\cdot}C_6H_4{\cdot}CO_2H$	167.12	tri./aq.	$1.575^{4/4}$	147.5		0.65^{20}	28^{11}	22^{11}	
(*m*-)	$NO_2{\cdot}C_6H_4{\cdot}CO_2H$	167.12	mn.	$1.494^{4/4}$	140–1		0.24^{165}	31^{12}	25^{10}	
(*p*-)	$NO_2{\cdot}C_6H_4{\cdot}CO_2H$	167.12	yel. mn.	$1.550^{22/4}$	240–2	subl.	0.02^{15}	0.9^{10}	2.2^{18}	
-benzyl alcohol (*m*-)	$NO_2{\cdot}C_6H_4{\cdot}CH_2OH$	153.14	cr.		27	$175–80^{3}$				

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
-benzyl bromide (*p*-)	$NO_2{\cdot}C_6H_4CH_2Br$	216.03	nd./al.		99–100		i.	2^{19}	v. s.	
-chlorotoluene (1-,2-,6-)	$CH_3{\cdot}C_6H_3(NO_2)Cl$	171.58	cr.		37.5	238	i.			
-cresol (1-,3-,4-)	$CH_3{\cdot}C_6H_3(NO_2)OH$	153.14	yel.	$1.240^{89/4}$	32	125^{22}	v. sl. s.	v. s.	v. s.	
-cymene (1-,2-,4-)	$CH_3{\cdot}C_6H_3(NO_2)CH(CH_3)_2$	179.22	oil	$1.067^{20/4}$		152^{15}	i.			
-dimethyl aniline (*o*-)	$NO_2{\cdot}C_6N_4N(CH_3)_2$	166.18	yel. oil	$1.179^{20/4}$		$151–3^{80}$	v. sl. s.	v. s.	v. s.	
(*m*-)	$NO_2{\cdot}C_6H_4N(CH_3)_2$	166.18	red mn.	1.313^{17}	60–1	280–5	i.	s.	s.	
(*p*-)	$NO_2{\cdot}C_6H_4N(CH_3)_2$	166.18	yel. nd.		163–4		i.	s. h.		
-diphenyl (*o*-)	$C_6H_5{\cdot}C_6H_4NO_2$	199.21	rhb.	1.44	37	320	i.	s.	v. s.	
(*p*-)	$C_6H_5{\cdot}C_6H_4NO_2$	199.21	nd./al.		113–4	340	i.	sl. s. c.	v. s.	
-diphenyl amine (*o*-)	$C_6H_5{\cdot}NH{\cdot}C_6H_4NO_2$	214.22	or. cr.		75–6					
-guanidine	$H_2NC(NH)NHNO_2$	104.07	nd./aq.		246–7		9^{100}	sl. s.	v. sl. s.	
-naphthalene (α-)	$C_{10}H_7NO_2$	173.17	yel./al.	1.223^{62}	59–60	304	i.	s.	s.	
(β-)	$C_{10}H_7NO_2$	173.17	col./al.		79	165^{15}	i.	v. s.	v. s.	
-phenol (*o*-)	$NO_2{\cdot}C_6H_4{\cdot}OH$	139.11	yel. mn.	1.295^{45}	44–5	214.5	1.08^{100}	v. s.	v. s.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
(*m*-)	$NO_2 \cdot C_6H_4 \cdot OH$	139.11	col. mn.	1.485^{20}	96–7	194^{70}	1.35^{20}	v. s.	s.	
(*p*-)	$NO_2 \cdot C_6H_4 \cdot OH$	139.11	yel. pr.	1.479^{20}	113–4	subl.	1.6^{25}	v. s.	v. s.	
-phenol sulfonic acid (1-,4-,2-)	$HO \cdot C_6H_3(NO_2)SO_3H \cdot 3H_2O$	273.22	nd.		d. 110		v. s.	v. s.	sl. s.	
(1-,2-,4-)	$HO \cdot C_6H_3(NO_2)SO_3H \cdot 3H_2O$	273.22	nd./aq.		51.5		v. s.	v. s.		
-phthalic acid (3-)	$NO_2 \cdot C_6H_3(CO_2H)_2$	211.13	yel./aq.		222		2.05^{25}	v. s. h.	sl. s.	
(4-)	$NO_2 \cdot C_6H_3(CO_2H)_2$	211.13	yel. cr.		164–5		v. s.	v. s.	s.	
-toluene (*o*-)	$CH_3 \cdot C_6H_4NO_2$	137.14	yel. lq.	$1.163^{20/4}$	−4.1	222.3	0.07^{80}	∞	∞	
(*m*-)	$CH_3 \cdot C_6H_4NO_2$	137.14	lq.	$1.160^{18/4}$	15–16	230–1	0.05^{80}	∞	∞	
(*p*-)	$CH_3 \cdot C_6H_4NO_2$	137.14	rhb.	$1.139^{55/55}$	51.9	237.7	0.04^{80}	8.6^{15}	80.8^{15}	
-toluene sulfonic acid (1-,4-,2-)	$CH_3 \cdot C_6H_3(NO_2)SO_3H \cdot 2H_2O$	253.23	pl./aq.		130		47.7^{28}	v. s.	v. s.	
-toluidine (4-,1-,2-)	$NO_2 \cdot C_6H_3(CH_3)NH_2$	152.15	yel. mn.	1.365^{15}	105–7		v. sl. s.	s.	s.	
(3-,1-,4-)	$NO_2 \cdot C_6H_3(CH_3)NH_2$	152.15	red mn.	1.312^{17}	116–7		sl. s. h.	s.		
Nitron	$C_{20}H_{16}N_4$	312.37	yel. lf.		189–90 d.		i.	s. h.	v. sl. s.	
Nitroso-dimethyl aniline (*p*-)	$ON \cdot C_6H_4N(CH_3)_2$	150.18	gn. tri.		86–7		i.	s.	s.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
-naphthol (β-)(1-)	ON·$C_{10}H_6OH$	173.17	brn. pr.		109.5		0.1^{20}	2.4^{18}		
Nonadecane (*n*-)	$CH_3(CH_2)_{17}CH_3$	268.52	cr.	$0.777^{32/4}$	32	330	i.	sl. s.	s.	
Nonane (*n*-)	$CH_3(CH_2)_7CH_3$	128.26	col. lq.	$0.718^{20/4}$	−53.7	150.5^{759}	i.	sl. s.	s.	
Octadecane (*n*-)	$CH_3(CH_2)_{16}CH_3$	254.49	cr.	$0.775^{28/4}$	28	317	i.	sl. s.	s.	
Octane (*n*-)	$CH_3(CH_2)_6CH_3$	114.23	col. lq.	$0.703^{20/4}$	−56.5	125.7	0.002^{16}	sl. s.	s.	
(iso-)	$(CH_3)_3CCH_2CH(CH_3)_2$	114.23	col. lq.	$0.692^{20/4}$	−107.4	99.3^{760}	i.	sl. s.	s.	
Octyl acetate (*n*-)	$CH_3CO_2CH_2(CH_2)_6CH_3$	172.26	col. lq.	$0.885^{0/4}$	−38.5	210	i.	s.	s.	
(*sec*-)	$CH_3CO_2CH(CH_3)C_6H_{13}$	172.26	col. lq.	$0.863^{14/4}$		195	i.	s.	s.	
alcohol (*n*-)	$CH_3(CH_2)_6CH_2OH$	130.23	col. lq.	$0.827^{20/4}$	−16	194–5	0.054^{25}	∞	∞	
(*sec*-)	$CH_3(CH_2)_5CH(OH)CH_3$	130.23	col. lq.	$0.822^{20/4}$	−38.6	179–80	0.096^{25}	∞	∞	
Octylene (*n*-)	$CH_3(CH_2)_5CH:CH_2$	112.21	lq.	$0.721^{18/4}$		126	i.	∞	∞	
Oleic acid	$C_8H_{17}CH:CH(CH_2)_7CO_2H$	282.46	col. nd.	$0.854^{78/4}$	14	$285–6^{100}$	i.	∞	∞	
Orcinol (1-,3-,5-)	$(HO)_2C_6H_3·CH_3$	124.14	pr./bz.	1.290^{4}	107–8	287–90	v. s.	v. s.	v. s.	
Oxalic acid	$HO_2C·CO_2H·2H_2O$	126.07	col. mn.	$1.653^{19/4}$	101.5	subl.	s.	s.	1.3	
Palmitic acid	$CH_3(CH_2)_{14}CO_2H$	256.42	col. pl.	$0.849^{70/4}$	63–4	271.5^{100}	i.	9^{20}	s.	
Pelargonic acid	$CH_3(CH_2)_7CO_2H$	158.24	col. oil	$0.906^{20/4}$	12.5	253–4	v. sl. s.	s.	s.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
Penta-chloroethane	$CHCl_2 \cdot CCl_3$	202.29	col. lq.	$1.671^{25/4}$	−22	162	0.05^{20}	∞	∞	
-decane (*n*-)	$CH_3(CH_2)_{13}CH_3$	212.41	col. lq.	$0.770^{20/4}$	10	270.5	i.	v. s.	v. s.	
-erythritol	$C(CH_2OH)_4$	136.15	cr.		262	276^{30}	5.6^{15}	v. sl. s.	i.	
Pentandiol	$HOCH_2(CH_2)_3CH_2OH$	104.15	lq.	$0.994^{20/4}$		239.4	∞			
Pentane (*n*-)	$CH_3(CH_2)_3CH_3$	72.15	col. lq.	$0.630^{18/4}$	−129.7	36.3	0.036^{16}	∞	∞	
(*i*-)	$(CH_3)_2CHCH_2CH_3$	72.15	col. lq.	0.621^{19}	−160.0	27.95	i.	∞	∞	
(neo-)	$(CH_3)_2C(CH_3)_2$	72.15	col. lq.	$0.613^{20/4}$	−20	9.5	i.	s.	s.	
Phenacetin	$C_2H_5OC_6H_4NHCOCH_3$	179.22	col. mn.		134–5	d.	0.7^{20}	40 h.	1.6^{25}	
Phenanthrene	$<(C_6H_4CH)_2>$	178.23	pl./al.	1.179^{25}	99–100	340	i.	10 h.	v. s.	
Phenetidine (*o*-)	$C_2H_5O \cdot C_6H_4 \cdot NH_2$	137.18	oil		<−21	228–9	i.	s.	s.	
(*p*-)	$C_2H_5O \cdot C_6H_4 \cdot NH_2$	137.18	lq.	1.061^{15}	3–4	254–5	i.	s.	s.	
Phenetole	$C_2H_5O \cdot C_6H_5$	122.16	col. lq.	$0.967^{20/4}$	−30.2	172	i.	∞	∞	
Phenol	C_6H_5OH	94.11	col. nd.	$1.071^{25/4}$	42–3	181.4	8.2^{15}	∞	∞	
-phthalein	$C_{20}H_{14}O_4$	318.32	col. rhb.	$1.299^{25/4}$	261–2		0.2^{20}	10^{25}	5.9 c.	
-sulfonic acid (*o*-)	$HO \cdot C_6H_4SO_3H \cdot ¾H_2O$	187.69	cr.		50 d.		v. s.	v. s.		
Phenylacetaldehyde	$C_6H_5CH_2CHO$	120.15	lq.	1.025^{20}		193–4	v. sl. s.	∞	∞	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
acetic acid	$C_6H_5CH_2CO_2H$	136.15	lf.	$1.081^{80/4}$	76–7	265.5	1.66^{20}	v. s.	v. s.	
-acetylene	$C_6H_5C{:}CH$	102.13	col. lq.	$0.930^{20/4}$	−43	142–3	i.	∞	∞	
aniline (*o*-)	$C_6H_5{\cdot}C_6H_4{\cdot}NH_2$	169.22	cr.		45–6	299^{760}	v. sl. s.	s.	s.	
(*p*-)	$C_6H_5{\cdot}C_6H_4{\cdot}NH_2$	169.22	lf.		50–2	302	s. h.	s.	s.	
Phenyl-ethyl alcohol	$C_6H_5CH_2CH_2OH$	122.16	col. oil	$1.023^{18/4}$		$219–21^{750}$	1.6^{20}	s.	∞	
-glycine	$C_6H_5NHCH_2CO_2H$	151.16	cr.		127		s.	s.	sl. s.	
-hydrazine	$C_6H_5NH{\cdot}NH_2$	108.14	yel. oil	$1.097^{23/4}$	19.6	243.5	sl. s. h.	∞	∞	
-hydrazine sulfonic acid (*p*-)	$H_2NNHC_6H_4SO_3H$	188.20	cr./al.		286		0.6^{12}	sl. s.		
isocyanate	$C_6H_5N{:}CO$	119.12	lq.	$1.096^{20/4}$		166^{769}	d.	d.	v. s.	
-methylpyrazolone (3-)(*N*-)	$C_4H_5ON_2{\cdot}C_6H_5$	174.20	pr./aq.		128	191^{17}	1^{20}	v. s. h.	v. sl. s.	
-mustard oil	$C_6H_5N{:}CS$	135.19	col. lq.	$1.138^{15/15}$	−21	219–20	i.	s.	s.	
naphthalene (α-)	$C_{10}H_7{\cdot}C_6H_5$	204.27	waxy		45	336–7	i.	v. s.	v. s.	
(β-)	$C_{10}H_7{\cdot}C_6H_5$	204.27	lf./al.		102.5	345–6	i.	sl. s.	sl. s.	
naphthylamine (α-)	$C_{10}H_7NHC_6H_5$	219.28	pr./al.	1.17	62	335^{258}	0.08^{60}	s.	s.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
(β-)	$C_{10}H_7NH$ C_6H_5	219.28	rhb.	1.18	107–8	399.5	0.4^{60}	v. s. h.	v. s. h.	
phenol (*o*-)	$C_6H_5{\cdot}C_6$ H_4OH	170.21	nd.		56–7	275	i.	s.	s.	
(*p*-)	$C_6H_5{\cdot}C_6$ H_4OH	170.21	nd.		164–5	305–8	i.	s.	s.	
propyl alcohol (γ-)	$C_6H_5(CH$ $_2)_3OH$	136.19	oil	$1.008^{20/4}$	<–18	235–7	sl. s.	∞	∞	
quinoline (2-)(α-)	$C_6H_5{\cdot}C_9$ H_6N	205.25	nd.		86	363	sl. s.	s. h.	s.	
(8-)(0-)	$C_6H_5{\cdot}C_9$ H_6N	205.25	lq.			283^{187}	sl. s.	s.	s.	
salicylate, salol	$HO{\cdot}C_6H_4$ $CO_2C_6H_5$	214.22	rhb./al.	$1.250^{20/4}$	42–3	$172–3^{12}$	0.015^{25}	v. s.	s.	
stearate	$CH_3(CH_2$ $)_{16}CO_2C_6$ H_5	360.57	cr.		52	267^{15}	i.			
urethane	C_6H_5NH $CO_2C_2H_5$	165.19	pl./al.	$1.106^{30/4}$	52–3	237–8	i. c.	s.	s.	
Phenylene-diamine (*o*-)	$C_6H_4(NH$ $_2)_2$	108.14	lf./aq.		103–4	256–8	733^{81}	v. s.	v. s.	
(*m*-)	$C_6H_4(NH$ $_2)_2$	108.14	rhb.	$1.139^{15/15}$	62.8	284–7	35.1^{25}	v. s.	s.	
(*p*-)	$C_6H_4(NH$ $_2)_2$	108.14	mn.		140	267	669^{107}	s.	s.	
Phloroglucinol (1-,3-,5-)	$C_6H_3(OH$ $)_3{\cdot}2H_2O$	162.14	rhb.		117	subl.	1.13^{25}	v. s.	v. s.	
Phorone	$[(CH_3)_2C$ $:CH]_2CO$	138.21	yel. pr.	$0.885^{20/4}$	28	197.2^{743}	0.1^{50}	s.	s.	
Phosgene	$OCCl_2$	98.92	gas	$1.392^{19/4}$	–104	8.2^{756}	v. sl. s.			
Phthalic acid (*o*-)	$C_6H_4(CO$ $_2H)_2$	166.13	mn./aq.	$1.593^{20/4}$	208	d.	0.70^{25}	12^{18}	0.68^{15}	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts		
								Water	Alcohol	Ether
(*m*-)(iso-)	$C_6H_4(CO_2H)_2$	166.13	nd./aq.		330	subl.	0.2^{100}	s.		
anhydride (*o*-)	$C_6H_4<(CO)_2>O$	148.12	rhb.	1.527^{4}	130.8	284.5	v. sl. s.	s.	sl. s.	
nitrile (*o*-)	$C_6H_4(CN)_2$	128.13	cr.		141		sl. s. c.			
Phthalide	$C_6H_4(CH_2)(CO)>O$	134.13	nd./aq.	$1.164^{99/4}$	73(65)	290	v. sl. s.	s.		
Phthalimide (*o*-)	$C_6H_4<(CO)_2>NH$	147.13	cr./et.		238	subl.	0.04^{25}	5	s. h.	
Picoline (α-)	$C_5H_4N{\cdot}CH_3$	93.13	col. lq.	$0.950^{15/4}$	−70	128.8	v. s.	∞	∞	
(β-)	$C_5H_4N{\cdot}CH_3$	93.13	col. lq.	$0.961^{15/4}$		143.5	∞	∞	∞	
(γ-)	$C_5H_4N{\cdot}CH_3$	93.13	lq.	$0.957^{15/4}$		143.1	∞	∞	∞	
Picramic acid (1-,2-,4-,6-)	$HO{\cdot}C_6H_2(NH_2)(NO_2)_2$	199.12	red nd.		169		0.14^{22}	s.	sl. s.	
Picric acid (2-,4-,6-)	$HO{\cdot}C_6H_2(NO_2)_3$	229.10	yel. rhb.	$1.763^{20/4}$	121.8	expl.	1.23^{20}	6^{20}	1^{13}	
Picryl chloride (2-,4-,6-)	$ClC_6H_2(NO_2)_3$	247.55	yel. mn.	1.797^{20}	83	d.	0.018^{15}	4.8^{17}	7^{17}	
Pinacol	$[(CH_3)_2C{\cdot}OH]_2$	118.17	col. nd.	0.967^{15}	43(38)	$171–2^{789}$	sl. s. c.	v. s.	v. s.	
Pinacoline	$CH_3COC(CH_3)_3$	100.16	col. lq.	0.800^{16}	−52.5	106.2	2.5^{15}	s.	s.	
Pinene (α-)(*dl*-)	$C_{10}H_{16}$	136.23	col. lq.	$0.878^{20/4}$	−55	154–6	v. sl. s.	s.	∞	
hydrochloride	$C_{10}H_{17}Cl$	172.69	lf.		131–2	207–8	i.	33	s.	
Pinol (*dl*-)	$C_{10}H_{16}O$	152.23	lq.	$0.953^{20/20}$		183–4		s.	s.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
Piperidine	CH_2 < $(CH_2CH_2)_2$ > NH	85.15	lq.	$0.860^{20/4}$	−9	106	∞	∞		
carboxylic acid (α-)(*dl*-)	$HO_2C{\cdot}CH$ < $(CH_2CH_2)_2$ > NH	129.16	cr.		264		s.			
Piperidinium pentamethylene dithiocarbamate	$(CH_2)_5CS_2H{\cdot}HN(CH_2)_5$	232.43	cr.	1.13	175		6^{28}			
Propane	$CH_3CH_2CH_3$	44.10	gas	$0.585^{-45/4}$	−187.1	−42.2	6.5^{18} cc.	s.	v. s.	
Propionic acid	$CH_3CH_2CO_2H$	74.08	col. lq.	$0.992^{20/4}$	−22	141.1	∞	∞	∞	
aldehyde	CH_3CH_2CHO	58.08	col. lq.	$0.807^{20/4}$	−81	49.5^{740}	20^{20}	∞	∞	
anhydride	$(CH_3CH_2CO)_2O$	130.14	col. lq.	$1.012^{20/4}$	−45	168.8^{780}	d.	d.		
Propyl acetate (*n*-)	$CH_3CO_2CH_2CH_2CH_3$	102.13	col. lq.	$0.886^{20/4}$	−92.5	101.6	1.6^{16}	∞	∞	
(*i*-)	$CH_3CO_2CH(CH_3)_2$	102.13	col. lq.	$0.874^{20/20}$	−73.4	88.4	3^{20}	∞	∞	
alcohol (*n*-)	$CH_3CH_2CH_2OH$	60.10	col. lq.	$0.804^{20/4}$	−127	97.8	∞	∞	∞	
(*i*-)	$(CH_3)_2CHOH$	60.10	col. lq.	$0.789^{20/4}$	−85.8	82.5	∞	∞	∞	
amine (*n*-)	$CH_3CH_2CH_2NH_2$	59.11	col. lq.	$0.718^{20/20}$	−83	$49–50^{761}$	∞	∞	∞	
(*i*-)	$(CH_3)_2CHNH_2$	59.11	col. lq.	$0.694^{15/4}$	−101	33–4	∞	∞	∞	
aniline (*n*-)	$C_6H_5NHCH_2CH_2CH_3$	135.21	lq.	0.949^{18}		222	i.	v. s.	v. s.	
benzoate (*n*-)	$C_6H_5CO_2CH_2CH_2CH_3$	164.20	col. lq.	$1.021^{25/25}$	−51.6	231	i.	s.	s.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
(*i*-)	$C_6H_5CO_2CH(CH_3)_2$	164.20	col. lq.	$1.010^{25/25}$		218.5	i.	s.	s.	
bromide (*n*-)	$CH_3CH_2CH_2Br$	122.99	col. lq.	$1.353^{20/4}$	−109.9	70.8	0.25^{20}	∞	∞	
(*i*-)	$(CH_3)_2CHBr$	122.99	col. lq.	$1.310^{20/4}$	−89	60	0.32^{20}	∞	∞	
n-butyrate (*n*-)	$C_2H_5CH_2CO_2CH_2C_2H_5$	130.18	col. lq.	0.879^{15}	−95.2	142.7	0.17^{17}	∞	∞	
i-butyrate (*n*-)	$(CH_3)_2CHCO_2CH_2C_2H_5$	130.18	col. lq.	$0.884^{0/4}$		134–5	v. sl. s.			
n-butyrate (*i*-)	$C_2H_5CH_2CO_2CH(CH_3)_2$	130.18	col. lq.	0.865^{18}		128	v. sl. s.			
i-butyrate (*i*-)	$(CH_3)_2CHCO_2CH(CH_3)_2$	130.18	col. lq.	$0.869^{0/4}$		120.8	v. sl. s.			
chloride (*n*-)	$CH_3CH_2CH_2Cl$	78.54	col. lq.	$0.890^{20/4}$	−122.8	46.4	0.27^{20}	∞	∞	
(*i*-)	$(CH_3)_2CHCl$	78.54	col. lq.	0.859^{20}	−117	36.5	0.31^{20}	∞	∞	
Propyl formate (*n*-)	$HCO_2CH_2CH_2CH_3$	88.11	col. lq.	$0.901^{20/4}$	−92.9	81.3	12.2^{22}	∞	∞	
(*i*-)	$HCO_2CH(CH_3)_2$	88.11	col. lq.	$0.873^{20/4}$		68–71[751]	2.1^{22}	∞	∞	
furoate (*n*-)	$C_4H_3O{\cdot}CO_2C_3H_7$	154.16	col. lq.	$1.075^{26/4}$		211	v. sl. s.	s.	∞	
lactate (*n*-)	$CH_3CH(OH)CO_2CH_2C_2H_5$	132.16	col. lq.			122–3[150]	s.	s.	s.	
(*i*-)	$CH_3CH(OH)CO_2CH(CH_3)_2$	132.16	col. lq.			167.5	s.	s.	s.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
mercaptan (*n*-)	$CH_3CH_2CH_2SH$	76.16	lq.	$0.836^{25/4}$	−112	67–8	v. sl. s.	s.	s.	
(*i*-)	$(CH_3)_2CHSH$	76.16	lq.	$0.809^{25/4}$	−130.7	58–60	v. sl. s.	∞	∞	
propionate (*n*-)	$C_2H_5CO_2CH_2C_2H_5$	116.16	col. lq.	$0.883^{20/4}$	−76	122–3	0.56^{25}	∞	∞	
(*i*-)	$C_2H_5CO_2CH(CH_3)_2$	116.16	col. lq.	0.893^{0}		109–11 ^{750}	0.6^{25}	∞	∞	
thiocyanate (*i*-)	$(CH_3)_2CH{\cdot}CNS$	101.17	lq.	0.963^{20}		152–3 ^{754}	i.	∞	∞	
n-valerate (*n*-)	$CH_3(CH_2)_3CO_2CH_2C_2H_5$	144.21	lq.	0.874^{15}	−70.7	67.5	i.	∞	∞	
i-valerate (*n*-)	$(CH_3)_2CHCH_2CO_2C_3H_7$	144.21	col. lq.	$0.863^{20/4}$		155.9	i.	∞	∞	
i-valerate (*i*-)	$(CH_3)_2CHCH_2CO_2C_3H_7$	144.21	col. lq.	0.854^{17}		142 ^{756}				
Propylene	$CH_3CH{:}CH_2$	42.08	gas	$0.609^{-47/4}$	−185	−48 ^{749}	44.6 cc.	1200 cc.		
bromide	$CH_3CHBrCH_2Br$	201.89	col. lq.	$1.933^{20/4}$	−55.5	141.6	0.25^{20}	s.	v. s.	
chlorohydrin	$CH_3CHClCH_2OH$	94.54	col. lq.	1.103^{20}		133–4	s.	s.	s.	
chloride	$CH_3CHClCH_2Cl$	112.99	col. lq.	$1.159^{20/20}$	<−70	96.8	0.27^{20}	v. s.	v. s.	
glycol	$CH_3CH(OH)CH_2OH$	76.09	col. oil	$1.040^{19.4}$		188–9	∞	∞	8	
oxide	$CH_3(CHCH_2)O$	58.08	col. lq.	$0.831^{20/20}$		35	33^{20}	∞	∞	
Protocatechuic acid (3-,4-)	$(HO)_2C_6H_3CO_2H{\cdot}H_2O$	172.14	nd./aq.	$1.542^{4/4}$	199 d.		1.82^{14}	v. s.	s.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
Pulegol (iso-)(*d*-)	$C_{10}H_{17}OH$	154.25	col. lq.	$0.911^{20/4}$		$86–9^{10}$	v. sl. s.			
Pulegone	$C_{10}H_{16}O$	152.23	col. lq.	$0.932^{20/20}$		224^{754}	i.	∞	∞	
Pyrazole	—NH·N:CH·CH:CH—	68.08	nd./et.		70	186–8	s.	s.	s.	
Pyrazoline	—NH·N:CH·CH_2CH_2—	70.09	lq.			144	∞	∞	sl. s.	
Pyrazolone	—NH·CO·CH_2CH:N—	84.08	nd.		165	subl. d.	s.	v. s.	v. sl. s.	
Pyrene	$C_{16}H_{10}$	202.25	yel. pr.	$1.277^{0/4}$	149–50	>360	i.	3 h.	v. s.	
Pyridazine	N_2 < $(CHCH)_2$ >	80.09	lq.	$1.107^{20/4}$	−8	208	∞	s.	s.	
Pyridine	CH < $(CHCH)_2$ > N	79.10	col. lq.	$0.982^{20/4}$	−42	115–6	∞	∞	s.	
Pyrocatechol (*o*-)	$C_6H_4(OH)_2$	110.11	nd./aq.	1.344^{4}	104–5	240–5	45.1^{20}	v. s.	v. s.	
Pyrogallol (1-,2-,3-)	$C_6H_3(OH)_3$	126.11	nd.	1.453^{4}	133–4	309	40^{13}	s.	s.	
Pyrone	CO < $(CHCH)_2$ > O	96.08	cr.	$1.190^{40.3}$	32.5	215–7	v. sl. s.	s.	v. s.	
Pyrrole	< $(CH:CH)_2$ > NH	67.09	lq.	$0.948^{20/4}$		131	i.	s.	s.	
Pyrrolidine	< $(CH_2·CH_2)_2$ > NH	71.12	lq.	$0.852^{22.5}$		87–8	∞	∞	∞	
Pyrroline	< $(CH·CH_2)_2$ > NH	69.11	lq.	$0.910^{20/4}$		90–1	v. s.	∞	∞	
Pyruvic acid	CH_3COCO_2H	88.06	col. lq.	$1.267^{20/4}$	13.6	165	∞	∞	∞	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
Quercitrin	$C_{21}H_{20}O_{11}\cdot 2H_2O$	484.41	yel. nd.		182–5		0.04^{20}	s.	sl. s.	
Quinaldine (py-2)	$CH_3\cdot C_9H_6N$	143.19	lq.	$1.059^{20/4}$	−1	$244–5^{750}$	v. sl. s.		s.	
Quinoline	C_9H_7N	129.16	lq.	1.095^{20}	−15	237.1^{747}	6	∞	∞	
(iso-)	C_9H_7N	129.16	pl.	$1.099^{21/4}$	24.6	240.5^{763}	sl. s.		s.	
-diol (1-,3-)	—C_6H_4CH:C(OH)N:C(OH)—	161.16	cr.		237		v. sl. s.			
Quinone (*p*-)	CO < $(CHCH)_2$ > CO	108.09	yel. mn.	$1.318^{20/4}$	115.7	subl.	sl. s. h.	s.	s.	
R-acid Ca salt (2-)(3-,6-)	$HOC_{10}H_5(SO_3)_2Ca$	342.36	cr.				30.6^{25}			
K salt	$HOC_{10}H_5(SO_3K)_2$	380.48	cr.				29.5^{25}			
Na salt	$HOC_{10}H_5(SO_3Na)_2$	348.26	cr.				25.2^{25}			
Raffinose	$C_{18}H_{32}O_{16}\cdot 5H_2O$	594.51	cr./aq.	1.465^{0}	119	d. 130	14.3^{20}	0.1^{20}		
Resorcinol (*m*-)	$C_6H_4(OH)_2$	110.11	col. rhb.	1.272^{15}	110.7	276.5	147^{12}	v. s.	v. s.	
Retene	$C_{18}H_{18}$	234.34	lf./al.	1.13^{16}	98–9	390–4	i.	69 h.	v. s. h.	
Rhamnose (β-)	$CH_3(CHOH)_4CHO\cdot H_2O$	182.17	col. mn.	$1.471^{20/4}$	126		60.8^{21}		i.	
Ricinoleic acid	$C_{17}H_{32}(OH)CO_2H$	298.46	lq.	0.954^{16}	4–5	$226–8^{10}$	i.	∞	∞	
Rosaniline	$C_{20}H_{21}ON_3$	319.40	col. nd.		186 d.		v. sl. s.	sl. s.	i.	
Rosolic acid	$C_{20}H_{16}O_3$	304.34	red lf.		308–10 d.		0.12^{25}	v. s. h.	sl. s.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
Saccharin	$C_6H_4(CO)(SO_2)>NH$	183.18	mn.		225–8	subl.	0.4^{25}	3.1 c.	1.05 c.	
Safrole (1-,3-,4-)	$CH_2{:}CHCH_2{\cdot}C_6H_3{:}O_2CH_2$	162.19	col. mn.	$1.100^{20/4}$	11.2	233–4	i.	s.	∞	
(iso-) (1-,3-,4-)	$CH_3{\cdot}CH{:}CH{\cdot}C_6H_3{:}O_2CH_2$	162.19	col. lq.	$1.122^{20/4}$	6–7	252–3	i.	∞	∞	
Salicylic acid (*o*-)	$HO{\cdot}C_6H_4{\cdot}CO_2H$	138.12	mn.	$1.443^{20/4}$	159	211^{20}	0.2^{23}	49^{15}	51^{15}	
aldehyde (*o*-)	$HO{\cdot}C_6H_4{\cdot}CHO$	122.12	col. oil	$1.153^{25/4}$	−7	196.5	1.7^{86}	∞	∞	
Saligenin	$HO{\cdot}C_6H_4{\cdot}CH_2OH$	124.14	rhb./aq.	1.161^{25}	86–7	subl.	6.6^{15}	v. s.	v. s.	
Schaeffer's salt, Ca	$(HOC_{10}H_6SO_3)_2Ca{\cdot}5H_2O$	576.60	cr.				4.76^{20}			
K	$HOC_{10}H_6SO_3K$	262.32	cr.				3.46^{25}			
Na	$HOC_{10}H_6SO_3Na$	246.21	cr.				6.29^{25}			
Semicarbazide	$NH_2{\cdot}CO{\cdot}NH{\cdot}NH_2$	75.07	pr./al.		96		v. s.	v. s.	i.	
hydrochloride	$NH_2{\cdot}CO{\cdot}NH{\cdot}NH_3Cl$	111.53	pr.		173 d.		v. s.	sl. s.	i.	
Skatole (3-)	$CH_3{\cdot}C_8H_6N$	131.17	lf.		95	$265–6^{755}$	0.05 c.	s.	s.	
Sodium methylate	CH_3ONa	54.02	pd.		d. 300		d.			
Sorbitol	$[CH_2OH(CHOH)_2]_2$	182.17	cr.		110–2		v. s.	v. s. h.		
Sorbose (*d*- or *l*-)	$C_6H_{12}O_6$	180.16	rhb.	1.654^{15}	165		55^{17}	sl. s.		
Starch	$(C_6H_{10}O_5)x$	162.14	amor.	1.50^{21}	d.		i.	i.	i.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
Stearic acid	$CH_3(CH_2)_{16}CO_2H$	284.48	mn.	$0.847^{69.3}$	70–1	291^{110}	0.03^{25}	2^{20}	6^{g}	
amide	$CH_3(CH_2)_{16}CONH_2$	283.49	col. cr.		108–9	251^{12}	i.	s. h.	s. h:	
Styrene	$C_6H_5CH:CH_2$	104.15	col. lq.	$0.903^{20/4}$	–31	145–6	v. sl. s.	∞	∞	
Suberic acid	$HO_2C(CH_2)_6CO_2H$	174.19	nd./aq.	$1.266^{25/4}$	140–4	279^{100}	0.14^{16}	s.	0.8^{15}	
Succinic acid	$HO_2C(CH_2)_2CO_2H$	118.09	col. mn.	$1.572^{25/4}$	189–90	235 d.	6.8^{20}	9.9^{15}	1.2^{15}	
Sucrose	$C_{12}H_{22}O_{11}$	342.30	col. mn.	1.588^{15}	170–86 d.		179^{0}	0.9	i.	
Sulfanilic acid (*p*-)	$H_2N{\cdot}C_6H_4{\cdot}SO_3H$	173.19	col. cr.		d. > 280		0.8^{10}	v. sl. s.	v. sl. s.	
Sylvestrene (*d*-)	$C_{10}H_{16}$	136.23	lq.	$0.863^{20/4}$		176–7				
Tartaric acid (meso-)	$(CHOHCO_2H)_2$	150.09	cr.	1.737	159–60		120^{15}			
(racemic)	$(CHOHCO_2H)_2{\cdot}H_2O$	168.10	tri.	$1.697^{20/4}$	205–6		20.6^{20}	2^{0}	0.09	
(*d*- or *l*-)	$(CHOHCO_2H)_2$	150.09	mn.	$1.760^{20/4}$	168–70	d.	139^{20}	25^{15}	0.4^{15}	
Tartronic acid	$CH(OH)(CO_2H)_2{\cdot}½H_2O$	129.07	pr./aq.		d. 155–8	subl.	v. s.	v. s.	i.	
Terephthalic acid (*p*-)	$C_6H_4(CO_2H)_2$	166.13	cr.	1.510	subl.		0.001 c.	sl. s. h.	i.	
Terpin hydrate (*cis*-)	$C_{10}H_{20}O_2{\cdot}H_2O$	190.28	rhb.		117	d.	0.4^{15}	10^{15}	1^{15}	
Terpineol (α-)(*d*- or *l*-)	$C_{10}H_{18}O$	154.25	col. cr.	0.935^{15}	38–40	219–21	i.	v. s.	v. s.	
(*dl*-)	$C_{10}H_{18}O$	154.25	col. cr.	$0.935^{20/20}$	35	$218–9^{752}$	i.	v. s.	v. s.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
Terpinyl acetate (α-)(*dl*-)	$CH_3CO_2 \cdot C_{10}H_{17}$	196.29	lq.	$0.966^{20/4}$	< −50	220 d.	i.	20		
Tetrabromo-ethane (sym)	$Br_2CH \cdot CHBr_2$	345.65	col. lq.	$2.964^{20/4}$	−1.0	151^{54}	i.	∞	∞	
(uns)	$Br_3C \cdot CH_2Br$	345.65	col. lq.	$2.875^{20/4}$	0	104^{13}		s.		
Tetrachloro-ethane (sym)	$Cl_2CH \cdot CHCl_2$	167.85	col. lq.	$1.600^{20/4}$	−36	146.3	0.29^{20}	∞	∞	
(uns)	$Cl_3C \cdot CH_2Cl$	167.85	lq.	$1.588^{20/4}$		129–30	i.	∞	∞	
-ethylene	$Cl_2C:CCl_2$	165.83	col. lq.	$1.624^{15/4}$	−19	120.8	0.02^{20}	∞	∞	
Tetracosane (*n*-)	$CH_3(CH_2)_{22}CH_3$	338.65	cr.	$0.779^{51/4}$	51.1	324			s.	
Tetradecane (*n*-)	$CH_3(CH_2)_{12}CH_3$	198.39	col. lq.	$0.765^{20/4}$	5.5	252.5	i.	v. s.	v. s.	
Tetraethyl-thiuram disulfide	$[(C_2H_5)_2NCS]_2S_2$	296.54	cr.	1.17	70		i.			
Tetrafluoro-ethylene	$F_2C:CF_2$	100.02	gas	1.58^{-78}	−142.5	−76.3	0.01^{30}			
Tetrahydro-furan	—$CH_2(CH_2)_2CH_2 \cdot O$—	72.11	col. lq.	$0.888^{21/4}$	−65	65–6	s.	s.	s.	
-furfuryl alcohol	$C_4H_7O \cdot CH_2OH$	102.13	col. lq.	$1.050^{20/4}$		$177–8^{743}$	∞	∞	∞	
-pyran	—$CH_2(CH_2)_3CH_2 \cdot O$—	86.13	lq.	$0.881^{20/4}$		88	s.			
Tetralin	—$C_6H_4CH_2(CH_2)_2CH_2$—	132.20	col. lq.	$0.973^{18/4}$	−31	206^{764}	i.	s.	s.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
Tetramethyl-thiuram disulfide	$[(CH_3)_2NCS]_2S_2$	240.43	cr.	1.29	155–6		i.			
Tetryl (2-,4-,6-)	$(NO_2)_3C_6H_2{\cdot}N(CH_3)NO_2$	287.14	yel. mn.	1.57^{19}	130.5	expl.	i.	s. h.	s.	
Theobromine	$C_7H_8O_2N_4$	180.16	rhb.		330		0.06^{15}	0.06 c.	0.03 h.	
Thio-acetic acid	$CH_3{\cdot}CO{\cdot}SH$	76.12	yel. lq.	1.074^{10}	< −17	93	s.	∞	∞	
-aniline (4-,4'-)	$(NH_2{\cdot}C_6H_4)_2S$	216.30	nd./aq.		108		sl. s. h.	s.	s.	
-carbanilide	$(C_6H_5{\cdot}NH)_2CS$	228.31	rhb./al.	1.3^{24}	154	d.	i.	v. s.	v. s.	
-naphthol (β-)	$C_{10}H_7{\cdot}SH$	160.24	cr./al.		81	286–8	v. sl. s.	v. s.	v. s.	
-phenol	$C_6H_5{\cdot}SH$	110.18	col. lq.	$1.074^{23/4}$		168–9	v. sl. s.	v. s.	∞	
-salicylic acid (*o*-)	$HS{\cdot}C_6H_4{\cdot}CO_2H$	154.19	yel. nd.		164	subl.	sl. s. h.	s.		
-urea	$NH_2{\cdot}CS{\cdot}NH_2$	76.12	rhb./al.	$1.405^{20/4}$	180–2	d.	9.2^{13}	s.	sl. s.	
Thiophene	$<(CH{:}CH)_2>S$	84.14	col. lq.	$1.070^{15/4}$	−30	84	i.	s.		
Thymol (5-,2-,1-)	$(CH_3)(C_3H_7)C_6H_3OH$	150.22	cr.	$0.972^{25/25}$	51.5	232^{752}	0.09^{19}	v. s.	v. s.	
Tolidine (0-)(3-,3'-,4-,4'-)	$[CH_3(NH_2)C_6H_3]_2$	212.29	lf.		128–9		v. sl. s.	s.	s.	
Toluene	$C_6H_5{\cdot}CH_3$	92.14	col. lq.	$0.866^{20/4}$	−95	110.8	0.05^{16}	s.	∞	
sulfonic acid (*o*-)	$CH_3{\cdot}C_6H_4SO_3H{\cdot}2H_2O$	208.23	cr.		d.	128.8^0	v. s.	s.		

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts		
								Water	Alcohol	Ether
(*p*-)	$CH_3{\cdot}C_6H_4SO_3H{\cdot}H_2O$	190.22	mn.		104–5	$146–7^{0}$	v. s.	s.		
sulfonic amide (*p*-)	$CH_3{\cdot}C_6H_4SO_2NH_2$	171.22	mn.		137		0.2^{9}	7.4^{5}		
sulfonic chloride (*p*-)	$CH_3{\cdot}C_6H_4{\cdot}SO_2Cl$	190.65	tri.		69	134.5^{10}	i.	s.	s.	
Toluic acid (*o*-)	$CH_3{\cdot}C_6H_4{\cdot}CO_2H$	136.15	cr./aq.	$1.062^{115/4}$	104–5	259^{751}	2.17^{100}	v. s.		
(*m*-)	$CH_3{\cdot}C_6H_4{\cdot}CO_2H$	136.15	pr./aq.	$1.054^{112/4}$	110–1	263	1.6^{100}	v. s.	v. s.	
(*p*-)	$CH_3{\cdot}C_6H_4{\cdot}CO_2H$	136.15	cr./aq.		179–80	274–5	1.3^{100}	v. s.	v. s.	
Toluidine (*o*-)	$CH_3{\cdot}C_6H_4{\cdot}NH_2$	107.15	col. lq.	$0.999^{20/4}$	−16.3	199.7	1.5^{25}	∞	∞	
(*m*-)	$CH_3{\cdot}C_6H_4{\cdot}NH_2$	107.15	col. lq.	$0.989^{20/4}$	−31.5	203.3	sl. s.	∞	∞	
(*p*-)	$CH_3{\cdot}C_6H_4{\cdot}NH_2$	107.15	cr.	$1.046^{20/4}$	44–5	200.3	0.74^{21}	v. s.	v. s.	
hydrochloride (*o*-)	$CH_3{\cdot}C_6H_4{\cdot}NH_3Cl$	143.61	mn. pr.		218–20	242	s.	sl. s.		
sulfonic acid (1-,2-,3-)	$CH_3(NH_2)C_6H_3SO_3H$	187.22	cr.				0.97^{11}			
Toluylenediamine (1-,2-,4-)	$CH_3{\cdot}C_6H_3(NH_2)_2$	122.17	rhb.		99	283–5	s. h.	s.	s.	
Tolylene diisocyanate (1-,2-,4-)	$CH_3{\cdot}C_6H_3(NCO)_2$	174.16	lq.	1.23^{28}		134.5^{20}	d.	d.		
Trehalose	$C_{12}H_{22}O_{11}{\cdot}2H_2O$	378.33	rhb./al.		97		s. h.	sl. s. h.	i.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
Triamylamine (*n*-)	$[CH_3(CH_2)_3CH_2]_3N$	227.43	lq.			240–5	i.			
(*i*-)	$[(CH_3)_2CH(CH_2)_2]_3N$	227.43	col. lq.	$0.786^{20/4}$		235	i.			
Tributyl-amine (*n*-)	$[CH_3(CH_2)_2CH_2]_3N$	185.35	col. lq.	$0.778^{20/20}$		216.5^{761}	i.	s.	∞	
phosphite	$[CH_3(CH_2)_3O]_3P$	250.31	lq.	$0.925^{20/4}$		$122–3^{12}$	i.			
Trichloro-acetic acid	$Cl_3C{\cdot}CO_2H$	163.39	cr.	$1.617^{46/15}$	58	195.5^{754}	120^{25}	s.	s.	
-benzene (*s*-)(1-,3-,5-)	$C_6H_3Cl_3$	181.45	nd.		63.5	208.5^{764}	i.	sl. s.		
-ethane (1-,1-,1-)	$Cl_3C{\cdot}CH_3$	133.40	lq.	$1.325^{26/4}$		74.1	i.	∞	∞	
-ethylene	$Cl_2C{:}CHCl$	131.39	col. lq.	$1.466^{20/20}$	−73	87.2	0.1^{25}	∞	∞	
-phenol	$Cl_3C_6H_2OH$	197.45	nd.	$1.490^{75/4}$	68–9	246	0.09^{25}	v. s.	v. s.	
Tricosane (*n*-)	$CH_3(CH_2)_{21}CH_3$	324.63	lf.	$0.779^{48/4}$	47.7	234^{15}	i.			
Tricresyl phosphate (*o*-)	$OP(OC_6H_4CH_3)_3$	368.36	lq.				i.			
Tridecane (*n*-)	$CH_3(CH_2)_{11}CH_3$	184.36	col. lq.	$0.757^{20/4}$	−6.2	234	i.	v. s.	v. s.	
Triethanol amine	$(HOCH_2CH_2)_3N$	149.19	col. lq.	$1.126^{20/20}$	20–1	$277–9^{150}$	∞	∞	sl. s.	
Triethyl-amine	$(CH_3CH_2)_3N$	101.19	col. oil	$0.729^{20/20}$	−114.8	89.4	$\infty > 19^0$	∞	∞	
-benzene (1-,3-,5-)	$(C_2H_5)_3C_6H_3$	162.27	lq.	$0.861^{20/4}$		215	i.	s.	s.	
(1-,2-,4-)	$(C_2H_5)_3C_6H_3$	162.27	lq.	$0.882^{17/4}$		$217–8^{755}$	i.	s.	s.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
borate	$B(OCH_2CH_3)_3$	145.99	lq.	$0.864^{20/20}$		120	d.			
citrate	$HOC_3H_4(CO_2C_2H_5)_3$	276.28	oil	$1.137^{20/4}$		294	i.	∞	∞	
Triethylene glycol	$(\cdot CH_2OCH_2CH_2OH)_2$	150.17	col. lq.	$1.125^{20/20}$	−5	290	∞	∞	v. sl. s.	
Trifluoro-chloromethane	CF_3Cl	104.46	gas	1.726^{-13}_{0}	−182	−80				
-chloroethylene	$F_2C{:}CFCl$	116.47	gas		−157.5	−27.9	d.			
-trichloroethane	$Cl_2CF\cdot CClF_2$	187.38	lq.	$1.576^{20/4}$	−35	47.6	i.	∞	∞	
Trimethoxybutane (1-,3-,3-)	$CH_2(OCH_3)CH_2C(OCH_3)_2CH_3$	148.20	lq.	0.932		$63–5^{25}$	d.			
Trimethylamine	$(CH_3)_3N$	59.11	gas	0.662^{-5}	−124	3.5	41^{19}	s.	s.	
Trimethylene bromide	$BrCH_2CH_2CH_2Br$	201.89	lq.	$1.987^{15/4}$	−34.4	167.5	0.17^{30}	s.	s.	
chloride	$ClCH_2CH_2CH_2Cl$	112.99	lq.	1.201^{15}		123–5	0.27^{25}	s.	s.	
glycol	$HOCH_2CH_2CH_2OH$	76.09	oil	$1.060^{20/4}$		214	∞	∞		
Trinitro-benzene (1-,3-,5-)	$C_6H_3(NO_2)_3$	213.10	col. rhb.	$1.688^{20/4}$	121	d.	0.03^{15}	1.9^{18}	1.5^{18}	
-benzoic acid (2-,4-,6-)	$(NO_2)_3C_6H_2CO_2H$	257.11	rhb./aq.		210–20 d.		2.05^{24}			
-tert-butylxylene	$(NO_2)_3C_6(CH_3)_2C_4H_9$	297.26	nd./al.		110		i.	sl. s.	s.	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts		
								Water	Alcohol	Ether
-naphthalene (α-)(1-,3-,5-)	$C_{10}H_5(NO_2)_3$	263.16	rhb.		122–3		i.	s.		
(β-)(1-,3-,8-)	$C_{10}H_5(NO_2)_3$	263.16	cr./al.		218–9		0.02^{100}	0.05^{23}	0.13^{15}	
(γ-)(1-,4-,5-)	$C_{10}H_5(NO_2)_3$	263.16	yel. cr.		148–9		i.	0.11^{19}	0.4^{19}	
-phenol (2-,3-,6-)	$(NO_2)_3C_6H_2OH$	229.10	nd.		117–8		s. h.	v. s.	v. s.	
-toluene (β-)(2-,3-,4-)	$CH_3C_6H_2(NO_2)_3$	227.13	cr.	$1.620^{20/4}$	112	expl.	i.	sl. s. c.	s.	
(γ-)(2-,4-,5-)	$CH_3C_6H_2(NO_2)_3$	227.13	yel. pl.	$1.620^{20/4}$	104	expl.	i.	s. h.	v. s.	
(α-)(2-,4-,6-)	$CH_3C_6H_3(NO_2)_3$	227.13	cr./al.	1.654	80.8	expl.	0.01^{20}	1.5^{22}	5^{33}	
Trional	$(C_2H_5SO_2C_2H_4)_2$	242.36	pl./al.	$1.199^{85/4}$	76	d.	0.3^{15}	5^{0}	6.6^{15}	
Triphenyl-arsine	$(C_6H_5)_3As$	306.23	pl.	1.306	59–60	>360	i.	s.	v. s.	
carbinol	$(C_6H_5)_3COH$	260.33	cr.	$1.188^{20/4}$	162.5	>360	i.	v. s.	v. s.	
guanidine (α-)	$C_6H_5N{:}C(NHC_6H_5)_2$	287.36	rhb./al.	1.13	144–5	d.	i.	4^{0}		
methane	$(C_6H_5)_3CH$	244.33	cr.	$1.014^{99/4}$	93.4	359^{754}	i.	v. s. h.	v. s.	
methyl	$(C_6H_5)_3C\ldots$	243.32	col. cr.		145–7	d.	i.	sl. s. h.		
phosphate	$OP(OC_6H_5)_3$	326.28	pr./al.	$1.206^{58/4}$	49–50	245^{11}	i.	155^{25}	v. s.	
Tripropylamine (*n*-)	$(CH_3CH_2CH_2)_3N$	143.27	col. lq.	$0.757^{20/4}$	−93.5	156.5	v. sl. s.	∞	∞	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
Undecane (*n*-)	$CH_3(CH_2)_9CH_3$	156.31	col. lq.	$0.741^{20/4}$	−25.6	194.5	i.	∞	∞	
Urea	$H_2N{\cdot}CO{\cdot}NH_2$	60.06	col. pr.	$1.335^{20/4}$	132.7	d.	100^{17}	20^{20}	sl. s.	
nitrate	$CO(NH_2)_2{\cdot}HNO_3$	123.07	col. mn.		152 d.		v. s. h.	s.		
Uric acid	$C_5H_4O_3N_4$	168.11	cr.	1.893^{20}	d.		0.06 h.	i.	i.	
Valeric acid (*n*-)	$C_2H_5CH_2CH_2CO_2H$	102.13	col. lq.	$0.939^{20/4}$	−34.5	187	3.3^{16}	∞	∞	
(*i*-)	$(CH_3)_2CHCH_2CO_2H$	102.13	col. lq.	$0.931^{20/20}$	−37.6	176	4.2^{20}	∞	∞	
aldehyde (*n*-)	$C_2H_5CH_2CH_2CHO$	86.13	lq.	0.819^{11}	−92	103.4	v. sl. s.	s.	s.	
(*i*-)	$(CH_3)_2CHCH_2CHO$	86.13	col. lq.	0.803^{17}	−51	92.5	sl. s.	s.	s.	
amide (*n*-)	$C_2H_5CH_2CH_2CONH_2$	101.15	mn. pl.	1.023	106		v. s.	v. s.	v. s.	
(*i*-)	$(CH_3)_2CHCH_2CONH_2$	101.15	mn.	$0.965^{20/4}$	135–7	232	s.	s.	s.	
Vanillic acid (3-,4-,1-)	$CH_3O(OH)C_6H_3CO_2H$	168.15	nd./aq.		207	subl.	0.12^{14}	v. s.	v. s.	
alcohol (3-,4-,1-)	$CH_3O(OH)C_6H_3CH_2OH$	154.16	mn./aq.		115	d.	v. s. h.	v. s.	v. s.	
hyl-thiuram disulfide	$[(C_2H_5)_2NCS]_2S_2$	296.54	cr.	1.17	70		i.			
Vanillin (3-,4-,1-)	$CH_3O(OH)C_6H_3CHO$	152.15	mn.	1.056	81–2	285	1^{14}	v. s.	v. s.	
Veratrole (*o*-)	$C_6H_4(OCH_3)_2$	138.16	cr.	$1.091^{15/15}$	22.5	207.1	v. sl. s.	s.	s.	
Vinyl acetate	$CH_3CO_2CH{:}CH_2$	86.09	col. lq.	$0.932^{20/4}$	< −60	72–3	2^{20}	∞	∞	

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
(poly-)	$(CH_3CO_2CH{:}CH_2)_x$	(86.09)		1.19^{20}	100–25		i.			
acetic acid	$CH_2{:}CH{\cdot}CH_2CO_2H$	86.09	col. lq.	$1.013^{15/15}$	−39	163	s.	∞	∞	
acetylene	$CH_2{:}CH{\cdot}C{:}CH$	52.07	gas	$0.705^{1.5}$		5.5	$0.67^{0.6}$			
alcohol	$CH_2{:}CHOH$	44.05								
(poly-)	$(CH_2{:}CHOH)_x$	(44.05)		1.3^{20}	d. >200		s.			
chloride	$CH_2{:}CHCl$	62.50	gas	$0.908^{25/25}$	−160	−12	sl. s.	s.	v. s.	
propionate	$C_2H_5CO_2CH{:}CH_2$	100.12	lq.			93–5	v. sl. s.			
Xylene (*o*-)	$C_6H_4(CH_3)_2$	106.17	col. lq.	$0.881^{20/4}$	−25	144	i.	s.	∞	
(*m*-)	$C_6H_4(CH_3)_2$	106.17	col. lq.	$0.867^{17/4}$	−47.4	139.3	i.	s.	∞	
(*p*-)	$C_6H_4(CH_3)_2$	106.17	col. lq.	$0.861^{20/4}$	13.2	138.5	i.	s.	v. s.	
sulfonic acid (1-,4-,2-)	$(CH_3)_2C_6H_3SO_3H{\cdot}2H_2O$	222.26	col. lf.		86	$149^{0.1}$	s.			
Xylidine (1:2)(3-)	$(CH_3)_2C_6H_3NH_2$	121.18	lq.	0.991^{15}	< −15	223	v. sl. s.	s.	s.	
(1:2)(4-)	$(CH_3)_2C_6H_3NH_2$	121.18	pr.	$1.076^{17.5}$	49–50	224–6	v. sl. s.			
(1:3)(2-)	$(CH_3)_2C_6H_3NH_2$	121.18	lq.	0.980^{15}		216–7	v. sl. s.			
(1:3)(4-)	$(CH_3)_2C_6H_3NH_2$	121.18	lq.	$0.978^{20/4}$		213–4	v. sl. s.			
(1:3)(5-)	$(CH_3)_2C_6H_3NH_2$	121.18	oil	$0.972^{20/4}$		221–2	v. sl. s.			
(1:4)(2-)	$(CH_3)_2C_6H_3NH_2$	121.18	oil	$0.979^{21/4}$	15.5	215^{789}	v. sl. s.			

Name	Synonym	Formula	Formula weight	Form and color	Specific gravity	Melting point, °C	Boiling point, °C	Solubility in 100 parts Water	Alcohol	Ether
Xylose (*l*-)(+)	$CH_2OH(CHOH)_3CHO$	150.13	nd.	1.535^{0}	153–4		117^{20}	v. sl. s.	i.	
Xylylene dichloride (*p*-)	$C_6H_4(CH_2Cl)_2$	175.06	mn.	1.417^{0}	100.5	240–5 d.	i.	s.	v. sl. s.	
Zinc diethyl	$Zn(CH_2CH_3)_2$	123.53	col. lq.	1.182^{18}	−28	118	d.	d.		
dimethyl	$Zn(CH_3)_2$	95.48	col. lq.	1.386^{11}	−40	46	d.	d.		
dimethyl-dithiocarbamate	$Zn[S_2CN(CH_3)_2]_2$	305.84		$2.00^{40/4}$	248–50		i.			

*By N. A. Lange, Ph.D., Handbook Publishers, Inc., Sandusky, Ohio. Abridged from table of Physical Constants of Organic Compounds in *Lange's Handbook of Chemistry*.

NOTE: °F = 9/5°C + 32.