

# AQUEOUS SOLUBILITY OF INORGANIC COMPOUNDS AT VARIOUS TEMPERATURES

The solubility of over 300 common inorganic compounds in water is tabulated here as a function of temperature. Solubility is defined as the concentration of the compound in a solution that is in equilibrium with a solid phase at the specified temperature. In this table the solid phase is generally the most stable crystalline phase at the temperature in question. An asterisk \* on solubility values in adjacent columns indicates that the solid phase changes between those two temperatures (usually from one hydrated phase to another or from a hydrate to the anhydrous solid). In such cases the slope of the solubility vs. temperature curve may show a discontinuity.

All solubility values are expressed as mass percent of solute,  $100 \cdot w_2$ , where

$$w_2 = m_2 / (m_1 + m_2)$$

and  $m_2$  is the mass of solute and  $m_1$  the mass of water. This quantity is related to other common measures of solubility as follows:

$$\text{Molarity: } c_2 = 1000 \rho w_2 / M_2$$

$$\text{Molality: } m_2 = 1000 w_2 / M_2 (1 - w_2)$$

$$\text{Mole fraction: } x_2 = (w_2 / M_2) / \{ (w_2 / M_2) + (1 - w_2) / M_1 \}$$

$$\text{Mass of solute per 100 g of H}_2\text{O: } r_2 = 100 w_2 / (1 - w_2)$$

Here  $M_2$  is the molar mass of the solute and  $M_1 = 18.015$  g/mol is the molar mass of water.  $\rho$  is the density of the solution in  $\text{g cm}^{-3}$ .

The data in the table have been derived from the references indicated; in many cases the data have been refitted or interpolated in order to present solubility at rounded values of temperature. Where available, values were taken from the IUPAC *Solubility Data Series* (Reference 1) or the related papers in the *Journal of Physical and Chemical Reference Data* (References 2 to 5), which present carefully evaluated data.

The solubility of sparingly soluble compounds that do not appear in this table may be calculated from the data in the table "Solubility Product Constants." Solubility of inorganic gases may be found in the table "Solubility of Selected Gases in Water."

Compounds are listed alphabetically by chemical formula in the most commonly used form (e.g., NaCl,  $\text{NH}_4\text{NO}_3$ , etc.).

## References

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Compound	0 °C	10 °C	20 °C	25 °C	30 °C	40 °C	50 °C	60 °C	70 °C	80 °C	90 °C	100 °C	Ref.
AgBrO <sub>3</sub>				0.193							1.32		7
AgClO <sub>2</sub>	0.17	0.31	0.47	0.55	0.64	0.82	1.02	1.22	1.44	1.66	1.88	2.11	7
AgClO <sub>3</sub>				15									7
AgClO <sub>4</sub>	81.6	83.0	84.2	84.8	85.3	86.3	86.9	87.5	87.9	88.3	88.6	88.8	6
AgNO <sub>2</sub>	0.155			0.413									7
AgNO <sub>3</sub>	55.9	62.3	67.8	70.1	72.3	76.1	79.2	81.7	83.8	85.4	86.7	87.8	6
Ag <sub>2</sub> SO <sub>4</sub>	0.56	0.67	0.78	0.83	0.88	0.97	1.05	1.13	1.20	1.26	1.32	1.39	7
AlCl <sub>3</sub>	30.84	30.91	31.03	31.10	31.18	31.37	31.60	31.87	32.17	32.51	32.90	33.32	7
Al(ClO <sub>4</sub> ) <sub>3</sub>	54.9										64.4		7
AlF <sub>3</sub>	0.25	0.34	0.44	0.50	0.56	0.68	0.81	0.96	1.11	1.28	1.45	1.64	7
Al(NO <sub>3</sub> ) <sub>3</sub>	37.0	38.2	39.9	40.8	42.0	44.5	47.3	50.4	53.8*			61.5*	6
Al <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub>	27.5			27.8	28.2	29.2	30.7	32.6	34.9	37.6	40.7	44.2	7
As <sub>2</sub> O <sub>3</sub>	1.19	1.48	1.80	2.01	2.27	2.86	3.43	4.11	4.89	5.77	6.72	7.71	10
BaBr <sub>2</sub>	47.6	48.5	49.5	50.0	50.4	51.4	52.5	53.5	54.5	55.5	56.6	57.6	6
Ba(BrO <sub>3</sub> ) <sub>2</sub>	0.285	0.442	0.656	0.788	0.935	1.30	1.74	2.27	2.90	3.61	4.40	5.25	1:14
Ba(C <sub>2</sub> H <sub>3</sub> O <sub>2</sub> ) <sub>2</sub>	37.0			44.2									7
BaCl <sub>2</sub>	23.30	24.88	26.33	27.03	27.70	29.00	30.27	31.53	32.81	34.14	35.54	37.05	8
Ba(ClO <sub>2</sub> ) <sub>2</sub>	30.5			31.3								44.7	7
Ba(ClO <sub>3</sub> ) <sub>2</sub>	16.90	21.23	23.66	27.50	29.43	33.16	36.69	40.05	43.04	45.90	48.70	51.17	1:14
Ba(ClO <sub>4</sub> ) <sub>2</sub>	67.30	70.96	74.30	75.75	77.05	79.23	80.92	82.21	83.16	83.88	84.43	84.90	7
BaF <sub>2</sub>		0.158		0.161									7
BaI <sub>2</sub>	62.5	64.7	67.3	68.8	69.1	69.5	70.1	70.7	71.3	72.0	72.7	73.4	6

Compound	0 °C	10 °C	20 °C	25 °C	30 °C	40 °C	50 °C	60 °C	70 °C	80 °C	90 °C	100 °C	Ref.
Ba(IO <sub>3</sub> ) <sub>2</sub>	0.0182	0.0262	0.0342	0.0396	0.045*	0.058*	0.073	0.090	0.109	0.131	0.156	0.182	1:14
Ba(NO <sub>2</sub> ) <sub>2</sub>	31.1	36.6	41.8	44.3	46.8	51.6	56.2	60.5	64.6	68.5	72.1	75.6	10
Ba(NO <sub>3</sub> ) <sub>2</sub>	4.7	6.3	8.2	9.3	10.2	12.4	14.7	17.0	19.3	21.5	23.5	25.5	6
Ba(OH) <sub>2</sub>	1.67			4.68	8.4	19	33	52	74	100			7
BaS	2.79	4.78	6.97	8.21	9.58	12.67	16.18	20.05	24.19	28.55	33.04	37.61	7
Ba(SCN) <sub>2</sub>				62.6									7
BaSO <sub>3</sub>				0.0011									1:26
BeCl <sub>2</sub>	40.5			41.7									7
Be(ClO <sub>4</sub> ) <sub>2</sub>				59.5									7
BeSO <sub>4</sub>	26.69	27.58	28.61	29.22	29.90	31.51	33.39	35.50	37.78	40.21	42.72	45.28	7
CaBr <sub>2</sub>	55	56	59	61	63	68	71	73					10
CaCl <sub>2</sub>	36.70	39.19	42.13	44.83*	49.12*	52.85*	56.05*	56.73	57.44	58.21	59.04	59.94	8
Ca(ClO <sub>3</sub> ) <sub>2</sub>	63.2	64.2	65.5	66.3	67.2	69.0	71.0	73.2	75.5*	77.4*	77.7	78.0	1:14
Ca(ClO <sub>4</sub> ) <sub>2</sub>				65.3									7
CaF <sub>2</sub>	0.0013			0.0016									10
CaI <sub>2</sub>	64.6	66.0	67.6	68.3	69.0	70.8	72.4	74.0	76.0	78.0	79.6	81.0	7
Ca(IO <sub>3</sub> ) <sub>2</sub>	0.082	0.155	0.243	0.305	0.384*	0.517*	0.590	0.652	0.811*	0.665*	0.668		1:14
Ca(NO <sub>2</sub> ) <sub>2</sub>	38.6	39.5	44.5	48.6									7
Ca(NO <sub>3</sub> ) <sub>2</sub>	50.1	53.1	56.7	59.0	60.9	65.4	77.8	78.1	78.2	78.3	78.4	78.5	6
CaSO <sub>3</sub>			0.0059	0.0054	0.0049	0.0041	0.0035	0.0030	0.0026	0.0023	0.0020	0.0019	1:26
CaSO <sub>4</sub>	0.174	0.191	0.202	0.205	0.208	0.210	0.207	0.201	0.193	0.184	0.173	0.163	9
CdBr <sub>2</sub>	36.0	43.0	49.9	53.4	56.4	60.3*	60.3*	60.5	60.7	60.9	61.3	61.6	6
CdC <sub>2</sub> O <sub>4</sub>				0.0060									5
CdCl <sub>2</sub>	47.2	50.1	53.2	54.6	56.3*	57.3*	57.5	57.8	58.1	58.51	58.98	59.5	6
Cd(ClO <sub>4</sub> ) <sub>2</sub>				58.7								66.9	7
CdF <sub>2</sub>		5.82	4.65	4.18	3.76								5
CdI <sub>2</sub>	44.1	44.9	45.8	46.3	46.8	47.9	49.0	50.2	51.5	52.7	54.1	55.4	6
Cd(IO <sub>3</sub> ) <sub>2</sub>				0.091									5
Cd(NO <sub>3</sub> ) <sub>2</sub>	55.4	57.1	59.6	61.0	62.8	66.5	70.6	86.1	86.5	86.8	87.1	87.4	6
CdSO <sub>4</sub>	43.1	43.1	43.2	43.4	43.6	44.1	43.5	42.5	41.4	40.2	38.5	36.7	6
CdSeO <sub>4</sub>	42.04	40.59	39.02	38.18	37.29	35.35	33.15	30.65	27.84	24.69	21.24	17.49	5
Ce(NO <sub>3</sub> ) <sub>3</sub>	57.99	59.80	61.89	63.05	64.31*	67.0*	68.6	71.1*	74.9*	79.2	80.9	83.1	1:13
CoCl <sub>2</sub>	30.30	32.60	34.87	35.99	37.10	39.27	41.38	43.46	45.50	47.51	49.51	51.50	7
Co(ClO <sub>4</sub> ) <sub>2</sub>	50.0			53.0									7
CoF <sub>2</sub>				1.4									7
CoI <sub>2</sub>	58.00	61.78	65.35	66.99	68.51	71.17	73.41	75.29	76.89	78.28	79.52	80.70	7
Co(NO <sub>2</sub> ) <sub>2</sub>	0.076			0.49									7
Co(NO <sub>3</sub> ) <sub>2</sub>	45.5	47.0	49.4	50.8	52.4	56.0	60.1	62.6	64.9	67.7			6
CoSO <sub>4</sub>	19.9	23.0	26.1	27.7	29.2	32.3	34.4	35.9	35.5	33.2	30.6	27.8	6
Co(SCN) <sub>2</sub>				50.7									7
CrO <sub>3</sub>	62.2	62.3	62.6	62.8	63.0	63.5	64.1	64.7	65.5	66.2	67.1	67.9	6
CsBr				55.2									7
CsBrO <sub>3</sub>	1.16	1.93	3.01	3.69	4.46	6.32	8.60	11.32	14.45	17.96	21.83	25.98	1:30
CsCl	61.83	63.48	64.96	65.64	66.29	67.50	68.60	69.61	70.54	71.40	72.21	72.96	1:47
CsClO <sub>3</sub>	2.40	3.87	5.94	7.22	8.69	12.15	16.33	21.14	26.45	32.10	37.89	43.42	1:30
CsClO <sub>4</sub>	0.79	1.01	1.51	1.96	2.57	4.28	6.55	9.29	12.41	15.80	19.39	23.07	7
CsI	30.9	37.2	43.2	45.9	48.6	53.3	57.3	60.7	63.6	65.9	67.7	69.2	6
CsIO <sub>3</sub>	1.08	1.58	2.21	2.59	3.02	3.96	5.06	6.29	7.70	9.20	10.79	12.45	1:30
CsNO <sub>3</sub>	8.46	13.0	18.6	21.8	25.1	32.0	39.0	45.7	51.9	57.3	62.1	66.2	6
CsOH				75									7
Cs <sub>2</sub> SO <sub>4</sub>	62.6	63.4	64.1	64.5	64.8	65.5	66.1	66.7	67.3	67.8	68.3	68.8	6
CuBr <sub>2</sub>				55.8									7
CuCl <sub>2</sub>	40.8	41.7	42.6	43.1	43.7	44.8	46.0	47.2	48.5	49.9	51.3	52.7	6
Cu(ClO <sub>4</sub> ) <sub>2</sub>	54.3			59.3									7
CuF <sub>2</sub>				0.075									7
Cu(NO <sub>3</sub> ) <sub>2</sub>	45.2	49.8	56.3	59.2	61.1	62.0	63.1	64.5	65.9	67.5	69.2	71.0	6
CuSO <sub>4</sub>	12.4	14.4	16.7	18.0	19.3	22.2	25.4	28.8	32.4	36.3	40.3	43.5	6
CuSeO <sub>4</sub>	10.6			16.0									7
Dy(NO <sub>3</sub> ) <sub>3</sub>	58.79	59.99	61.49	62.35	63.29	65.43	68.04	71.58					1:13
Er(NO <sub>3</sub> ) <sub>3</sub>	61.58	63.15	64.84	65.75	66.69	68.70	70.96	73.64	77.75				1:13
Eu(NO <sub>3</sub> ) <sub>3</sub>	55.2	56.7	58.5	59.4	60.4	62.5	64.6						1:13

Compound	0 °C	10 °C	20 °C	25 °C	30 °C	40 °C	50 °C	60 °C	70 °C	80 °C	90 °C	100 °C	Ref.
FeBr <sub>2</sub>				54.6								64.8*	7
FeCl <sub>2</sub>	33.2*			39.4*								48.7*	7
FeCl <sub>3</sub>	42.7	44.9	47.9	47.7	51.6	74.8	76.7	84.6	84.3	84.3	84.4	84.7	6
Fe(ClO <sub>4</sub> ) <sub>2</sub>	63.39			67.76									7
FeF <sub>3</sub>				5.59									7
Fe(NO <sub>3</sub> ) <sub>3</sub>	40.15			46.57									7
Fe(NO <sub>3</sub> ) <sub>2</sub>	41.44			46.67									7
FeSO <sub>4</sub>	13.5	17.0	20.8	22.8	24.8	28.8	32.8	35.5	33.6	30.4	27.1	24.0	6
Gd(NO <sub>3</sub> ) <sub>3</sub>	56.3	57.7	59.2	60.1	61.0	62.9	65.2	67.9	71.5				1:13
HIO <sub>3</sub>	73.45	74.10	74.98	75.48	76.03	77.20	78.46	79.78	81.13	82.48	83.82	85.14	1:30
H <sub>3</sub> BO <sub>3</sub>	2.61	3.57	4.77	5.48	6.27	8.10	10.3	12.9	15.9	19.3	23.1	27.3	6
HgBr <sub>2</sub>	0.26	0.37	0.52	0.61	0.72	0.96	1.26	1.63	2.08	2.61	3.23	3.95	4
Hg(CN) <sub>2</sub>	6.57	7.83	9.33	10.2	11.1	13.1	15.5	18.2	21.2	24.6	28.3	32.3	6
HgCl <sub>2</sub>	4.24	5.05	6.17	6.81	7.62	9.53	12.02	15.18	19.16	24.06	29.90	36.62	4
HgI <sub>2</sub>			0.0041	0.0055	0.0072	0.0122	0.0199						4
Hg(SCN) <sub>2</sub>				0.070									4
Hg <sub>2</sub> Cl <sub>2</sub>				0.0004									3
Hg <sub>2</sub> (ClO <sub>4</sub> ) <sub>2</sub>	73.8			79.8*								85.3*	7
Hg <sub>2</sub> SO <sub>4</sub>	0.038	0.043	0.048	0.051	0.054	0.059	0.065	0.070	0.076	0.082	0.088	0.093	4
Ho(NO <sub>3</sub> ) <sub>3</sub>				63.8									1:13
KBF <sub>4</sub>	0.28	0.34	0.45	0.55	0.75	1.38	2.09	2.82	3.58	4.34	5.12	5.90	10
KBr	35.0	37.3	39.4	40.4	41.4	43.2	44.8	46.2	47.6	48.8	49.8	50.8	6
KBrO <sub>3</sub>	2.97	4.48	6.42	7.55	8.79	11.57	14.71	18.14	21.79	25.57	29.42	33.28	1:30
KC <sub>2</sub> H <sub>3</sub> O <sub>2</sub>	68.40	70.29	72.09	72.92	73.70	75.08	76.27	77.31	78.22	79.04	79.80	80.55	7
KCl	21.74	23.61	25.39	26.22	27.04	28.59	30.04	31.40	32.66	33.86	34.99	36.05	1:47
KClO <sub>3</sub>	3.03	4.67	6.74	7.93	9.21	12.06	15.26	18.78	22.65	26.88	31.53	36.65	1:30
KClO <sub>4</sub>	0.70	1.10	1.67	2.04	2.47	3.54	4.94	6.74	8.99	11.71	14.94	18.67	6
KF	30.90	39.8	47.3	50.41	53.2					60.0			7
KHCO <sub>3</sub>	18.62	21.73	24.92	26.6	28.13	31.32	34.46	37.51	40.45				6
KHSO <sub>4</sub>	27.1	29.7	32.3	33.6	35.0	37.8	40.5	43.4	46.2	49.02	51.82	54.6	6
KH <sub>2</sub> PO <sub>4</sub>	11.74	14.91	18.25	19.97	21.77	25.28	28.95	32.76	36.75	40.96	45.41	50.12	1:31
KI	56.0	57.6	59.0	59.7	60.4	61.6	62.8	63.8	64.8	65.7	66.6	67.4	6
KIO <sub>3</sub>	4.53	5.96	7.57	8.44	9.34	11.09	13.22	15.29	17.41	19.58	21.78	24.03	1:30
KIO <sub>4</sub>	0.16	0.22	0.37	0.51	0.70	1.24	1.96	2.83	3.82	4.89	6.02	7.17	7
KMnO <sub>4</sub>	2.74	4.12	5.96	7.06	8.28	11.11	14.42	18.16					6
KNO <sub>2</sub>	73.7	74.6	75.3	75.7	76.0	76.7	77.4	78.0	78.5	79.1	79.6	80.1	6
KNO <sub>3</sub>	12.0	17.6	24.2	27.7	31.3	38.6	45.7	52.2	58.0	63.0	67.3	70.8	6
KOH	48.7	50.8	53.2	54.7	56.1	57.9	58.6	59.5	60.6	61.8	63.1	64.6	6
KSCN	63.8	66.4	69.1	70.4	71.6	74.1	76.5	78.9	81.1	83.3	85.3	87.3	6
K <sub>2</sub> CO <sub>3</sub>	51.3	51.7	52.3	52.7	53.1	54.0	54.9	56.0	57.2	58.4	59.6	61.0	6
K <sub>2</sub> CrO <sub>4</sub>	37.1	38.1	38.9	39.4	39.8	40.5	41.3	41.9	42.6	43.2	43.8	44.3	6
K <sub>2</sub> Cr <sub>2</sub> O <sub>7</sub>	4.30	7.12	10.9	13.1	15.5	20.8	26.3	31.7	36.9	41.5	45.5	48.9	6
K <sub>2</sub> HAsO <sub>4</sub>	48.5*			63.6*								79.8*	7
K <sub>2</sub> HPO <sub>4</sub>	57.0	59.1	61.5	62.7	64.1	67.7*		72.7*					1:31
K <sub>2</sub> MoO <sub>4</sub>				64.7							66.5		7
K <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	51.30	51.39	51.49	51.55	51.62	51.76	51.93	52.11	52.32	52.54	52.79	53.06	1:26
K <sub>2</sub> SO <sub>4</sub>	7.11	8.46	9.95	10.7	11.4	12.9	14.2	15.5	16.7	17.7	18.6	19.3	6
K <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	49.0*			62.3*							75.7*		7
K <sub>2</sub> S <sub>2</sub> O <sub>5</sub>	22.1	26.7	31.1	33.1	35.2	39.0	42.6	46.0	49.1	52.0	54.6		1:26
K <sub>2</sub> SeO <sub>3</sub>	68.4*			68.5*								68.5*	7
K <sub>2</sub> SeO <sub>4</sub>	52.70	52.93	53.17	53.30	53.43	53.70	53.99	54.30	54.61	54.94	55.26	55.60	7
K <sub>3</sub> AsO <sub>4</sub>	51.5*			55.6*								73*	7
K <sub>3</sub> Fe(CN) <sub>6</sub>	23.9	27.6	31.1	32.8	34.3	37.2	39.6	41.7	43.5	45.0	46.1	47.0	6
K <sub>3</sub> PO <sub>4</sub>	44.3			51.4									7
K <sub>4</sub> Fe(CN) <sub>6</sub>	12.5	17.3	22.0	23.9	25.6	29.2	32.5	35.5	38.2	40.6	41.4	43.1	6
LaCl <sub>3</sub>	49.0	48.5	48.6	48.9	49.3	50.5	52.1	54.0	56.3	58.9	61.7		6
La(NO <sub>3</sub> ) <sub>3</sub>	55.0	56.9	58.9	60.0	61.1	63.6	66.3	69.9*	74.1*				1:13
LiBr	58.4	60.1	62.7	64.4	65.9	67.8	68.3	69.0	69.8	70.7	71.7	72.8	6
LiBrO <sub>3</sub>	61.03	62.62	64.44	65.44	66.51	68.90	71.68*	73.24*	74.43	75.66	76.93	78.32	1:30
LiC <sub>2</sub> H <sub>3</sub> O <sub>2</sub>	23.76	26.49	29.42	31.02	32.72	36.48	40.65	45.15	49.93	54.91	60.04	65.26	7
LiCl	40.45	42.46*	45.29*	45.81	46.25	47.30	48.47	49.78	51.27	52.98	54.98*	56.34*	1:47



Compound	0 °C	10 °C	20 °C	25 °C	30 °C	40 °C	50 °C	60 °C	70 °C	80 °C	90 °C	100 °C	Ref.
NaBr	44.4	45.9	47.7	48.6	49.6	51.6	53.7	54.1	54.3	54.5	54.7	54.9	6
NaBrO <sub>3</sub>	20.0	23.22	26.65	28.28	29.86	32.83	35.55	38.05	40.37	42.52			1:30
NaCHO <sub>2</sub>	30.8	37.9	45.7	48.7	50.6	52.0	53.5	55.0					6
NaC <sub>2</sub> H <sub>3</sub> O <sub>2</sub>	26.5	28.8	31.8	33.5	35.5	39.9	45.1	58.3	59.3	60.5	61.7	62.9	6
NaCl	26.28	26.32	26.41	26.45	26.52	26.67	26.84	27.03	27.25	27.50	27.78	28.05	1:47
NaClO	22.7			44.4									7
NaClO <sub>2</sub>				97.0*				95.3*					7
NaClO <sub>3</sub>	44.27	46.67	49.3	50.1	51.2	53.6	55.5	57.0	58.5	60.5	63.3	67.1	1:30
NaClO <sub>4</sub>	61.9	64.1	66.2	67.2	68.3	70.4	72.5	74.1	74.7	75.4	76.1	76.7	6
NaF	3.52	3.72	3.89	3.97	4.05	4.20	4.34	4.46	4.57	4.66	4.75	4.82	6
NaHCO <sub>3</sub>	6.48	7.59	8.73	9.32	9.91	11.13	12.40	13.70	15.02	16.37	17.73	19.10	7
NaHSO <sub>4</sub>				22.2								33.3	10
NaH <sub>2</sub> PO <sub>4</sub>	36.54	41.07	46.00	48.68	51.54	57.89*	61.7*	62.3*	65.9	68.7			1:31
NaI	61.2	62.4	63.9	64.8	65.7	67.7	69.8	72.0	74.7	74.8	74.9	75.1	6
NaIO <sub>3</sub>	2.43	4.40	7.78*	8.65*	9.60	11.67	13.99	16.52	19.25*	21.1*	22.9	24.7	1:30
NaIO <sub>4</sub>				12.62									7
NaNO <sub>2</sub>	41.9	43.4	45.1	45.9	46.8	48.7	50.7	52.8	55.0	57.2	59.5	61.8	6
NaNO <sub>3</sub>	42.2	44.4	46.6	47.7	48.8	51.0	53.2	55.3	57.5	59.6	61.7	63.8	6
NaOH	30	39	46	50	53	58	63	67	71	74	76	79	10
NaSCN		52.9	57.1	60.2	62.7	63.5	64.2	65.0	65.9	66.9	67.9	69.0	6
Na <sub>2</sub> B <sub>4</sub> O <sub>7</sub>	1.23	1.71	2.50	3.07	3.82	6.02	9.7	14.9	17.1	19.9	23.5	28.0	6
Na <sub>2</sub> CO <sub>3</sub>	6.44	10.8	17.9	23.5	28.7	32.8	32.2	31.7	31.3	31.1	30.9	30.9	6
Na <sub>2</sub> C <sub>2</sub> O <sub>4</sub>	2.62	2.95	3.30	3.48	3.65	4.00	4.36	4.71	5.06	5.41	5.75	6.08	6
Na <sub>2</sub> CrO <sub>4</sub>	22.6	32.3	44.6	46.7	46.9	48.9	51.0	53.4	55.3	55.5	55.8	56.1	6
Na <sub>2</sub> Cr <sub>2</sub> O <sub>7</sub>	62.1	63.1	64.4	65.2	66.1	68.0	70.1	72.3	74.6	77.0	79.6	80.7	6
Na <sub>2</sub> HAsO <sub>4</sub>	5.6*			29.3*								67*	7
Na <sub>2</sub> HPO <sub>4</sub>	1.66	4.19	7.51	10.55	16.34*	35.17*	44.64*	45.20	46.81	48.78	50.52	51.53	1:31
Na <sub>2</sub> MoO <sub>4</sub>	30.6	38.8	39.4	39.4	39.8	40.3	41.0	41.7	42.6	43.5	44.5	45.5	6
Na <sub>2</sub> S	11.1	13.2	15.7	17.1	18.6	22.1	26.7	28.1	30.2	33.0	36.4	41.0	6
Na <sub>2</sub> SO <sub>3</sub>	12.0	16.1	20.9	23.5	26.3*	27.3*	25.9	24.8	23.7	22.8	22.1	21.5	1:26
Na <sub>2</sub> SO <sub>4</sub>			16.13	21.94	29.22*	32.35*	31.55	30.90	30.39	30.02	29.79	29.67	8
Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	33.1	36.3	40.6	43.3	45.9	52.0	62.3	65.7	68.8	69.4	70.1	71.0	6
Na <sub>2</sub> S <sub>2</sub> O <sub>5</sub>		38.4	39.5	40.0	40.6	41.8	43.0	44.2	45.5	46.8	48.1	49.5	1:26
Na <sub>2</sub> SeO <sub>3</sub>				47.3*								45*	7
Na <sub>2</sub> SeO <sub>4</sub>	11.7			36.9*								42.1*	7
Na <sub>2</sub> WO <sub>4</sub>	41.6	41.9	42.3	42.6	42.9	43.6	44.4	45.3	46.2	47.3	48.4	49.5	6
Na <sub>3</sub> PO <sub>4</sub>	4.28	7.30	10.8	12.6	14.1	16.6	22.9	28.4	32.4	37.6	40.4	43.5	6
Na <sub>4</sub> P <sub>2</sub> O <sub>7</sub>	2.23	3.28	4.81	6.62	7.00	10.10	14.38	20.07	27.31	36.03	32.37	30.67	6
NdCl <sub>3</sub>	49.0	49.3	49.7	50.0	50.4	51.2	52.2	53.3	54.5	55.8	57.1	58.5	6
Nd(NO <sub>3</sub> ) <sub>3</sub>	55.76	57.49	59.37	60.38	61.43	63.69	66.27	69.47					1:13
NiCl <sub>2</sub>	34.7	36.1	38.5	40.3	41.7	42.1	43.2	45.0	46.1	46.2	46.4	46.6	6
Ni(ClO <sub>4</sub> ) <sub>2</sub>	51.1			52.8									7
NiF <sub>2</sub>				2.50							2.52		7
NiI <sub>2</sub>	55.40	57.68	59.78	60.69	61.50	62.80	63.73	64.38	64.80	65.09	65.30		7
Ni(NO <sub>3</sub> ) <sub>2</sub>	44.1	46.0	48.4	49.8	51.3	54.6	58.3	61.0	63.1	65.6	67.9	69.0	6
NiSO <sub>4</sub>	21.4	24.4	27.4	28.8	30.3*	32.0*	34.1	35.8	37.7	39.9	42.3	44.8	6
Ni(SCN) <sub>2</sub>				35.48									7
NiSeO <sub>4</sub>	21.6		26.2*									45.6*	7
PbBr <sub>2</sub>	0.449	0.620	0.841	0.966	1.118	1.46	1.89						2
PbCl <sub>2</sub>	0.66	0.81	0.98	1.07	1.17	1.39	1.64	1.93	2.24	2.60	2.99	3.42	2
Pb(ClO <sub>4</sub> ) <sub>2</sub>				81.5									7
PbF <sub>2</sub>		0.0603	0.0649	0.0670	0.0693								2
PbI <sub>2</sub>	0.041	0.052	0.067	0.076	0.086	0.112	0.144	0.187	0.243	0.315			2
Pb(IO <sub>3</sub> ) <sub>2</sub>				0.0025									7
Pb(NO <sub>3</sub> ) <sub>2</sub>	28.46	32.13	35.67	37.38	39.05	42.22	45.17	47.90	50.42	52.72	54.82	56.75	2
PbSO <sub>4</sub>	0.0033	0.0038	0.0042	0.0044	0.0047	0.0052	0.0058						2
PrCl <sub>3</sub>	48.0	48.1	48.6	49.0	49.5	50.8	52.3	54.1	56.1	58.3			6
Pr(NO <sub>3</sub> ) <sub>3</sub>	57.50	59.20	61.16	62.24	63.40*	65.7*	67.8	70.2	73.4				1:13
RbBr	47.4	50.1	52.6	53.8	54.9	57.0	58.8	60.6	62.1	63.5	64.8	65.9	6
RbBrO <sub>3</sub>	0.97	1.55	2.36	2.87	3.45	4.87	6.64	8.78	11.29	14.15	17.32	20.76	1:30
RbCl	43.58	45.65	47.53	48.42	49.27	50.86	52.34	53.67	54.92	56.08	57.16	58.15	1:47

