

TABLE A-13 SOLUBILITY OF COMPOUNDS

Solubilities are given in grams of solute that can be dissolved in 100 g of water at the temperature (°C) indicated.

Compound	Formula	0°C	20°C	60°C	100°C
aluminum sulfate	$\text{Al}_2(\text{SO}_4)_3$	31.2	36.4	59.2	89.0
ammonium chloride	NH_4Cl	29.4	37.2	55.3	77.3
ammonium nitrate	NH_4NO_3	118	192	421	871
ammonium sulfate	$(\text{NH}_4)_2\text{SO}_4$	70.6	75.4	88	103
barium carbonate	BaCO_3	—*	0.0022 ^{18°}	—*	0.0065
barium chloride dihydrate	$\text{BaCl}_2 \cdot 2\text{H}_2\text{O}$	31.2	35.8	46.2	59.4
barium hydroxide	$\text{Ba}(\text{OH})_2$	1.67	3.89	20.94	101.40 ^{80°}
barium nitrate	$\text{Ba}(\text{NO}_3)_2$	4.95	9.02	20.4	34.4
barium sulfate	BaSO_4	—*	0.000 246 ^{25°}	—*	0.000 413
calcium carbonate	CaCO_3	—*	0.0014 ^{25°}	—*	0.0018 ^{75°}
calcium fluoride	CaF_2	0.0016 ^{18°}	0.0017 ^{26°}	—*	—*
calcium hydrogen carbonate	$\text{Ca}(\text{HCO}_3)_2$	16.15	16.60	17.50	18.40
calcium hydroxide	$\text{Ca}(\text{OH})_2$	0.189	0.173	0.121	0.076
calcium sulfate	CaSO_4	—*	0.209 ^{30°}	—*	0.1619
copper(II) chloride	CuCl_2	68.6	73.0	96.5	120
copper(II) sulfate pentahydrate	$\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$	23.1	32.0	61.8	114
lead(II) chloride	PbCl_2	0.67	1.00	1.94	3.20
lead(II) nitrate	$\text{Pb}(\text{NO}_3)_2$	37.5	54.3	91.6	133
lithium chloride	LiCl	69.2	83.5	98.4	128
lithium sulfate	Li_2SO_4	36.1	34.8	32.6	30.9 ^{90°}
magnesium hydroxide	$\text{Mg}(\text{OH})_2$	—*	0.0009 ^{18°}	—*	0.004
magnesium sulfate	MgSO_4	22.0	33.7	54.6	68.3
mercury(I) chloride	Hg_2Cl_2	—*	0.000 20 ^{25°}	0.001 ^{43°}	—*
mercury(II) chloride	HgCl_2	3.63	6.57	16.3	61.3
potassium bromide	KBr	53.6	65.3	85.5	104
potassium chlorate	KClO_3	3.3	7.3	23.8	56.3
potassium chloride	KCl	28.0	34.2	45.8	56.3
potassium chromate	K_2CrO_4	56.3	63.7	70.1	74.5 ^{90°}
potassium iodide	KI	128	144	176	206
potassium nitrate	KNO_3	13.9	31.6	106	245
potassium permanganate	KMnO_4	2.83	6.34	22.1	—*
potassium sulfate	K_2SO_4	7.4	11.1	18.2	24.1
silver acetate	$\text{AgC}_2\text{H}_3\text{O}_2$	0.73	1.05	1.93	2.59 ^{80°}
silver chloride	AgCl	0.000 089 ^{10°}	—*	—*	0.0021
silver nitrate	AgNO_3	122	216	440	733
sodium acetate	$\text{NaC}_2\text{H}_3\text{O}_2$	36.2	46.4	139	170
sodium chlorate	NaClO_3	79.6	95.9	137	204
sodium chloride	NaCl	35.7	35.9	37.1	39.2
sodium nitrate	NaNO_3	73.0	87.6	122	180
sucrose	$\text{C}_{12}\text{H}_{22}\text{O}_{11}$	179.2	203.9	287.3	487.2

*Dashes indicate that values are not available.

