

Solubility Table

- The following table provides data for formulating a saturated solution of the reagents listed at the temperature designated.

Reagent	Formula	MW	Temp (°C)	g/100 ml	[M]
Ammonium bromide	NH ₄ Br	97.95	15	53.8	5.5
Ammonium chloride	NH ₄ Cl	53.49	20	26.7	5.0
Ammonium citrate dibasic	(NH ₄) ₂ C ₆ H ₆ O ₇	226.19	25	56.54	2.5
Ammonium fluoride	NH ₄ F	37.04	20	37.0	10.0
Ammonium formate	HCOONH ₄	63.06	20	63.0	10.0
Ammonium iodide	NH ₄ I	144.94	25	94.2	6.5
Ammonium nitrate	NH ₄ NO ₃	80.04	25	90.2	11.2
Ammonium phosphate dibasic	(NH ₄) ₂ HPO ₄	132.06	25	46.2	3.5
Ammonium phosphate monobasic	NH ₄ H ₂ PO ₄	115.03	25	28.7	2.5
Ammonium sulfate	(NH ₄) ₂ SO ₄	132.14	20	46.2	3.5
Ammonium tartrate dibasic	(NH ₄) ₂ C ₄ H ₄ O ₆	184.15	20	36.8	2.0
Barium nitrate	Ba(NO ₃) ₂	261.34	25	10.2	0.3
Cadmium bromide tetrahydrate	CdBr ₂ • 4H ₂ O	344.28	25	94.0	2.7
Cadmium chloride hemipentahydrate	CdCl ₂ • 2.5H ₂ O	228.35	25	97.2	4.2
Cadmium iodide	CdI ₂	366.22	20	73.0	1.9
Cadmium sulfate hydrate	3CdSO ₄ • 8H ₂ O	769.52	25	70.3	0.9
Calcium chloride hexahydrate	CaCl ₂ • 6H ₂ O	219.08	25	67.8	3.0
Calcium sulfate dihydrate	CaSO ₄ • 2H ₂ O	172.17	25	0.208	0.01
Cesium bromide	CsBr	212.81	22	89.8	4.2
Cesium chloride	CsCl	168.36	25	126.3	7.5
Cesium iodide	CsI	259.81	23	74.1	2.8
Cesium nitrate	CsNO ₃	194.91	25	26.1	1.3
Cesium sulfate	Cs ₂ SO ₄	361.87	25	129.8	3.5
Citric acid monohydrate	HOC(COOH)(CH ₂ COOH) ₂ • H ₂ O	210.14	25	88.6	4.2
Copper(II) bromide	CuBr ₂	223.35	25	102.5	4.5
Copper(II) chloride dihydrate	CuCl ₂ • 2H ₂ O	170.48	25	80.0	4.6
Copper(II) sulfate pentahydrate	CuSO ₄ • 5H ₂ O	249.68	25	22.3	0.8
Iron(III) sulfate heptahydrate	FeSO ₄ • 7H ₂ O	278.01	25	52.8	1.8
Lithium acetate dihydrate	CH ₃ COOLi • 2H ₂ O	102.02	20	51.0	5.0
Lithium chloride	LiCl	42.39	20	42.4	10.0
Lithium citrate tribasic tetrahydrate	HOC(COOLi)(CH ₂ COOLi) ₂ • 4H ₂ O	281.99	20	42.3	1.5
Lithium fluoride	LiF	25.94	18	0.27	0.1
Lithium nitrate	LiNO ₃	68.95	20	55.2	8.0
Lithium sulfate monohydrate	LiSO ₄ • H ₂ O	127.96	20	25.6	2.0
Magnesium bromide hexahydrate	MgBr ₂ • 6H ₂ O	292.20	18	83.1	2.8

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Magnesium chloride hexahydrate	MgCl ₂ • 6H ₂ O	203.30	20	40.7	5.0
Magnesium formate dihydrate	C ₂ H ₂ O ₄ Mg • 2H ₂ O	150.38	25	150.04	1.0
Magnesium nitrate hexahydrate	Mg(NO ₃) ₂ • 6H ₂ O	256.41	20	76.9	3.0
Nickel(II) chloride hexahydrate	NiCl ₂ • 6H ₂ O	237.69	20	95.1	4.0
Potassium acetate	CH ₃ COOK	98.14	20	49.1	5.0
Potassium bromide	KBr	119.00	25	56.0	4.7
Potassium chloride	KCl	74.55	25	22.4	3.0
Potassium citrate tribasic monohydrate	HOC(COOK)(CH ₂ COOK) ₂ • H ₂ O	324.42	20	81.2	2.5
Potassium fluoride	KF	58.10	20	34.9	6.0
Potassium formate	HCOOK	84.12	20	117.7	14.0
Potassium iodide	KI	166.00	25	103.2	6.2
Potassium nitrate	KNO ₃	101.10	25	30.3	3.0
Potassium phosphate dibasic	K ₂ HPO ₄	174.18	22	52.3	4.0
Potassium phosphate monobasic	KH ₂ PO ₄	136.09	22	20.4	1.5
Potassium sodium tartrate tetrahydrate	KOCOCH(OH)CH(OH)COONa • 4H ₂ O	282.22	20	42.3	1.5
Potassium sulfate	K ₂ SO ₄	174.27	22	8.7	0.5
Potassium thiocyanate	KSCN	97.18	22	77.7	8.0
Sodium acetate trihydrate	CH ₃ COONa • 3H ₂ O	136.08	22	40.8	3.0
Sodium chloride	NaCl	58.44	22	29.2	5.0
Sodium citrate tribasic dihydrate	HOC(COONa)(CH ₂ COONa) ₂ • 2H ₂ O	294.10	22	47.1	1.6
Sodium fluoride	NaF	41.99	22	3.4	0.8
Sodium formate	HCOONa	68.01	22	47.6	7.0
Sodium iodide	NaI	149.89	25	124.3	8.2
Sodium nitrate	NaNO ₃	84.99	22	59.5	7.0
Sodium phosphate dibasic dihydrate	Na ₂ HPO ₄ • 2H ₂ O	177.99	22	8.9	0.5
Sodium phosphate monobasic monohydrate	NaH ₂ PO ₄ • H ₂ O	137.99	22	69.0	5.0
Sodium sulfate decahydrate	Na ₂ SO ₄ • 10H ₂ O	322.20	22	32.2	1.0
Sodium tartrate dibasic dihydrate	C ₄ H ₄ Na ₂ O ₆ • 2H ₂ O	230.08	22	34.5	1.5
Sodium thiocyanate	NaSCN	81.07	22	64.8	8.0
Zinc acetate dihydrate	Zn(CH ₃ COO) ₂ • 2H ₂ O	219.50	22	22.0	1.0
Zinc sulfate heptahydrate	ZnSO ₄ • 7H ₂ O	287.56	22	57.5	2.0

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