

Supporting Information

The Thermodynamics of Inorganic Hydration and of Humidity Control, with an Extensive Database of Salt Hydrate Pairs

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Table S1: Master list, sorted alphabetically by formula.

Salt pair hydrate aqueous vapour pressure at 25°C calculated from the standard Gibbs energy of the reaction (using eq. (4) with “*HSC Chemistry*” data¹). The equilibrium vapour pressure of water at 25°C is 23.8 Torr.² The final two columns list the standard enthalpy and standard entropy per mole for production of gaseous water from the salt pair, with the enthalpy term providing the temperature coefficient (eq. 2) for the process. The rows in *red italics* contain thermodynamic data which is unusual, and thus suspect; the calculated pressure term has consequently been omitted.

| | $\Delta n(\text{H}_2\text{O})$ | $\Delta G^\circ/\Delta n(\text{H}_2\text{O})$ | p^a | $\Delta_r H^\circ/\Delta n(\text{H}_2\text{O})$ | $\Delta_r S^\circ/\Delta n(\text{H}_2\text{O})$ |
|---|--------------------------------|---|-----------|---|---|
| | | / kJ mol ⁻¹ | / Torr | / kJ mol ⁻¹ | / J K ⁻¹ mol ⁻¹ |
| $\text{H}_2\text{O}(\text{s}) = \text{H}_2\text{O}(\text{g})^3$ | 1 | 8.1 | 23.8 | 50.0 | 141 |
| $\text{AgF} \cdot \text{H}_2\text{O} = \text{AgF} + \text{H}_2\text{O}(\text{g})$ | 1 | 12.2 | 5.5 | 59.2 | 158 |
| $\text{AgF} \cdot 2\text{H}_2\text{O} = \text{AgF} \cdot \text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 15.8 | 1.3 | 56.2 | 136 |
| $\text{AgF} \cdot 4\text{H}_2\text{O} = \text{AgF} \cdot 2\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 10.2 | 12.1 | 51.6 | 139 |
| <i>$\text{Al}_4\text{C}_3 \cdot 6\text{H}_2\text{O} = \text{Al}_4\text{C}_3 + 6\text{H}_2\text{O}(\text{g})$</i> | <i>6</i> | <i>128.9</i> | | <i>170.9</i> | <i>141</i> |
| $\text{AlCl}_3 \cdot 6\text{H}_2\text{O} = \text{AlCl}_3 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 43.4 | 0.0 | 89.4 | 154 |
| $\text{AlF}_3 \cdot 3\text{H}_2\text{O} = \text{AlF}_3 \cdot 0.5\text{H}_2\text{O} + 2.5\text{H}_2\text{O}(\text{g})$ | 2.5 | 33.1 | 0.0 | 78.4 | 152 |
| $\text{Al}_2\text{O}_3 \cdot \text{H}_2\text{O} = \text{Al}_2\text{O}_3 + \text{H}_2\text{O}(\text{g})$ | 1 | 31.2 | 0.0 | 81.6 | 169 |
| $\text{Al}_2\text{O}_3 \cdot 3\text{H}_2\text{O} = \text{Al}_2\text{O}_3 \cdot \text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 5.5 | 82.7 | 51.9 | 156 |
| $\text{Al}_2(\text{SO}_4)_3 \cdot 6\text{H}_2\text{O} = \text{Al}_2(\text{SO}_4)_3 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 57.4 | 0.0 | 102.3 | 150 |
| $\text{As}_2\text{O}_5 \cdot 4\text{H}_2\text{O} = \text{As}_2\text{O}_5 + 4\text{H}_2\text{O}(\text{g})$ | 4 | 5.6 | 77.2 | 50.3 | 150 |
| $\text{AuCl}_3 \cdot 2\text{H}_2\text{O} = \text{AuCl}_3 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 9.3 | 17.3 | 56.5 | 158 |
| $\text{BaAl}_2\text{O}_4 \cdot \text{H}_2\text{O} = \text{BaAl}_2\text{O}_4 + \text{H}_2\text{O}(\text{g})$ | 1 | 39.2 | 0.0 | 83.7 | 149 |
| $\text{BaBr}_2 \cdot \text{H}_2\text{O} = \text{BaBr}_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 12.9 | 4.2 (3.7) | 57.8 | 151 |
| $\text{BaBr}_2 \cdot 2\text{H}_2\text{O} = \text{BaBr}_2 \cdot \text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 13.4 | 3.3 | 57.3 | 147 |
| $\text{BaCl}_2 \cdot \text{H}_2\text{O} = \text{BaCl}_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 24.5 | 0.0 | 67.8 | 145 |
| <i>$\text{BaCl}_2 \cdot 2\text{H}_2\text{O} = \text{BaCl}_2 \cdot \text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$</i> | <i>1</i> | <i>-6.4</i> | | <i>39.3</i> | <i>153</i> |
| <i>$\text{Ba}(\text{ClO}_4)_2 \cdot 3\text{H}_2\text{O} = \text{Ba}(\text{ClO}_4)_2 + 3\text{H}_2\text{O}(\text{g})$</i> | <i>3</i> | <i>105.4</i> | | <i>146.6</i> | <i>138</i> |
| $\text{BaI}_2 \cdot \text{H}_2\text{O} = \text{BaI}_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 33.0 | 0.0 | 77.4 | 149 |
| $\text{BaI}_2 \cdot 2\text{H}_2\text{O} = \text{BaI}_2 \cdot \text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 11.4 | 7.5 | 55.2 | 147 |
| <i>$\text{Ba}(\text{IO}_3)_2 \cdot \text{H}_2\text{O} = \text{Ba}(\text{IO}_3)_2 + \text{H}_2\text{O}(\text{g})$</i> | <i>1</i> | <i>-7.3</i> | | <i>27.0</i> | <i>115</i> |
| $\text{Ba}(\text{N}_3)_2 \cdot \text{H}_2\text{O} = \text{Ba}(\text{N}_3)_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 6.9 | 46.5 | 44.3 | 126 |
| $\text{Ba}(\text{OH})_2 \cdot \text{H}_2\text{O} = \text{Ba}(\text{OH})_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 17.4 | 0.7 | 60.6 | 145 |
| $\text{Ba}(\text{OH})_2 \cdot 3\text{H}_2\text{O} = \text{Ba}(\text{OH})_2 \cdot \text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 12.4 | 5.1 | 57.5 | 152 |
| $\text{Ba}(\text{OH})_2 \cdot 8\text{H}_2\text{O} = \text{Ba}(\text{OH})_2 \cdot 3\text{H}_2\text{O} + 5\text{H}_2\text{O}(\text{g})$ | 5 | 14.2 | 2.4 | 58.5 | 149 |
| $\text{BeSO}_4 \cdot \text{H}_2\text{O} = \text{BeSO}_4 + \text{H}_2\text{O}(\text{g})$ | 1 | 24.9 | 0.0 | 68.4 | 146 |
| $\text{BeSO}_4 \cdot 2\text{H}_2\text{O} = \text{BeSO}_4 \cdot \text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 26.4 | 0.0 | 70.1 | 147 |
| $\text{BeSO}_4 \cdot 3\text{H}_2\text{O} = \text{BeSO}_4 \cdot 2\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 9.3 | 17.4 | 55.7 | 155 |

| | | | | | |
|--|------|-------|-----------|-------|-----|
| $\text{BeSO}_4 \cdot 4\text{H}_2\text{O} = \text{BeSO}_4 \cdot 3\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 16.1 | 1.1 | 61.5 | 152 |
| $\text{CaBr}_2 \cdot 6\text{H}_2\text{O} = \text{CaBr}_2 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 19.5 | 0.3 | 61.9 | 142 |
| $\text{CaCl}_2 \cdot \text{H}_2\text{O} = \text{CaCl}_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 31.9 | 0.0 | 73.8 | 140 |
| $\text{CaCl}_2 \cdot 2\text{H}_2\text{O} = \text{CaCl}_2 \cdot \text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 8.0 | 30.0 | 51.2 | 145 |
| $\text{CaCl}_2 \cdot 4\text{H}_2\text{O} = \text{CaCl}_2 \cdot 2\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 15.1 | 1.7 | 60.8 | 153 |
| $\text{CaCl}_2 \cdot 6\text{H}_2\text{O} = \text{CaCl}_2 \cdot 4\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 11.7 | 6.6 | 66.1 | 182 |
| $\text{Ca}(\text{ClO}_4)_2 \cdot 4\text{H}_2\text{O} = \text{Ca}(\text{ClO}_4)_2 + 4\text{H}_2\text{O}(\text{g})$ | 4 | 22.8 | 0.1 | 64.1 | 139 |
| $\text{CaHPO}_4 \cdot 2\text{H}_2\text{O} = \text{CaHPO}_4 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 16.9 | 0.8 | 61.6 | 150 |
| $\text{Ca}(\text{H}_2\text{PO}_4)_2 \cdot \text{H}_2\text{O} = \text{Ca}(\text{H}_2\text{PO}_4)_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 17.8 | 0.6 | 53.2 | 119 |
| $\text{Ca}(\text{IO}_3)_2 \cdot \text{H}_2\text{O} = \text{Ca}(\text{IO}_3)_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 46.1 | 0.0 | 89.9 | 147 |
| $\text{Ca}(\text{IO}_3)_2 \cdot 6\text{H}_2\text{O} = \text{Ca}(\text{IO}_3)_2 \cdot \text{H}_2\text{O} + 5\text{H}_2\text{O}(\text{g})$ | 5 | 0.8 | 541.8 | 46.4 | 153 |
| $\text{Ca}(\text{NO}_3)_2 \cdot 2\text{H}_2\text{O} = \text{Ca}(\text{NO}_3)_2 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 15.2 | 1.6 (2.2) | 60.2 | 151 |
| $\text{Ca}(\text{NO}_3)_2 \cdot 3\text{H}_2\text{O} = \text{Ca}(\text{NO}_3)_2 \cdot 2\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 14.0 | 2.7 | 55.4 | 139 |
| $\text{Ca}(\text{NO}_3)_2 \cdot 4\text{H}_2\text{O} = \text{Ca}(\text{NO}_3)_2 \cdot 3\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 12.9 | 4.1 | 52.5 | 133 |
| $\text{CaSO}_3 \cdot 0.5\text{H}_2\text{O} = \text{CaSO}_3 + 0.5\text{H}_2\text{O}(\text{g})$ | 0.5 | 18.4 | 0.5 | 62.8 | 149 |
| $\text{CaSO}_3 \cdot 2\text{H}_2\text{O} = \text{CaSO}_3 \cdot 0.5\text{H}_2\text{O} + 1.5\text{H}_2\text{O}(\text{g})$ | 1.5 | 8.6 | 23.8 | 52.4 | 147 |
| $\text{CaSO}_4 \cdot 2\text{H}_2\text{O} = \text{CaSO}_4 \cdot 0.5\text{H}_2\text{O} + 1.5\text{H}_2\text{O}(\text{g})$ | 1.5 | 11.8 | 6.5 | 55.4 | 146 |
| $\text{CaSeO}_4 \cdot 2\text{H}_2\text{O} = \text{CaSeO}_4 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 18.7 | 0.4 | 56.8 | 128 |
| $\text{CaSiF}_6 \cdot 2\text{H}_2\text{O} = \text{CaSiF}_6 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 30.5 | 0.0 | 75.1 | 149 |
| $\text{CaTeO}_3 \cdot \text{H}_2\text{O} = \text{CaTeO}_3 + \text{H}_2\text{O}(\text{g})$ | 1 | 26.9 | 0.0 | 70.7 | 147 |
| $\text{CdBr}_2 \cdot 4\text{H}_2\text{O} = \text{CdBr}_2 + 4\text{H}_2\text{O}(\text{g})$ | 4 | 8.7 | 22.3 | 52.1 | 145 |
| $\text{CdCl}_2 \cdot \text{H}_2\text{O} = \text{CdCl}_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 13.4 | 3.3 | 53.3 | 134 |
| $\text{CdCl}_2 \cdot 2.5\text{H}_2\text{O} = \text{CdCl}_2 \cdot \text{H}_2\text{O} + 1.5\text{H}_2\text{O}(\text{g})$ | 1.5 | 9.4 | 16.9 | 53.4 | 148 |
| $\text{Cd}(\text{NO}_3)_2 \cdot 2\text{H}_2\text{O} = \text{Cd}(\text{NO}_3)_2 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 14.9 | 1.8 | 57.5 | 143 |
| $\text{Cd}(\text{NO}_3)_2 \cdot 4\text{H}_2\text{O} = \text{Cd}(\text{NO}_3)_2 \cdot 2\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 14.5 | 2.1 (2.1) | 57.0 | 142 |
| $\text{CdSO}_4 \cdot \text{H}_2\text{O} = \text{CdSO}_4 + \text{H}_2\text{O}(\text{g})$ | 1 | 17.6 | 0.6 | 64.6 | 158 |
| $\text{CdSO}_4 \cdot 2.67\text{H}_2\text{O} = \text{CdSO}_4 \cdot \text{H}_2\text{O} + 1.67\text{H}_2\text{O}(\text{g})$ | 1.67 | 8.7 | 22.6 | 51.5 | 144 |
| $\text{CeCl}_3 \cdot 7\text{H}_2\text{O} = \text{CeCl}_3 + 7\text{H}_2\text{O}(\text{g})$ | 7 | 16.3 | 1.1 | 61.0 | 150 |
| $\text{CePO}_4 \cdot 2\text{H}_2\text{O} = \text{CePO}_4 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 5.4 | 83.2 | 50.5 | 151 |
| $\text{Ce}(\text{SO}_4)_2 \cdot 5\text{H}_2\text{O} = \text{Ce}(\text{SO}_4)_2 + 5\text{H}_2\text{O}(\text{g})$ | 5 | 344.6 | | 384.1 | 132 |
| $\text{CoBr}_2 \cdot 6\text{H}_2\text{O} = \text{CoBr}_2 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 14.5 | 2.2 | 58.9 | 149 |
| $\text{CoCl}_2 \cdot \text{H}_2\text{O} = \text{CoCl}_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 22.6 | 0.1 | 61.1 | 129 |
| $\text{CoCl}_2 \cdot 2\text{H}_2\text{O} = \text{CoCl}_2 \cdot \text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 14.4 | 2.2 | 60.3 | 154 |
| $\text{CoCl}_2 \cdot 6\text{H}_2\text{O} = \text{CoCl}_2 \cdot 2\text{H}_2\text{O} + 4\text{H}_2\text{O}(\text{g})$ | 4 | 11.5 | 7.1 | 57.0 | 153 |
| $\text{Co}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O} = \text{Co}(\text{NO}_3)_2 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 14.5 | 2.2 | 56.0 | 139 |
| $\text{CoSO}_4 \cdot 6\text{H}_2\text{O} = \text{CoSO}_4 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 13.6 | 3.1 | 57.5 | 147 |
| $\text{CoSO}_4 \cdot 7\text{H}_2\text{O} = \text{CoSO}_4 \cdot 6\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 9.3 | 17.4 | 54.2 | 150 |
| $\text{CrCl}_2 \cdot 2\text{H}_2\text{O} = \text{CrCl}_2 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 17.7 | 0.6 | 62.2 | 149 |
| $\text{CrCl}_2 \cdot 3\text{H}_2\text{O} = \text{CrCl}_2 \cdot 2\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 17.8 | 0.6 | 62.4 | 150 |
| $\text{CrCl}_2 \cdot 4\text{H}_2\text{O} = \text{CrCl}_2 \cdot 3\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 13.8 | 2.9 | 58.4 | 150 |
| $\text{Cr}_2(\text{SO}_4)_3 \cdot 8\text{H}_2\text{O} = \text{Cr}_2(\text{SO}_4)_3 + 8\text{H}_2\text{O}(\text{g})$ | 8 | 55.2 | 0.0 | 99.6 | 149 |
| $\text{Cr}_2(\text{SO}_4)_3 \cdot 14\text{H}_2\text{O} = \text{Cr}_2(\text{SO}_4)_3 \cdot 8\text{H}_2\text{O} + 6\text{H}_2\text{O}(\text{g})$ | 6 | 13.2 | 3.6 | 57.7 | 149 |
| $\text{CsAl}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O} = \text{CsAl}(\text{SO}_4)_2 + 12\text{H}_2\text{O}(\text{g})$ | 12 | 10.2 | 12.3 | 54.8 | 150 |
| $\text{Cs}_2\text{CO}_3 \cdot 3.5\text{H}_2\text{O} = \text{Cs}_2\text{CO}_3 + 3.5\text{H}_2\text{O}(\text{g})$ | 3.5 | 18.6 | 0.4 | 64.5 | 154 |

| | | | | | |
|--|-----|------|-----------|-------|------|
| $\text{CsF} \cdot \text{H}_2\text{O} = \text{CsF} + \text{H}_2\text{O}(\text{g})$ | 1 | 21.8 | 0.1 | 65.9 | 148 |
| $\text{CuBr}_2 \cdot 4\text{H}_2\text{O} = \text{CuBr}_2 + 4\text{H}_2\text{O}(\text{g})$ | 4 | 10.7 | 10.0 | 54.8 | 148 |
| $\text{CuCl}_2 \cdot 2\text{H}_2\text{O} = \text{CuCl}_2 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 15.8 | 1.3 | 59.1 | 145 |
| $\text{CuF}_2 \cdot 2\text{H}_2\text{O} = \text{CuF}_2 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 26.0 | 0.0 | 71.3 | 152 |
| $\text{CuHPO}_4 \cdot \text{H}_2\text{O} = \text{CuHPO}_4 + \text{H}_2\text{O}(\text{g})$ | 1 | 42.2 | | 35.2 | -24 |
| $\text{Cu}(\text{IO}_3)_2 \cdot \text{H}_2\text{O} = \text{Cu}(\text{IO}_3)_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 14.3 | 2.3 | 60.2 | 154 |
| $\text{Cu}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O} = \text{Cu}(\text{NO}_3)_2 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 12.7 | 4.5 | 58.0 | 152 |
| $\text{Cu}_3(\text{PO}_4)_2 \cdot 3\text{H}_2\text{O} = \text{Cu}_3(\text{PO}_4)_2 + 3\text{H}_2\text{O}(\text{g})$ | 3 | 52.0 | | 46.2 | -20 |
| $\text{CuSO}_4 \cdot \text{H}_2\text{O} = \text{CuSO}_4 + \text{H}_2\text{O}(\text{g})$ | 1 | 24.0 | 0.0 | 69.6 | 153 |
| $\text{CuSO}_4 \cdot 3\text{H}_2\text{O} = \text{CuSO}_4 \cdot \text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 12.5 | 4.8 (5.2) | 57.3 | 150 |
| $\text{CuSO}_4 \cdot 5\text{H}_2\text{O} = \text{CuSO}_4 \cdot 3\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 11.4 | 7.7 (7.6) | 55.9 | 149 |
| $\text{CuSeO}_3 \cdot 2\text{H}_2\text{O} = \text{CuSeO}_3 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 10.9 | 9.1 | 44.1 | 111 |
| $\text{DyCl}_3 \cdot 6\text{H}_2\text{O} = \text{DyCl}_3 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 27.9 | 0.0 | 70.5 | 143 |
| $\text{DyPO}_4 \cdot 2\text{H}_2\text{O} = \text{DyPO}_4 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 62.5 | 0.0 | 107.5 | 151 |
| $\text{ErCl}_3 \cdot 6\text{H}_2\text{O} = \text{ErCl}_3 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 27.7 | 0.0 | 71.5 | 147 |
| $\text{ErPO}_4 \cdot 2\text{H}_2\text{O} = \text{ErPO}_4 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 54.1 | 0.0 | 99.2 | 151 |
| $\text{EuCl}_3 \cdot 6\text{H}_2\text{O} = \text{EuCl}_3 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 22.5 | 0.1 | 65.8 | 145 |
| $\text{Eu}(\text{IO}_3)_3 \cdot 2\text{H}_2\text{O} = \text{Eu}(\text{IO}_3)_3 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 73.2 | | 23.2 | -168 |
| $\text{EuPO}_4 \cdot 2\text{H}_2\text{O} = \text{EuPO}_4 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 3.3 | 200.9 | 49.0 | 153 |
| $\text{FeCl}_2 \cdot 2\text{H}_2\text{O} = \text{FeCl}_2 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 16.5 | 1.0 | 65.8 | 165 |
| $\text{FeCl}_2 \cdot 4\text{H}_2\text{O} = \text{FeCl}_2 \cdot 2\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 11.8 | 6.5 | 56.1 | 149 |
| $\text{FeCl}_3 \cdot 6\text{H}_2\text{O} = \text{FeCl}_3 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 16.4 | 1.0 | 62.2 | 154 |
| $\text{FePO}_4 \cdot 2\text{H}_2\text{O} = \text{FePO}_4 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 9.0 | 19.6 | 53.8 | 150 |
| $\text{FeSO}_4 \cdot \text{H}_2\text{O} = \text{FeSO}_4 + \text{H}_2\text{O}(\text{g})$ | 1 | 25.8 | 0.0 | 71.1 | 152 |
| $\text{FeSO}_4 \cdot 4\text{H}_2\text{O} = \text{FeSO}_4 \cdot \text{H}_2\text{O} + 3\text{H}_2\text{O}(\text{g})$ | 3 | 9.5 | 16.1 | 53.4 | 147 |
| $\text{FeSO}_4 \cdot 7\text{H}_2\text{O} = \text{FeSO}_4 \cdot 4\text{H}_2\text{O} + 3\text{H}_2\text{O}(\text{g})$ | 3 | 10.1 | 12.5 | 53.8 | 147 |
| $\text{GdCl}_3 \cdot 6\text{H}_2\text{O} = \text{GdCl}_3 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 23.1 | 0.1 | 67.4 | 149 |
| $\text{GdPO}_4 \cdot 2\text{H}_2\text{O} = \text{GdPO}_4 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 66.6 | 0.0 | 111.7 | 151 |
| $\text{H}_3\text{PO}_4 \cdot 0.5\text{H}_2\text{O} = \text{H}_3\text{PO}_4 + 0.5\text{H}_2\text{O}(\text{g})$ | 0.5 | 17.6 | 0.6 | 62.8 | 152 |
| $\text{H}_2\text{SO}_4 \cdot \text{H}_2\text{O} = \text{H}_2\text{SO}_4 + \text{H}_2\text{O}(\text{g})$ | 1 | 31.8 | 0.0 | 71.8 | 134 |
| $\text{H}_2\text{SO}_4 \cdot 2\text{H}_2\text{O} = \text{H}_2\text{SO}_4 \cdot \text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 20.7 | 0.2 | 57.7 | 124 |
| $\text{H}_2\text{SO}_4 \cdot 3\text{H}_2\text{O} = \text{H}_2\text{SO}_4 \cdot 2\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 15.8 | 1.3 | 51.5 | 120 |
| $\text{H}_2\text{SO}_4 \cdot 4\text{H}_2\text{O} = \text{H}_2\text{SO}_4 \cdot 3\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 13.3 | 3.5 | 49.0 | 120 |
| $\text{H}_2\text{SO}_4 \cdot 6.5\text{H}_2\text{O} = \text{H}_2\text{SO}_4 \cdot 4\text{H}_2\text{O} + 2.5\text{H}_2\text{O}(\text{g})$ | 2.5 | 11.4 | 7.7 | 47.0 | 120 |
| $\text{HoCl}_3 \cdot 6\text{H}_2\text{O} = \text{HoCl}_3 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 26.1 | 0.0 | 70.2 | 148 |
| $\text{HoPO}_4 \cdot 2\text{H}_2\text{O} = \text{HoPO}_4 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 64.6 | 0.0 | 109.6 | 151 |
| $\text{KAl}(\text{SO}_4)_2 \cdot 3\text{H}_2\text{O} = \text{KAl}(\text{SO}_4)_2 + 3\text{H}_2\text{O}(\text{g})$ | 3 | 16.4 | 1.0 | 61.8 | 152 |
| $\text{KAl}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O} = \text{KAl}(\text{SO}_4)_2 \cdot 3\text{H}_2\text{O} + 9\text{H}_2\text{O}(\text{g})$ | 9 | 12.1 | 5.7 | 56.0 | 147 |
| $\text{K}_2\text{CO}_3 \cdot 0.5\text{H}_2\text{O} = \text{K}_2\text{CO}_3 + 0.5\text{H}_2\text{O}(\text{g})$ | 0.5 | 23.4 | 0.1 | 70.2 | 157 |
| $\text{K}_2\text{CO}_3 \cdot 1.5\text{H}_2\text{O} = \text{K}_2\text{CO}_3 \cdot 0.5\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 17.3 | 0.7 | 63.6 | 155 |
| $\text{K}_2\text{CuCl}_4 \cdot 2\text{H}_2\text{O} = \text{K}_2\text{CuCl}_4 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 14.5 | 2.2 | 59.7 | 152 |
| $\text{KF} \cdot 2\text{H}_2\text{O} = \text{KF} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 14.0 | 2.6 | 57.0 | 144 |
| $\text{K}_4\text{Fe}(\text{CN})_6 \cdot 3\text{H}_2\text{O} = \text{K}_4\text{Fe}(\text{CN})_6 + 3\text{H}_2\text{O}(\text{g})$ | 3 | 16.9 | 0.8 | 50.2 | 112 |
| $\text{KOH} \cdot \text{H}_2\text{O} = \text{KOH} + \text{H}_2\text{O}(\text{g})$ | 1 | 41.5 | 0.0 | 87.1 | 153 |

| | | | | | |
|---|---|------|-----------|-------|-----|
| $\text{KOH} \cdot 2\text{H}_2\text{O} = \text{KOH} \cdot \text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 12.9 | 4.2 | 56.7 | 147 |
| $\text{K}_3\text{PO}_4 \cdot 7\text{H}_2\text{O} = \text{K}_3\text{PO}_4 + 7\text{H}_2\text{O}(\text{g})$ | 7 | 5.8 | 72.2 | 49.9 | 148 |
| $\text{K}_4\text{P}_2\text{O}_7 \cdot 3\text{H}_2\text{O} = \text{K}_4\text{P}_2\text{O}_7 + 3\text{H}_2\text{O}(\text{g})$ | 3 | 16.9 | 0.8 | 60.7 | 147 |
| $\text{K}_2\text{SO}_3 \cdot \text{H}_2\text{O} = \text{K}_2\text{SO}_3 + \text{H}_2\text{O}(\text{g})$ | 1 | 1.8 | 364.4 | 45.6 | 147 |
| $\text{LaCl}_3 \cdot 7\text{H}_2\text{O} = \text{LaCl}_3 + 7\text{H}_2\text{O}(\text{g})$ | 7 | 14.9 | 1.9 | 57.3 | 142 |
| $\text{LaPO}_4 \cdot 2\text{H}_2\text{O} = \text{LaPO}_4 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 72.2 | 0.0 | 113.8 | 140 |
| $\text{LiBr} \cdot \text{H}_2\text{O} = \text{LiBr} + \text{H}_2\text{O}(\text{g})$ | 1 | 23.8 | 0.1 | 69.5 | 153 |
| $\text{LiBr} \cdot 2\text{H}_2\text{O} = \text{LiBr} \cdot \text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 1.4 | 427.6 | 56.7 | 185 |
| $\text{LiCl} \cdot \text{H}_2\text{O} = \text{LiCl} + \text{H}_2\text{O}(\text{g})$ | 1 | 19.6 | 0.3 (0.5) | 62.9 | 145 |
| $\text{LiClO}_4 \cdot \text{H}_2\text{O} = \text{LiClO}_4 + \text{H}_2\text{O}(\text{g})$ | 1 | 16.5 | 1.0 | 64.0 | 160 |
| $\text{LiClO}_4 \cdot 3\text{H}_2\text{O} = \text{LiClO}_4 \cdot \text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 17.4 | 0.7 | 60.9 | 146 |
| $\text{LiI} \cdot \text{H}_2\text{O} = \text{LiI} + \text{H}_2\text{O}(\text{g})$ | 1 | 32.9 | 0.0 | 78.3 | 153 |
| $\text{LiI} \cdot 2\text{H}_2\text{O} = \text{LiI} \cdot \text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 20.8 | 0.2 | 58.9 | 128 |
| $\text{LiI} \cdot 3\text{H}_2\text{O} = \text{LiI} \cdot 2\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 22.3 | 0.1 | 58.9 | 123 |
| $\text{LiNO}_2 \cdot \text{H}_2\text{O} = \text{LiNO}_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 23.3 | 0.1 | 65.9 | 143 |
| $\text{LiNO}_3 \cdot 3\text{H}_2\text{O} = \text{LiNO}_3 + 3\text{H}_2\text{O}(\text{g})$ | 3 | 11.2 | 8.3 | 55.6 | 149 |
| $\text{LiOH} \cdot \text{H}_2\text{O} = \text{LiOH} + \text{H}_2\text{O}(\text{g})$ | 1 | 16.4 | 1.0 | 64.3 | 161 |
| $\text{Li}_2\text{SO}_4 \cdot \text{H}_2\text{O} = \text{Li}_2\text{SO}_4 + \text{H}_2\text{O}(\text{g})$ | 1 | 15.7 | 1.3 (2.3) | 57.2 | 139 |
| $\text{LuCl}_3 \cdot 6\text{H}_2\text{O} = \text{LuCl}_3 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 20.5 | 0.2 | 65.5 | 151 |
| $\text{LuPO}_4 \cdot 2\text{H}_2\text{O} = \text{LuPO}_4 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 37.4 | 0.0 | 82.4 | 151 |
| $\text{MgBr}_2 \cdot 6\text{H}_2\text{O} = \text{MgBr}_2 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 30.1 | 0.0 | 72.5 | 142 |
| $\text{MgCO}_3 \cdot 3\text{H}_2\text{O} = \text{MgCO}_3 + 3\text{H}_2\text{O}(\text{g})$ | 3 | 8.6 | 23.3 | 51.9 | 145 |
| $\text{MgCO}_3 \cdot 5\text{H}_2\text{O} = \text{MgCO}_3 \cdot 3\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 9.3 | 17.4 | 53.0 | 146 |
| $\text{MgCl}_2 \cdot \text{H}_2\text{O} = \text{MgCl}_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 41.4 | 0.0 | 83.5 | 141 |
| $\text{MgCl}_2 \cdot 2\text{H}_2\text{O} = \text{MgCl}_2 \cdot \text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 27.7 | 0.0 | 71.3 | 146 |
| $\text{MgCl}_2 \cdot 4\text{H}_2\text{O} = \text{MgCl}_2 \cdot 2\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 24.1 | 0.0 | 67.8 | 147 |
| $\text{MgCl}_2 \cdot 6\text{H}_2\text{O} = \text{MgCl}_2 \cdot 4\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 17.1 | 0.8 (0.9) | 58.2 | 138 |
| $\text{Mg}(\text{ClO}_4)_2 \cdot 6\text{H}_2\text{O} = \text{Mg}(\text{ClO}_4)_2 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 26.5 | 0.0 | 67.7 | 138 |
| $\text{Mg}(\text{NO}_3)_2 \cdot 2\text{H}_2\text{O} = \text{Mg}(\text{NO}_3)_2 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 25.2 | 0.0 | 68.5 | 145 |
| $\text{Mg}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O} = \text{Mg}(\text{NO}_3)_2 \cdot 2\text{H}_2\text{O} + 4\text{H}_2\text{O}(\text{g})$ | 4 | 17.3 | 0.7 | 58.6 | 139 |
| $\text{MgSO}_3 \cdot 3\text{H}_2\text{O} = \text{MgSO}_3 + 3\text{H}_2\text{O}(\text{g})$ | 3 | 19.5 | 0.3 | 64.1 | 150 |
| $\text{MgSO}_3 \cdot 6\text{H}_2\text{O} = \text{MgSO}_3 \cdot 3\text{H}_2\text{O} + 3\text{H}_2\text{O}(\text{g})$ | 3 | 13.7 | 3.0 | 55.9 | 142 |
| $\text{MgSO}_4 \cdot \text{H}_2\text{O} = \text{MgSO}_4 + \text{H}_2\text{O}(\text{g})$ | 1 | 61.9 | 0.0 | 107.9 | 154 |
| $\text{MgSO}_4 \cdot 2\text{H}_2\text{O} = \text{MgSO}_4 \cdot \text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | -2.5 | | 41.6 | 148 |
| $\text{MgSO}_4 \cdot 4\text{H}_2\text{O} = \text{MgSO}_4 \cdot 2\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 16.3 | 1.1 | 58.8 | 143 |
| $\text{MgSO}_4 \cdot 5\text{H}_2\text{O} = \text{MgSO}_4 \cdot 4\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 14.5 | 2.2 | 57.8 | 145 |
| $\text{MgSO}_4 \cdot 6\text{H}_2\text{O} = \text{MgSO}_4 \cdot 5\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 6.8 | 49.0 | 49.7 | 144 |
| $\text{MgSO}_4 \cdot 7\text{H}_2\text{O} = \text{MgSO}_4 \cdot 6\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 10.2 | 12.3 | 59.6 | 166 |
| $\text{MgSeO}_3 \cdot 6\text{H}_2\text{O} = \text{MgSeO}_3 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 13.1 | 3.8 | 58.4 | 152 |
| $\text{MgSeO}_4 \cdot \text{H}_2\text{O} = \text{MgSeO}_4 + \text{H}_2\text{O}(\text{g})$ | 1 | 63.3 | | 88.4 | 84 |
| $\text{MgSeO}_4 \cdot 4\text{H}_2\text{O} = \text{MgSeO}_4 \cdot \text{H}_2\text{O} + 3\text{H}_2\text{O}(\text{g})$ | 3 | 12.5 | 4.8 | 56.4 | 147 |
| $\text{MgSeO}_4 \cdot 6\text{H}_2\text{O} = \text{MgSeO}_4 \cdot 4\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 8.9 | 20.7 | 52.7 | 147 |
| $\text{MgTeO}_3 \cdot 5\text{H}_2\text{O} = \text{MgTeO}_3 + 5\text{H}_2\text{O}(\text{g})$ | 5 | 17.2 | 0.7 | 61.0 | 147 |
| $\text{MgTeO}_3 \cdot 6\text{H}_2\text{O} = \text{MgTeO}_3 \cdot 5\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 8.9 | 20.7 | 52.7 | 147 |

| | | | | | |
|---|-----|------|-------------|------|-----|
| $\text{MnBr}_2 \cdot 4\text{H}_2\text{O} = \text{MnBr}_2 + 4\text{H}_2\text{O}(\text{g})$ | 4 | 1.9 | 342.9 | 46.7 | 150 |
| $\text{MnBr}_2 \cdot 6\text{H}_2\text{O} = \text{MnBr}_2 \cdot 4\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 35.2 | 0.0 | 76.5 | 139 |
| $\text{MnCl}_2 \cdot \text{H}_2\text{O} = \text{MnCl}_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 25.4 | 0.0 | 63.5 | 128 |
| $\text{MnCl}_2 \cdot 2\text{H}_2\text{O} = \text{MnCl}_2 \cdot \text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 19.0 | 0.3 | 63.6 | 150 |
| $\text{MnCl}_2 \cdot 4\text{H}_2\text{O} = \text{MnCl}_2 \cdot 2\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 11.9 | 6.1 | 55.7 | 147 |
| $\text{MnF}_2 \cdot 4\text{H}_2\text{O} = \text{MnF}_2 + 4\text{H}_2\text{O}(\text{g})$ | 4 | 6.5 | 54.6 | 50.2 | 147 |
| $\text{MnI}_2 \cdot 4\text{H}_2\text{O} = \text{MnI}_2 + 4\text{H}_2\text{O}(\text{g})$ | 4 | 14.6 | 2.0 | 56.9 | 142 |
| $\text{MnSO}_4 \cdot \text{H}_2\text{O} = \text{MnSO}_4 + \text{H}_2\text{O}(\text{g})$ | 1 | 25.9 | 0.0 | 69.5 | 146 |
| $\text{MnSO}_4 \cdot 4\text{H}_2\text{O} = \text{MnSO}_4 \cdot \text{H}_2\text{O} + 3\text{H}_2\text{O}(\text{g})$ | 3 | 7.4 | 38.3 | 52.0 | 150 |
| $\text{MnSO}_4 \cdot 7\text{H}_2\text{O} = \text{MnSO}_4 \cdot 5\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 6.5 | 54.4 | 51.0 | 149 |
| $\text{MnSeO}_4 \cdot \text{H}_2\text{O} = \text{MnSeO}_4 + \text{H}_2\text{O}(\text{g})$ | 1 | 53.8 | | 78.2 | 82 |
| $\text{MoO}_3 \cdot \text{H}_2\text{O} = \text{MoO}_3 + \text{H}_2\text{O}(\text{g})$ | 1 | 53.5 | 0.0 | 85.6 | 107 |
| $\text{NH}_4(\text{UO}_2)_2\text{F}_5 \cdot 3\text{H}_2\text{O} = \text{NH}_4(\text{UO}_2)_2\text{F}_5 + 3\text{H}_2\text{O}(\text{g})$ | 3 | 11.2 | | 17.2 | 20 |
| $\text{NH}_4(\text{UO}_2)_2\text{F}_5 \cdot 4\text{H}_2\text{O} = \text{NH}_4(\text{UO}_2)_2\text{F}_5 \cdot 3\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 9.4 | 16.7 | 48.5 | 131 |
| $\text{Na}_{0.96}\text{Al}_{0.96}\text{Si}_{2.04}\text{O}_6 \cdot \text{H}_2\text{O} = \text{Na}_{0.96}\text{Al}_{0.96}\text{Si}_{2.04}\text{O}_6 + \text{H}_2\text{O}(\text{g})$ | 1 | 44.6 | 0.0 | 84.5 | 134 |
| $\text{Na}_2\text{B}_4\text{O}_7 \cdot 10\text{H}_2\text{O} = \text{Na}_2\text{B}_4\text{O}_7 + 10\text{H}_2\text{O}(\text{g})$ | 10 | 11.0 | 9.0 | 55.5 | 149 |
| $\text{NaBr} \cdot 2\text{H}_2\text{O} = \text{NaBr} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 10.0 | 13.4 (8.3) | 53.1 | 145 |
| $\text{NaI} \cdot 2\text{H}_2\text{O} = \text{NaI} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 12.2 | 5.4 (2.9) | 57.3 | 151 |
| $\text{NaCN} \cdot 0.5\text{H}_2\text{O} = \text{NaCN} + 0.5\text{H}_2\text{O}(\text{g})$ | 0.5 | 11.2 | 8.3 | 55.2 | 148 |
| $\text{NaCN} \cdot 2\text{H}_2\text{O} = \text{NaCN} \cdot 0.5\text{H}_2\text{O} + 1.5\text{H}_2\text{O}(\text{g})$ | 1.5 | 9.9 | 13.9 | 54.1 | 148 |
| $\text{Na}_2\text{CO}_3 \cdot \text{H}_2\text{O} = \text{Na}_2\text{CO}_3 + \text{H}_2\text{O}(\text{g})$ | 1 | 13.0 | 4.0 | 59.4 | 156 |
| $\text{Na}_2\text{CO}_3 \cdot 7\text{H}_2\text{O} = \text{Na}_2\text{CO}_3 \cdot \text{H}_2\text{O} + 6\text{H}_2\text{O}(\text{g})$ | 6 | 8.0 | 30.3 | 51.6 | 146 |
| $\text{Na}_2\text{CO}_3 \cdot 10\text{H}_2\text{O} = \text{Na}_2\text{CO}_3 \cdot 7\text{H}_2\text{O} + 3\text{H}_2\text{O}(\text{g})$ | 3 | 12.5 | 4.9 (17.9) | 54.6 | 141 |
| $\text{NaClO}_2 \cdot 3\text{H}_2\text{O} = \text{NaClO}_2 + 3\text{H}_2\text{O}(\text{g})$ | 3 | 11.3 | 7.8 | 55.9 | 149 |
| $\text{NaClO}_4 \cdot \text{H}_2\text{O} = \text{NaClO}_4 + \text{H}_2\text{O}(\text{g})$ | 1 | 4.0 | 151.5 | 47.8 | 147 |
| $\text{Na}_2\text{CrO}_4 \cdot 4\text{H}_2\text{O} = \text{Na}_2\text{CrO}_4 + 4\text{H}_2\text{O}(\text{g})$ | 4 | 11.9 | 6.2 | 54.5 | 143 |
| $\text{Na}_2\text{HPO}_4 \cdot 2\text{H}_2\text{O} = \text{Na}_2\text{HPO}_4 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 10.8 | 9.6 (3.9) | 57.2 | 156 |
| $\text{Na}_2\text{HPO}_4 \cdot 7\text{H}_2\text{O} = \text{Na}_2\text{HPO}_4 \cdot 2\text{H}_2\text{O} + 5\text{H}_2\text{O}(\text{g})$ | 5 | 9.6 | 15.4 (14.5) | 53.2 | 146 |
| $\text{Na}_2\text{HPO}_4 \cdot 12\text{H}_2\text{O} = \text{Na}_2\text{HPO}_4 \cdot 7\text{H}_2\text{O} + 5\text{H}_2\text{O}(\text{g})$ | 5 | 9.3 | 17.6 (19.0) | 53.7 | 149 |
| $\text{NaHSO}_4 \cdot \text{H}_2\text{O} = \text{NaHSO}_4 + \text{H}_2\text{O}(\text{g})$ | 1 | 12.3 | 5.3 | 52.3 | 134 |
| $\text{NaI} \cdot 2\text{H}_2\text{O} = \text{NaI} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 12.2 | 5.4 | 57.3 | 151 |
| $\text{NaIO}_3 \cdot \text{H}_2\text{O} = \text{NaIO}_3 + \text{H}_2\text{O}(\text{g})$ | 1 | 24.2 | 0.0 | 68.4 | 148 |
| $\text{NaIO}_3 \cdot 5\text{H}_2\text{O} = \text{NaIO}_3 \cdot \text{H}_2\text{O} + 4\text{H}_2\text{O}(\text{g})$ | 4 | 6.9 | 46.0 | 51.4 | 149 |
| $\text{NaOH} \cdot \text{H}_2\text{O} = \text{NaOH} + \text{H}_2\text{O}(\text{g})$ | 1 | 15.0 | 1.8 | 65.3 | 169 |
| $\text{Na}_3\text{PO}_4 \cdot 12\text{H}_2\text{O} = \text{Na}_3\text{PO}_4 + 12\text{H}_2\text{O}(\text{g})$ | 12 | 10.9 | 9.1 | 55.1 | 148 |
| $\text{Na}_4\text{P}_2\text{O}_7 \cdot 10\text{H}_2\text{O} = \text{Na}_4\text{P}_2\text{O}_7 + 10\text{H}_2\text{O}(\text{g})$ | 10 | 10.2 | 12.0 | 54.1 | 147 |
| $\text{Na}_2\text{SO}_3 \cdot 7\text{H}_2\text{O} = \text{Na}_2\text{SO}_3 + 7\text{H}_2\text{O}(\text{g})$ | 7 | 8.9 | 21.1 | 52.1 | 145 |
| $\text{Na}_2\text{SO}_4 \cdot 7\text{H}_2\text{O} = \text{Na}_2\text{SO}_4 + 7\text{H}_2\text{O}(\text{g})$ | 7 | 8.6 | 23.4 | 53.7 | 151 |
| $\text{Na}_2\text{SO}_4 \cdot 10\text{H}_2\text{O} = \text{Na}_2\text{SO}_4 \cdot 7\text{H}_2\text{O} + 3\text{H}_2\text{O}(\text{g})$ | 3 | 9.9 | 13.5 | 48.3 | 129 |
| $\text{Na}_2\text{SO}_4 \cdot 10\text{H}_2\text{O} = \text{Na}_2\text{SO}_4 + 10\text{H}_2\text{O}(\text{g})$ | 10 | 9.0 | 19.9 (19.0) | 52.1 | 145 |
| $\text{Na}_2\text{S}_2\text{O}_3 \cdot 5\text{H}_2\text{O} = \text{Na}_2\text{S}_2\text{O}_3 + 5\text{H}_2\text{O}(\text{g})$ | 5 | 10.6 | 10.2 | 54.0 | 145 |
| $\text{Na}_2\text{SiO}_3 \cdot 5\text{H}_2\text{O} = \text{Na}_2\text{SiO}_3 + 5\text{H}_2\text{O}(\text{g})$ | 5 | 12.2 | 5.5 | 52.6 | 135 |
| $\text{Na}_2\text{SiO}_3 \cdot 6\text{H}_2\text{O} = \text{Na}_2\text{SiO}_3 \cdot 5\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 10.6 | 10.6 | 51.9 | 139 |
| $\text{Na}_2\text{SiO}_3 \cdot 8\text{H}_2\text{O} = \text{Na}_2\text{SiO}_3 \cdot 6\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 9.9 | 13.6 | 53.8 | 147 |

| | | | | | |
|---|-----|------|-----------|-------|-----|
| $\text{Na}_2\text{SiO}_3 \cdot 9\text{H}_2\text{O} = \text{Na}_2\text{SiO}_3 \cdot 8\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 1.2 | 460.0 | 53.1 | 174 |
| $\text{Na}_2\text{WO}_4 \cdot 2\text{H}_2\text{O} = \text{Na}_2\text{WO}_4 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 11.2 | 8.1 | 55.3 | 148 |
| $\text{NdCl}_3 \cdot 6\text{H}_2\text{O} = \text{NdCl}_3 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 16.9 | 0.8 | 61.7 | 150 |
| $\text{NdPO}_4 \cdot 2\text{H}_2\text{O} = \text{NdPO}_4 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 71.1 | 0.0 | 111.7 | 136 |
| $\text{Nd}_2(\text{SO}_4)_3 \cdot 8\text{H}_2\text{O} = \text{Nd}_2(\text{SO}_4)_3 + 8\text{H}_2\text{O}(\text{g})$ | 8 | 41.2 | 0.0 | 83.2 | 141 |
| $\text{NiCl}_2 \cdot 2\text{H}_2\text{O} = \text{NiCl}_2 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 19.1 | 0.3 | 62.2 | 145 |
| $\text{NiCl}_2 \cdot 4\text{H}_2\text{O} = \text{NiCl}_2 \cdot 2\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 12.0 | 5.9 (5.5) | 59.8 | 160 |
| $\text{NiCl}_2 \cdot 6\text{H}_2\text{O} = \text{NiCl}_2 \cdot 4\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 10.1 | 12.9 | 51.3 | 138 |
| $\text{Ni}(\text{IO}_3)_2 \cdot 2\text{H}_2\text{O} = \text{Ni}(\text{IO}_3)_2 + 2\text{H}_2\text{O}(\text{g})$ | 2 | -8.5 | | 41.6 | 168 |
| $\text{Ni}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O} = \text{Ni}(\text{NO}_3)_2 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 17.7 | 0.6 | 58.2 | 136 |
| $\text{NiSO}_4 \cdot \text{H}_2\text{O} = \text{NiSO}_4 + \text{H}_2\text{O}(\text{g})$ | 1 | 97.3 | 0.0 | 140.3 | 144 |
| $\text{NiSO}_4 \cdot 4\text{H}_2\text{O} = \text{NiSO}_4 \cdot \text{H}_2\text{O} + 3\text{H}_2\text{O}(\text{g})$ | 3 | 13.2 | 3.6 | 57.7 | 149 |
| $\text{NiSO}_4 \cdot 7\text{H}_2\text{O} = \text{NiSO}_4 \cdot 6\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 8.7 | 22.9 | 51.7 | 144 |
| $\text{PrCl}_3 \cdot 6\text{H}_2\text{O} = \text{PrCl}_3 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 16.6 | 0.9 | 61.6 | 151 |
| $\text{PrCl}_3 \cdot 7\text{H}_2\text{O} = \text{PrCl}_3 \cdot 6\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 19.8 | 0.3 | 64.4 | 150 |
| $\text{PtCl}_4 \cdot 5\text{H}_2\text{O} = \text{PtCl}_4 + 5\text{H}_2\text{O}(\text{g})$ | 5 | 14.2 | 2.5 | 62.9 | 163 |
| $\text{PuCl}_3 \cdot 6\text{H}_2\text{O} = \text{PuCl}_3 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 17.0 | 0.8 | 60.5 | 146 |
| $\text{PuO}_2(\text{OH})_2 \cdot \text{H}_2\text{O} = \text{PuO}_2(\text{OH})_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 3.4 | 188.5 | 34.1 | 103 |
| $\text{RaBr}_2 \cdot 2\text{H}_2\text{O} = \text{RaBr}_2 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 13.7 | 3.0 | 59.7 | 154 |
| $\text{Ra}(\text{BrO}_3)_2 \cdot \text{H}_2\text{O} = \text{Ra}(\text{BrO}_3)_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 17.6 | 0.6 | 60.2 | 143 |
| $\text{RaCl}_2 \cdot 2\text{H}_2\text{O} = \text{RaCl}_2 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 12.6 | 4.7 | 57.7 | 151 |
| $\text{RaI}_2 \cdot 0.5\text{H}_2\text{O} = \text{RaI}_2 + 0.5\text{H}_2\text{O}(\text{g})$ | 0.5 | 27.6 | 0.0 | 70.2 | 143 |
| $\text{Ra}(\text{IO}_3)_2 \cdot \text{H}_2\text{O} = \text{Ra}(\text{IO}_3)_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 5.3 | 88.0 | 51.2 | 154 |
| $\text{RbAl}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O} = \text{RbAl}(\text{SO}_4)_2 + 12\text{H}_2\text{O}(\text{g})$ | 12 | 13.3 | 3.5 | 57.7 | 149 |
| $\text{Rb}_2\text{CO}_3 \cdot \text{H}_2\text{O} = \text{Rb}_2\text{CO}_3 + \text{H}_2\text{O}(\text{g})$ | 1 | 20.4 | 0.2 | 66.5 | 155 |
| $\text{Rb}_2\text{CO}_3 \cdot 1.5\text{H}_2\text{O} = \text{Rb}_2\text{CO}_3 \cdot \text{H}_2\text{O} + 0.5\text{H}_2\text{O}(\text{g})$ | 0.5 | 24.4 | 0.0 | 69.5 | 151 |
| $\text{Rb}_2\text{CO}_3 \cdot 3.5\text{H}_2\text{O} = \text{Rb}_2\text{CO}_3 \cdot 1.5\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 5.6 | 79.4 | 51.3 | 153 |
| $\text{RbF} \cdot \text{H}_2\text{O} = \text{RbF} + \text{H}_2\text{O}(\text{g})$ | 1 | 21.7 | 0.1 | 66.2 | 149 |
| $\text{RbOH} \cdot \text{H}_2\text{O} = \text{RbOH} + \text{H}_2\text{O}(\text{g})$ | 1 | 42.7 | 0.0 | 88.3 | 153 |
| $\text{RbOH} \cdot 2\text{H}_2\text{O} = \text{RbOH} \cdot \text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 18.9 | 0.4 | 62.8 | 147 |
| $\text{ScCl}_3 \cdot 6\text{H}_2\text{O} = \text{ScCl}_3 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 26.7 | 0.0 | 71.2 | 149 |
| $\text{SmCl}_3 \cdot 6\text{H}_2\text{O} = \text{SmCl}_3 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 20.8 | 0.2 | 65.6 | 150 |
| $\text{SmPO}_4 \cdot 2\text{H}_2\text{O} = \text{SmPO}_4 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 72.7 | 0.0 | 115.9 | 145 |
| $\text{SrBr}_2 \cdot \text{H}_2\text{O} = \text{SrBr}_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 27.4 | 0.0 | 72.8 | 152 |
| $\text{SrBr}_2 \cdot 6\text{H}_2\text{O} = \text{SrBr}_2 \cdot \text{H}_2\text{O} + 5\text{H}_2\text{O}(\text{g})$ | 5 | 15.0 | 1.7 (2.2) | 57.9 | 144 |
| $\text{Sr}(\text{BrO}_3)_2 \cdot \text{H}_2\text{O} = \text{Sr}(\text{BrO}_3)_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 95.0 | 0.0 | 138.9 | 147 |
| $\text{SrCl}_2 \cdot \text{H}_2\text{O} = \text{SrCl}_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 6.4 | 57.0 | 61.1 | 184 |
| $\text{SrCl}_2 \cdot 2\text{H}_2\text{O} = \text{SrCl}_2 \cdot \text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 32.3 | 0.0 | 59.4 | 91 |
| $\text{SrCl}_2 \cdot 6\text{H}_2\text{O} = \text{SrCl}_2 \cdot 2\text{H}_2\text{O} + 4\text{H}_2\text{O}(\text{g})$ | 4 | 11.2 | 8.2 (8.3) | 54.6 | 146 |
| $\text{Sr}(\text{IO}_3)_2 \cdot \text{H}_2\text{O} = \text{Sr}(\text{IO}_3)_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 12.9 | 4.2 | 52.0 | 131 |
| $\text{Sr}(\text{IO}_3)_2 \cdot 6\text{H}_2\text{O} = \text{Sr}(\text{IO}_3)_2 \cdot \text{H}_2\text{O} + 5\text{H}_2\text{O}(\text{g})$ | 5 | 7.0 | 43.9 | 53.6 | 156 |
| $\text{Sr}(\text{NO}_3)_2 \cdot 4\text{H}_2\text{O} = \text{Sr}(\text{NO}_3)_2 + 4\text{H}_2\text{O}(\text{g})$ | 4 | 8.0 | 29.9 | 51.3 | 145 |
| $\text{SrTeO}_3 \cdot \text{H}_2\text{O} = \text{SrTeO}_3 + \text{H}_2\text{O}(\text{g})$ | 1 | 20.2 | 0.2 | 64.0 | 147 |
| $\text{TbCl}_3 \cdot 6\text{H}_2\text{O} = \text{TbCl}_3 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 26.2 | 0.0 | 70.2 | 148 |

| | | | | | |
|---|-----|-------|-----------|-------|-----|
| $\text{TbPO}_4 \cdot 2\text{H}_2\text{O} = \text{TbPO}_4 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 58.3 | 0.0 | 103.4 | 151 |
| $\text{Tc}_2\text{O}_7 \cdot \text{H}_2\text{O} = \text{Tc}_2\text{O}_7 + \text{H}_2\text{O}(\text{g})$ | 1 | 15.6 | 1.4 | 45.8 | 102 |
| $\text{ThF}_4 \cdot 2.5\text{H}_2\text{O} = \text{ThF}_4 + 2.5\text{H}_2\text{O}(\text{g})$ | 2.5 | 14.6 | 2.1 | 60.6 | 154 |
| $\text{Th}(\text{NO}_3)_4 \cdot 4\text{H}_2\text{O} = \text{Th}(\text{NO}_3)_4 + 4\text{H}_2\text{O}(\text{g})$ | 4 | 32.5 | 0.0 | 76.4 | 147 |
| $\text{Th}(\text{NO}_3)_4 \cdot 5\text{H}_2\text{O} = \text{Th}(\text{NO}_3)_4 \cdot 4\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 3.2 | 203.0 | 47.3 | 148 |
| $\text{TmPO}_4 \cdot 2\text{H}_2\text{O} = \text{TmPO}_4 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 58.3 | 0.0 | 103.4 | 151 |
| $\text{UF}_4 \cdot 2.5\text{H}_2\text{O} = \text{UF}_4 + 2.5\text{H}_2\text{O}(\text{g})$ | 2.5 | 18.1 | 0.5 | 61.1 | 144 |
| $\text{UO}_2\text{Br}_2 \cdot \text{H}_2\text{O} = \text{UO}_2\text{Br}_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 33.7 | 0.0 | 76.7 | 144 |
| $\text{UO}_2\text{Br}_2 \cdot 3\text{H}_2\text{O} = \text{UO}_2\text{Br}_2 \cdot \text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 16.3 | 1.0 | 59.2 | 144 |
| $\text{UO}_2\text{Cl}_2 \cdot \text{H}_2\text{O} = \text{UO}_2\text{Cl}_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 30.7 | 0.0 | 74.5 | 147 |
| $\text{UO}_2\text{Cl}_2 \cdot 3\text{H}_2\text{O} = \text{UO}_2\text{Cl}_2 \cdot \text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 16.2 | 1.1 | 60.7 | 149 |
| $\text{UOF}_2 \cdot \text{H}_2\text{O} = \text{UOF}_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 11.8 | 6.5 | 55.6 | 147 |
| $\text{UO}_2\text{F}_2 \cdot 3\text{H}_2\text{O} = \text{UO}_2\text{F}_2 + 3\text{H}_2\text{O}(\text{g})$ | 3 | 8.8 | 21.2 | 51.8 | 144 |
| $\text{UOFOH} \cdot 0.5\text{H}_2\text{O} = \text{UOFOH} + 0.5\text{H}_2\text{O}(\text{g})$ | 0.5 | 13.8 | 2.9 | 57.0 | 145 |
| $\text{UO}_3 \cdot 0.9\text{H}_2\text{O} = \text{UO}_3 + 0.9\text{H}_2\text{O}(\text{g})$ | 0.9 | 25.7 | 0.0 | 72.1 | 156 |
| $\text{UO}_3 \cdot \text{H}_2\text{O} = \text{UO}_3 \cdot 0.9\text{H}_2\text{O} + 0.1\text{H}_2\text{O}(\text{g})$ | 0.1 | 39.8 | 0.0 | 71.4 | 106 |
| $\text{UO}_3 \cdot 2\text{H}_2\text{O} = \text{UO}_3 \cdot \text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 7.1 | 42.3 | 47.3 | 135 |
| $\text{UO}_2(\text{NO}_3)_2 \cdot \text{H}_2\text{O} = \text{UO}_2(\text{NO}_3)_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 28.3 | 0.0 | 71.2 | 144 |
| $\text{UO}_2(\text{NO}_3)_2 \cdot 2\text{H}_2\text{O} = \text{UO}_2(\text{NO}_3)_2 \cdot \text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 29.0 | 0.0 | 72.9 | 147 |
| $\text{UO}_2(\text{NO}_3)_2 \cdot 3\text{H}_2\text{O} = \text{UO}_2(\text{NO}_3)_2 \cdot 2\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 15.6 | 1.4 | 59.9 | 148 |
| $\text{UO}_2(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O} = \text{UO}_2(\text{NO}_3)_2 \cdot 3\text{H}_2\text{O} + 3\text{H}_2\text{O}(\text{g})$ | 3 | 11.3 | 8.0 | 53.9 | 143 |
| $\text{UO}_2(\text{OH})_2 \cdot \text{H}_2\text{O} = \text{UO}_2(\text{OH})_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 11.2 | 8.3 | 51.4 | 135 |
| $(\text{UO}_2)_3(\text{PO}_4)_2 \cdot 4\text{H}_2\text{O} = (\text{UO}_2)_3(\text{PO}_4)_2 + 4\text{H}_2\text{O}(\text{g})$ | 4 | 27.2 | 0.0 | 70.1 | 144 |
| $(\text{UO}_2)_3(\text{PO}_4)_2 \cdot 6\text{H}_2\text{O} = (\text{UO}_2)_3(\text{PO}_4)_2 \cdot 4\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 8.4 | 24.8 | 52.8 | 149 |
| $\text{UO}_2\text{SO}_4 \cdot 2.5\text{H}_2\text{O} = \text{UO}_2\text{SO}_4 \cdot \text{H}_2\text{O} + 1.5\text{H}_2\text{O}(\text{g})$ | 1.5 | 35.1 | 0.0 | 77.0 | 141 |
| $\text{UO}_2\text{SO}_4 \cdot 3\text{H}_2\text{O} = \text{UO}_2\text{SO}_4 \cdot 2.5\text{H}_2\text{O} + 0.5\text{H}_2\text{O}(\text{g})$ | 0.5 | 7.6 | 35.1 | 47.2 | 133 |
| $\text{UO}_2\text{SO}_4 \cdot 3.5\text{H}_2\text{O} = \text{UO}_2\text{SO}_4 \cdot 3\text{H}_2\text{O} + 0.5\text{H}_2\text{O}(\text{g})$ | 0.5 | 9.5 | 16.3 | 58.4 | 164 |
| $\text{U}(\text{SO}_4)_2 \cdot 4\text{H}_2\text{O} = \text{U}(\text{SO}_4)_2 + 4\text{H}_2\text{O}(\text{g})$ | 4 | 8.6 | 23.2 | 51.6 | 144 |
| $\text{U}(\text{SO}_4)_2 \cdot 8\text{H}_2\text{O} = \text{U}(\text{SO}_4)_2 \cdot 4\text{H}_2\text{O} + 4\text{H}_2\text{O}(\text{g})$ | 4 | 10.1 | 12.9 | 53.0 | 144 |
| $\text{V}_2\text{O}_5 \cdot \text{H}_2\text{O} = \text{V}_2\text{O}_5 + \text{H}_2\text{O}(\text{g})$ | 1 | 8.2 | 26.9 | 52.2 | 147 |
| $\text{VOSO}_4 \cdot \text{H}_2\text{O} = \text{VOSO}_4 + \text{H}_2\text{O}(\text{g})$ | 1 | 90.3 | 0.0 | 134.7 | 149 |
| $\text{VOSO}_4 \cdot 3\text{H}_2\text{O} = \text{VOSO}_4 \cdot \text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 19.8 | 0.2 | 64.3 | 149 |
| $\text{VOSO}_4 \cdot 5\text{H}_2\text{O}(\text{A}) = \text{VOSO}_4 \cdot 3\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 12.5 | 4.9 | 56.9 | 149 |
| $\text{VOSO}_4 \cdot 6\text{H}_2\text{O} = \text{VOSO}_4 \cdot 5\text{H}_2\text{O}(\text{A}) + \text{H}_2\text{O}(\text{g})$ | 1 | 7.6 | 35.4 | 52.0 | 149 |
| $\text{YCl}_3 \cdot 6\text{H}_2\text{O} = \text{YCl}_3 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 29.3 | 0.0 | 73.6 | 149 |
| $\text{YPO}_4 \cdot 2\text{H}_2\text{O} = \text{YPO}_4 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 6.2 | 61.3 | 50.7 | 149 |
| $\text{YbCl}_3 \cdot 6\text{H}_2\text{O} = \text{YbCl}_3 + 6\text{H}_2\text{O}(\text{g})$ | 6 | -31.6 | | 12.3 | 147 |
| $\text{YbPO}_4 \cdot 2\text{H}_2\text{O} = \text{YbPO}_4 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 68.7 | 0.0 | 113.8 | 151 |
| $\text{ZnBr}_2 \cdot 2\text{H}_2\text{O} = \text{ZnBr}_2 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 15.0 | 1.8 | 62.3 | 159 |
| $\text{ZnF}_2 \cdot 4\text{H}_2\text{O} = \text{ZnF}_2 + 4\text{H}_2\text{O}(\text{g})$ | 4 | 10.6 | 10.2 | 55.7 | 151 |
| $\text{Zn}(\text{NO}_3)_2 \cdot 2\text{H}_2\text{O} = \text{Zn}(\text{NO}_3)_2 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 24.7 | 0.0 | 71.5 | 157 |
| $\text{Zn}(\text{NO}_3)_2 \cdot 4\text{H}_2\text{O} = \text{Zn}(\text{NO}_3)_2 \cdot 2\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 19.6 | 0.3 (0.3) | 52.6 | 111 |
| $\text{Zn}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O} = \text{Zn}(\text{NO}_3)_2 \cdot 4\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 12.2 | 5.5 (4.2) | 62.1 | 167 |
| $\text{ZnSO}_4 \cdot \text{H}_2\text{O} = \text{ZnSO}_4 + \text{H}_2\text{O}(\text{g})$ | 1 | 34.7 | 0.0 | 82.6 | 161 |

| | | | | | |
|---|---|------|-------------|------|-----|
| $\text{ZnSO}_4 \cdot 2\text{H}_2\text{O} = \text{ZnSO}_4 \cdot \text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 9.4 | 16.7 | 49.6 | 135 |
| $\text{ZnSO}_4 \cdot 6\text{H}_2\text{O} = \text{ZnSO}_4 \cdot 2\text{H}_2\text{O} + 4\text{H}_2\text{O}(\text{g})$ | 4 | 10.0 | 13.5 | 53.5 | 146 |
| $\text{ZnSO}_4 \cdot 7\text{H}_2\text{O} = \text{ZnSO}_4 \cdot 6\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 10.6 | 10.6 (15.0) | 59.4 | 164 |

^a The pressures appended in parentheses are from the compilation by Halling.⁴

1. Outotec Research Oy, HSC Chemistry 7. *HSC Chemistry 7* **2009**.
2. Lide, D. R., ed., *Handbook of Chemistry and Physics*. 87th ed.; CRC Press: Boca Raton, 2006-2007.
3. Halling, P. J., Salt hydrates for water activity control with biocatalysts in organic media. *Biotechnol. Tech.* **1992**, *6*, 271-6.

Table S2: Sorted by Pressure.

Salt pair hydrate aqueous vapour pressure at 25°C calculated from the standard Gibbs energy of the reaction (using eq. (4) with “*HSC Chemistry*” data¹). The equilibrium vapour pressure of water at 25°C is 23.8 Torr.² The final two columns list the standard enthalpy and standard entropy per mole for production of gaseous water from the salt pair, with the enthalpy term providing the temperature coefficient (eq. 2) for the process. Unreliable rows from Table S1 have been deleted. The rare-earth phosphates (highlighted in yellow) generally have large values in the enthalpy column (that is, appear early in this Table), while other phosphates are more widely dispersed.

| | $\Delta n(\text{H}_2\text{O})$ | $\Delta_r G^\circ / \Delta n(\text{H}_2\text{O})$ | p^a | $\Delta_r H^\circ / \Delta n(\text{H}_2\text{O})$ | $\Delta_r S^\circ / \Delta n(\text{H}_2\text{O})$ |
|---|--------------------------------|---|--------|---|---|
| | | / kJ mol ⁻¹ | / Torr | / kJ mol ⁻¹ | / J K ⁻¹ mol ⁻¹ |
| NiSO ₄ ·H ₂ O = NiSO ₄ + H ₂ O(g) | 1 | 97.3 | 0.0 | 140.3 | 144 |
| Sr(BrO ₃) ₂ ·H ₂ O = Sr(BrO ₃) ₂ + H ₂ O(g) | 1 | 95.0 | 0.0 | 138.9 | 147 |
| VOSO ₄ ·H ₂ O = VOSO ₄ + H ₂ O(g) | 1 | 90.3 | 0.0 | 134.7 | 149 |
| SmPO ₄ ·2H ₂ O = SmPO ₄ + 2H ₂ O(g) | 2 | 72.7 | 0.0 | 115.9 | 145 |
| LaPO ₄ ·2H ₂ O = LaPO ₄ + 2H ₂ O(g) | 2 | 72.2 | 0.0 | 113.8 | 140 |
| NdPO ₄ ·2H ₂ O = NdPO ₄ + 2H ₂ O(g) | 2 | 71.1 | 0.0 | 111.7 | 136 |
| YbPO ₄ ·2H ₂ O = YbPO ₄ + 2H ₂ O(g) | 2 | 68.7 | 0.0 | 113.8 | 151 |
| GdPO ₄ ·2H ₂ O = GdPO ₄ + 2H ₂ O(g) | 2 | 66.6 | 0.0 | 111.7 | 151 |
| HoPO ₄ ·2H ₂ O = HoPO ₄ + 2H ₂ O(g) | 2 | 64.6 | 0.0 | 109.6 | 151 |
| DyPO ₄ ·2H ₂ O = DyPO ₄ + 2H ₂ O(g) | 2 | 62.5 | 0.0 | 107.5 | 151 |
| MgSO ₄ ·H ₂ O = MgSO ₄ + H ₂ O(g) | 1 | 61.9 | 0.0 | 107.9 | 154 |
| TbPO ₄ ·2H ₂ O = TbPO ₄ + 2H ₂ O(g) | 2 | 58.3 | 0.0 | 103.4 | 151 |
| TmPO ₄ ·2H ₂ O = TmPO ₄ + 2H ₂ O(g) | 2 | 58.3 | 0.0 | 103.4 | 151 |
| Al ₂ (SO ₄) ₃ ·6H ₂ O = Al ₂ (SO ₄) ₃ + 6H ₂ O(g) | 6 | 57.4 | 0.0 | 102.3 | 150 |
| Cr ₂ (SO ₄) ₃ ·8H ₂ O = Cr ₂ (SO ₄) ₃ + 8H ₂ O(g) | 8 | 55.2 | 0.0 | 99.6 | 149 |
| ErPO ₄ ·2H ₂ O = ErPO ₄ + 2H ₂ O(g) | 2 | 54.1 | 0.0 | 99.2 | 151 |
| MoO ₃ ·H ₂ O = MoO ₃ + H ₂ O(g) | 1 | 53.5 | 0.0 | 85.6 | 107 |
| Ca(IO ₃) ₂ ·H ₂ O = Ca(IO ₃) ₂ + H ₂ O(g) | 1 | 46.1 | 0.0 | 89.9 | 147 |
| Na _{0.96} Al _{0.96} Si _{2.04} O ₆ ·H ₂ O = Na _{0.96} Al _{0.96} Si _{2.04} O ₆ + H ₂ O(g) | 1 | 44.6 | 0.0 | 84.5 | 134 |
| AlCl ₃ ·6H ₂ O = AlCl ₃ + 6H ₂ O(g) | 6 | 43.4 | 0.0 | 89.4 | 154 |
| RbOH·H ₂ O = RbOH + H ₂ O(g) | 1 | 42.7 | 0.0 | 88.3 | 153 |
| KOH·H ₂ O = KOH + H ₂ O(g) | 1 | 41.5 | 0.0 | 87.1 | 153 |
| MgCl ₂ ·H ₂ O = MgCl ₂ + H ₂ O(g) | 1 | 41.4 | 0.0 | 83.5 | 141 |
| Nd ₂ (SO ₄) ₃ ·8H ₂ O = Nd ₂ (SO ₄) ₃ + 8H ₂ O(g) | 8 | 41.2 | 0.0 | 83.2 | 141 |
| UO ₃ ·H ₂ O = UO ₃ ·0.9H ₂ O + 0.1H ₂ O(g) | 0.1 | 39.8 | 0.0 | 71.4 | 106 |
| BaAl ₂ O ₄ ·H ₂ O = BaAl ₂ O ₄ + H ₂ O(g) | 1 | 39.2 | 0.0 | 83.7 | 149 |

| | | | | | |
|---|-----|------|-----|------|-----|
| $\text{LuPO}_4 \cdot 2\text{H}_2\text{O} = \text{LuPO}_4 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 37.4 | 0.0 | 82.4 | 151 |
| $\text{MnBr}_2 \cdot 6\text{H}_2\text{O} = \text{MnBr}_2 \cdot 4\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 35.2 | 0.0 | 76.5 | 139 |
| $\text{UO}_2\text{SO}_4 \cdot 2.5\text{H}_2\text{O} = \text{UO}_2\text{SO}_4 \cdot \text{H}_2\text{O} + 1.5\text{H}_2\text{O}(\text{g})$ | 1.5 | 35.1 | 0.0 | 77.0 | 141 |
| $\text{ZnSO}_4 \cdot \text{H}_2\text{O} = \text{ZnSO}_4 + \text{H}_2\text{O}(\text{g})$ | 1 | 34.7 | 0.0 | 82.6 | 161 |
| $\text{UO}_2\text{Br}_2 \cdot \text{H}_2\text{O} = \text{UO}_2\text{Br}_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 33.7 | 0.0 | 76.7 | 144 |
| $\text{AlF}_3 \cdot 3\text{H}_2\text{O} = \text{AlF}_3 \cdot 0.5\text{H}_2\text{O} + 2.5\text{H}_2\text{O}(\text{g})$ | 2.5 | 33.1 | 0.0 | 78.4 | 152 |
| $\text{BaI}_2 \cdot \text{H}_2\text{O} = \text{BaI}_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 33.0 | 0.0 | 77.4 | 149 |
| $\text{LiI} \cdot \text{H}_2\text{O} = \text{LiI} + \text{H}_2\text{O}(\text{g})$ | 1 | 32.9 | 0.0 | 78.3 | 153 |
| $\text{Th}(\text{NO}_3)_4 \cdot 4\text{H}_2\text{O} = \text{Th}(\text{NO}_3)_4 + 4\text{H}_2\text{O}(\text{g})$ | 4 | 32.5 | 0.0 | 76.4 | 147 |
| $\text{SrCl}_2 \cdot 2\text{H}_2\text{O} = \text{SrCl}_2 \cdot \text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 32.3 | 0.0 | 59.4 | 91 |
| $\text{CaCl}_2 \cdot \text{H}_2\text{O} = \text{CaCl}_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 31.9 | 0.0 | 73.8 | 140 |
| $\text{H}_2\text{SO}_4 \cdot \text{H}_2\text{O} = \text{H}_2\text{SO}_4 + \text{H}_2\text{O}(\text{g})$ | 1 | 31.8 | 0.0 | 71.8 | 134 |
| $\text{Al}_2\text{O}_3 \cdot \text{H}_2\text{O} = \text{Al}_2\text{O}_3 + \text{H}_2\text{O}(\text{g})$ | 1 | 31.2 | 0.0 | 81.6 | 169 |
| $\text{UO}_2\text{Cl}_2 \cdot \text{H}_2\text{O} = \text{UO}_2\text{Cl}_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 30.7 | 0.0 | 74.5 | 147 |
| $\text{CaSiF}_6 \cdot 2\text{H}_2\text{O} = \text{CaSiF}_6 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 30.5 | 0.0 | 75.1 | 149 |
| $\text{MgBr}_2 \cdot 6\text{H}_2\text{O} = \text{MgBr}_2 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 30.1 | 0.0 | 72.5 | 142 |
| $\text{YCl}_3 \cdot 6\text{H}_2\text{O} = \text{YCl}_3 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 29.3 | 0.0 | 73.6 | 149 |
| $\text{UO}_2(\text{NO}_3)_2 \cdot 2\text{H}_2\text{O} = \text{UO}_2(\text{NO}_3)_2 \cdot \text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 29.0 | 0.0 | 72.9 | 147 |
| $\text{UO}_2(\text{NO}_3)_2 \cdot \text{H}_2\text{O} = \text{UO}_2(\text{NO}_3)_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 28.3 | 0.0 | 71.2 | 144 |
| $\text{DyCl}_3 \cdot 6\text{H}_2\text{O} = \text{DyCl}_3 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 27.9 | 0.0 | 70.5 | 143 |
| $\text{ErCl}_3 \cdot 6\text{H}_2\text{O} = \text{ErCl}_3 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 27.7 | 0.0 | 71.5 | 147 |
| $\text{MgCl}_2 \cdot 2\text{H}_2\text{O} = \text{MgCl}_2 \cdot \text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 27.7 | 0.0 | 71.3 | 146 |
| $\text{RaI}_2 \cdot 0.5\text{H}_2\text{O} = \text{RaI}_2 + 0.5\text{H}_2\text{O}(\text{g})$ | 0.5 | 27.6 | 0.0 | 70.2 | 143 |
| $\text{SrBr}_2 \cdot \text{H}_2\text{O} = \text{SrBr}_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 27.4 | 0.0 | 72.8 | 152 |
| $(\text{UO}_2)_3(\text{PO}_4)_2 \cdot 4\text{H}_2\text{O} = (\text{UO}_2)_3(\text{PO}_4)_2 + 4\text{H}_2\text{O}(\text{g})$ | 4 | 27.2 | 0.0 | 70.1 | 144 |
| $\text{CaTeO}_3 \cdot \text{H}_2\text{O} = \text{CaTeO}_3 + \text{H}_2\text{O}(\text{g})$ | 1 | 26.9 | 0.0 | 70.7 | 147 |
| $\text{ScCl}_3 \cdot 6\text{H}_2\text{O} = \text{ScCl}_3 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 26.7 | 0.0 | 71.2 | 149 |
| $\text{Mg}(\text{ClO}_4)_2 \cdot 6\text{H}_2\text{O} = \text{Mg}(\text{ClO}_4)_2 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 26.5 | 0.0 | 67.7 | 138 |
| $\text{BeSO}_4 \cdot 2\text{H}_2\text{O} = \text{BeSO}_4 \cdot \text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 26.4 | 0.0 | 70.1 | 147 |
| $\text{TbCl}_3 \cdot 6\text{H}_2\text{O} = \text{TbCl}_3 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 26.2 | 0.0 | 70.2 | 148 |
| $\text{HoCl}_3 \cdot 6\text{H}_2\text{O} = \text{HoCl}_3 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 26.1 | 0.0 | 70.2 | 148 |
| $\text{CuF}_2 \cdot 2\text{H}_2\text{O} = \text{CuF}_2 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 26.0 | 0.0 | 71.3 | 152 |
| $\text{MnSO}_4 \cdot \text{H}_2\text{O} = \text{MnSO}_4 + \text{H}_2\text{O}(\text{g})$ | 1 | 25.9 | 0.0 | 69.5 | 146 |
| $\text{FeSO}_4 \cdot \text{H}_2\text{O} = \text{FeSO}_4 + \text{H}_2\text{O}(\text{g})$ | 1 | 25.8 | 0.0 | 71.1 | 152 |
| $\text{UO}_3 \cdot 0.9\text{H}_2\text{O} = \text{UO}_3 + 0.9\text{H}_2\text{O}(\text{g})$ | 0.9 | 25.7 | 0.0 | 72.1 | 156 |
| $\text{MnCl}_2 \cdot \text{H}_2\text{O} = \text{MnCl}_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 25.4 | 0.0 | 63.5 | 128 |
| $\text{Mg}(\text{NO}_3)_2 \cdot 2\text{H}_2\text{O} = \text{Mg}(\text{NO}_3)_2 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 25.2 | 0.0 | 68.5 | 145 |
| $\text{BeSO}_4 \cdot \text{H}_2\text{O} = \text{BeSO}_4 + \text{H}_2\text{O}(\text{g})$ | 1 | 24.9 | 0.0 | 68.4 | 146 |
| $\text{Zn}(\text{NO}_3)_2 \cdot 2\text{H}_2\text{O} = \text{Zn}(\text{NO}_3)_2 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 24.7 | 0.0 | 71.5 | 157 |
| $\text{BaCl}_2 \cdot \text{H}_2\text{O} = \text{BaCl}_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 24.5 | 0.0 | 67.8 | 145 |
| $\text{Rb}_2\text{CO}_3 \cdot 1.5\text{H}_2\text{O} = \text{Rb}_2\text{CO}_3 \cdot \text{H}_2\text{O} + 0.5\text{H}_2\text{O}(\text{g})$ | 0.5 | 24.4 | 0.0 | 69.5 | 151 |
| $\text{NaIO}_3 \cdot \text{H}_2\text{O} = \text{NaIO}_3 + \text{H}_2\text{O}(\text{g})$ | 1 | 24.2 | 0.0 | 68.4 | 148 |
| $\text{MgCl}_2 \cdot 4\text{H}_2\text{O} = \text{MgCl}_2 \cdot 2\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 24.1 | 0.0 | 67.8 | 147 |
| $\text{CuSO}_4 \cdot \text{H}_2\text{O} = \text{CuSO}_4 + \text{H}_2\text{O}(\text{g})$ | 1 | 24.0 | 0.0 | 69.6 | 153 |

| | | | | | |
|---|-----|------|-----|------|-----|
| $\text{LiBr} \cdot \text{H}_2\text{O} = \text{LiBr} + \text{H}_2\text{O}(\text{g})$ | 1 | 23.8 | 0.1 | 69.5 | 153 |
| $\text{K}_2\text{CO}_3 \cdot 0.5\text{H}_2\text{O} = \text{K}_2\text{CO}_3 + 0.5\text{H}_2\text{O}(\text{g})$ | 0.5 | 23.4 | 0.1 | 70.2 | 157 |
| $\text{LiNO}_2 \cdot \text{H}_2\text{O} = \text{LiNO}_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 23.3 | 0.1 | 65.9 | 143 |
| $\text{GdCl}_3 \cdot 6\text{H}_2\text{O} = \text{GdCl}_3 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 23.1 | 0.1 | 67.4 | 149 |
| $\text{Ca}(\text{ClO}_4)_2 \cdot 4\text{H}_2\text{O} = \text{Ca}(\text{ClO}_4)_2 + 4\text{H}_2\text{O}(\text{g})$ | 4 | 22.8 | 0.1 | 64.1 | 139 |
| $\text{CoCl}_2 \cdot \text{H}_2\text{O} = \text{CoCl}_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 22.6 | 0.1 | 61.1 | 129 |
| $\text{EuCl}_3 \cdot 6\text{H}_2\text{O} = \text{EuCl}_3 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 22.5 | 0.1 | 65.8 | 145 |
| $\text{LiI} \cdot 3\text{H}_2\text{O} = \text{LiI} \cdot 2\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 22.3 | 0.1 | 58.9 | 123 |
| $\text{CsF} \cdot \text{H}_2\text{O} = \text{CsF} + \text{H}_2\text{O}(\text{g})$ | 1 | 21.8 | 0.1 | 65.9 | 148 |
| $\text{RbF} \cdot \text{H}_2\text{O} = \text{RbF} + \text{H}_2\text{O}(\text{g})$ | 1 | 21.7 | 0.1 | 66.2 | 149 |
| $\text{LiI} \cdot 2\text{H}_2\text{O} = \text{LiI} \cdot \text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 20.8 | 0.2 | 58.9 | 128 |
| $\text{SmCl}_3 \cdot 6\text{H}_2\text{O} = \text{SmCl}_3 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 20.8 | 0.2 | 65.6 | 150 |
| $\text{H}_2\text{SO}_4 \cdot 2\text{H}_2\text{O} = \text{H}_2\text{SO}_4 \cdot \text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 20.7 | 0.2 | 57.7 | 124 |
| $\text{LuCl}_3 \cdot 6\text{H}_2\text{O} = \text{LuCl}_3 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 20.5 | 0.2 | 65.5 | 151 |
| $\text{Rb}_2\text{CO}_3 \cdot \text{H}_2\text{O} = \text{Rb}_2\text{CO}_3 + \text{H}_2\text{O}(\text{g})$ | 1 | 20.4 | 0.2 | 66.5 | 155 |
| $\text{SrTeO}_3 \cdot \text{H}_2\text{O} = \text{SrTeO}_3 + \text{H}_2\text{O}(\text{g})$ | 1 | 20.2 | 0.2 | 64.0 | 147 |
| $\text{VOSO}_4 \cdot 3\text{H}_2\text{O} = \text{VOSO}_4 \cdot \text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 19.8 | 0.2 | 64.3 | 149 |
| $\text{PrCl}_3 \cdot 7\text{H}_2\text{O} = \text{PrCl}_3 \cdot 6\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 19.8 | 0.3 | 64.4 | 150 |
| $\text{LiCl} \cdot \text{H}_2\text{O} = \text{LiCl} + \text{H}_2\text{O}(\text{g})$ | 1 | 19.6 | 0.3 | 62.9 | 145 |
| $\text{Zn}(\text{NO}_3)_2 \cdot 4\text{H}_2\text{O} = \text{Zn}(\text{NO}_3)_2 \cdot 2\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 19.6 | 0.3 | 52.6 | 111 |
| $\text{CaBr}_2 \cdot 6\text{H}_2\text{O} = \text{CaBr}_2 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 19.5 | 0.3 | 61.9 | 142 |
| $\text{MgSO}_3 \cdot 3\text{H}_2\text{O} = \text{MgSO}_3 + 3\text{H}_2\text{O}(\text{g})$ | 3 | 19.5 | 0.3 | 64.1 | 150 |
| $\text{NiCl}_2 \cdot 2\text{H}_2\text{O} = \text{NiCl}_2 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 19.1 | 0.3 | 62.2 | 145 |
| $\text{MnCl}_2 \cdot 2\text{H}_2\text{O} = \text{MnCl}_2 \cdot \text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 19.0 | 0.3 | 63.6 | 150 |
| $\text{RbOH} \cdot 2\text{H}_2\text{O} = \text{RbOH} \cdot \text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 18.9 | 0.4 | 62.8 | 147 |
| $\text{CaSeO}_4 \cdot 2\text{H}_2\text{O} = \text{CaSeO}_4 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 18.7 | 0.4 | 56.8 | 128 |
| $\text{Cs}_2\text{CO}_3 \cdot 3.5\text{H}_2\text{O} = \text{Cs}_2\text{CO}_3 + 3.5\text{H}_2\text{O}(\text{g})$ | 3.5 | 18.6 | 0.4 | 64.5 | 154 |
| $\text{CaSO}_3 \cdot 0.5\text{H}_2\text{O} = \text{CaSO}_3 + 0.5\text{H}_2\text{O}(\text{g})$ | 0.5 | 18.4 | 0.5 | 62.8 | 149 |
| $\text{UF}_4 \cdot 2.5\text{H}_2\text{O} = \text{UF}_4 + 2.5\text{H}_2\text{O}(\text{g})$ | 2.5 | 18.1 | 0.5 | 61.1 | 144 |
| $\text{Ca}(\text{H}_2\text{PO}_4)_2 \cdot \text{H}_2\text{O} = \text{Ca}(\text{H}_2\text{PO}_4)_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 17.8 | 0.6 | 53.2 | 119 |
| $\text{CrCl}_2 \cdot 3\text{H}_2\text{O} = \text{CrCl}_2 \cdot 2\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 17.8 | 0.6 | 62.4 | 150 |
| $\text{Ni}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O} = \text{Ni}(\text{NO}_3)_2 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 17.7 | 0.6 | 58.2 | 136 |
| $\text{CrCl}_2 \cdot 2\text{H}_2\text{O} = \text{CrCl}_2 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 17.7 | 0.6 | 62.2 | 149 |
| $\text{H}_3\text{PO}_4 \cdot 0.5\text{H}_2\text{O} = \text{H}_3\text{PO}_4 + 0.5\text{H}_2\text{O}(\text{g})$ | 0.5 | 17.6 | 0.6 | 62.8 | 152 |
| $\text{Ra}(\text{BrO}_3)_2 \cdot \text{H}_2\text{O} = \text{Ra}(\text{BrO}_3)_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 17.6 | 0.6 | 60.2 | 143 |
| $\text{CdSO}_4 \cdot \text{H}_2\text{O} = \text{CdSO}_4 + \text{H}_2\text{O}(\text{g})$ | 1 | 17.6 | 0.6 | 64.6 | 158 |
| $\text{LiClO}_4 \cdot 3\text{H}_2\text{O} = \text{LiClO}_4 \cdot \text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 17.4 | 0.7 | 60.9 | 146 |
| $\text{Ba}(\text{OH})_2 \cdot \text{H}_2\text{O} = \text{Ba}(\text{OH})_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 17.4 | 0.7 | 60.6 | 145 |
| $\text{K}_2\text{CO}_3 \cdot 1.5\text{H}_2\text{O} = \text{K}_2\text{CO}_3 \cdot 0.5\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 17.3 | 0.7 | 63.6 | 155 |
| $\text{Mg}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O} = \text{Mg}(\text{NO}_3)_2 \cdot 2\text{H}_2\text{O} + 4\text{H}_2\text{O}(\text{g})$ | 4 | 17.3 | 0.7 | 58.6 | 139 |
| $\text{MgTeO}_3 \cdot 5\text{H}_2\text{O} = \text{MgTeO}_3 + 5\text{H}_2\text{O}(\text{g})$ | 5 | 17.2 | 0.7 | 61.0 | 147 |
| $\text{MgCl}_2 \cdot 6\text{H}_2\text{O} = \text{MgCl}_2 \cdot 4\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 17.1 | 0.8 | 58.2 | 138 |
| $\text{PuCl}_3 \cdot 6\text{H}_2\text{O} = \text{PuCl}_3 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 17.0 | 0.8 | 60.5 | 146 |
| $\text{CaHPO}_4 \cdot 2\text{H}_2\text{O} = \text{CaHPO}_4 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 16.9 | 0.8 | 61.6 | 150 |

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|--|-----|------|-----|------|-----|
| $\text{NdCl}_3 \cdot 6\text{H}_2\text{O} = \text{NdCl}_3 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 16.9 | 0.8 | 61.7 | 150 |
| $\text{K}_4\text{Fe}(\text{CN})_6 \cdot 3\text{H}_2\text{O} = \text{K}_4\text{Fe}(\text{CN})_6 + 3\text{H}_2\text{O}(\text{g})$ | 3 | 16.9 | 0.8 | 50.2 | 112 |
| $\text{K}_4\text{P}_2\text{O}_7 \cdot 3\text{H}_2\text{O} = \text{K}_4\text{P}_2\text{O}_7 + 3\text{H}_2\text{O}(\text{g})$ | 3 | 16.9 | 0.8 | 60.7 | 147 |
| $\text{PrCl}_3 \cdot 6\text{H}_2\text{O} = \text{PrCl}_3 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 16.6 | 0.9 | 61.6 | 151 |
| $\text{FeCl}_2 \cdot 2\text{H}_2\text{O} = \text{FeCl}_2 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 16.5 | 1.0 | 65.8 | 165 |
| $\text{LiClO}_4 \cdot \text{H}_2\text{O} = \text{LiClO}_4 + \text{H}_2\text{O}(\text{g})$ | 1 | 16.5 | 1.0 | 64.0 | 160 |
| $\text{KAl}(\text{SO}_4)_2 \cdot 3\text{H}_2\text{O} = \text{KAl}(\text{SO}_4)_2 + 3\text{H}_2\text{O}(\text{g})$ | 3 | 16.4 | 1.0 | 61.8 | 152 |
| $\text{LiOH} \cdot \text{H}_2\text{O} = \text{LiOH} + \text{H}_2\text{O}(\text{g})$ | 1 | 16.4 | 1.0 | 64.3 | 161 |
| $\text{FeCl}_3 \cdot 6\text{H}_2\text{O} = \text{FeCl}_3 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 16.4 | 1.0 | 62.2 | 154 |
| $\text{UO}_2\text{Br}_2 \cdot 3\text{H}_2\text{O} = \text{UO}_2\text{Br}_2 \cdot \text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 16.3 | 1.0 | 59.2 | 144 |
| $\text{CeCl}_3 \cdot 7\text{H}_2\text{O} = \text{CeCl}_3 + 7\text{H}_2\text{O}(\text{g})$ | 7 | 16.3 | 1.1 | 61.0 | 150 |
| $\text{MgSO}_4 \cdot 4\text{H}_2\text{O} = \text{MgSO}_4 \cdot 2\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 16.3 | 1.1 | 58.8 | 143 |
| $\text{UO}_2\text{Cl}_2 \cdot 3\text{H}_2\text{O} = \text{UO}_2\text{Cl}_2 \cdot \text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 16.2 | 1.1 | 60.7 | 149 |
| $\text{BeSO}_4 \cdot 4\text{H}_2\text{O} = \text{BeSO}_4 \cdot 3\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 16.1 | 1.1 | 61.5 | 152 |
| $\text{CuCl}_2 \cdot 2\text{H}_2\text{O} = \text{CuCl}_2 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 15.8 | 1.3 | 59.1 | 145 |
| $\text{AgF} \cdot 2\text{H}_2\text{O} = \text{AgF} \cdot \text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 15.8 | 1.3 | 56.2 | 136 |
| $\text{H}_2\text{SO}_4 \cdot 3\text{H}_2\text{O} = \text{H}_2\text{SO}_4 \cdot 2\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 15.8 | 1.3 | 51.5 | 120 |
| $\text{Li}_2\text{SO}_4 \cdot \text{H}_2\text{O} = \text{Li}_2\text{SO}_4 + \text{H}_2\text{O}(\text{g})$ | 1 | 15.7 | 1.3 | 57.2 | 139 |
| $\text{UO}_2(\text{NO}_3)_2 \cdot 3\text{H}_2\text{O} = \text{UO}_2(\text{NO}_3)_2 \cdot 2\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 15.6 | 1.4 | 59.9 | 148 |
| $\text{Tc}_2\text{O}_7 \cdot \text{H}_2\text{O} = \text{Tc}_2\text{O}_7 + \text{H}_2\text{O}(\text{g})$ | 1 | 15.6 | 1.4 | 45.8 | 102 |
| $\text{Ca}(\text{NO}_3)_2 \cdot 2\text{H}_2\text{O} = \text{Ca}(\text{NO}_3)_2 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 15.2 | 1.6 | 60.2 | 151 |
| $\text{CaCl}_2 \cdot 4\text{H}_2\text{O} = \text{CaCl}_2 \cdot 2\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 15.1 | 1.7 | 60.8 | 153 |
| $\text{SrBr}_2 \cdot 6\text{H}_2\text{O} = \text{SrBr}_2 \cdot \text{H}_2\text{O} + 5\text{H}_2\text{O}(\text{g})$ | 5 | 15.0 | 1.7 | 57.9 | 144 |
| $\text{NaOH} \cdot \text{H}_2\text{O} = \text{NaOH} + \text{H}_2\text{O}(\text{g})$ | 1 | 15.0 | 1.8 | 65.3 | 169 |
| $\text{ZnBr}_2 \cdot 2\text{H}_2\text{O} = \text{ZnBr}_2 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 15.0 | 1.8 | 62.3 | 159 |
| $\text{Cd}(\text{NO}_3)_2 \cdot 2\text{H}_2\text{O} = \text{Cd}(\text{NO}_3)_2 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 14.9 | 1.8 | 57.5 | 143 |
| $\text{LaCl}_3 \cdot 7\text{H}_2\text{O} = \text{LaCl}_3 + 7\text{H}_2\text{O}(\text{g})$ | 7 | 14.9 | 1.9 | 57.3 | 142 |
| $\text{MnI}_2 \cdot 4\text{H}_2\text{O} = \text{MnI}_2 + 4\text{H}_2\text{O}(\text{g})$ | 4 | 14.6 | 2.0 | 56.9 | 142 |
| $\text{ThF}_4 \cdot 2.5\text{H}_2\text{O} = \text{ThF}_4 + 2.5\text{H}_2\text{O}(\text{g})$ | 2.5 | 14.6 | 2.1 | 60.6 | 154 |
| $\text{Cd}(\text{NO}_3)_2 \cdot 4\text{H}_2\text{O} = \text{Cd}(\text{NO}_3)_2 \cdot 2\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 14.5 | 2.1 | 57.0 | 142 |
| $\text{K}_2\text{CuCl}_4 \cdot 2\text{H}_2\text{O} = \text{K}_2\text{CuCl}_4 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 14.5 | 2.2 | 59.7 | 152 |
| $\text{CoBr}_2 \cdot 6\text{H}_2\text{O} = \text{CoBr}_2 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 14.5 | 2.2 | 58.9 | 149 |
| $\text{MgSO}_4 \cdot 5\text{H}_2\text{O} = \text{MgSO}_4 \cdot 4\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 14.5 | 2.2 | 57.8 | 145 |
| $\text{Co}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O} = \text{Co}(\text{NO}_3)_2 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 14.5 | 2.2 | 56.0 | 139 |
| $\text{CoCl}_2 \cdot 2\text{H}_2\text{O} = \text{CoCl}_2 \cdot \text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 14.4 | 2.2 | 60.3 | 154 |
| $\text{Cu}(\text{IO}_3)_2 \cdot \text{H}_2\text{O} = \text{Cu}(\text{IO}_3)_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 14.3 | 2.3 | 60.2 | 154 |
| $\text{Ba}(\text{OH})_2 \cdot 8\text{H}_2\text{O} = \text{Ba}(\text{OH})_2 \cdot 3\text{H}_2\text{O} + 5\text{H}_2\text{O}(\text{g})$ | 5 | 14.2 | 2.4 | 58.5 | 149 |
| $\text{PtCl}_4 \cdot 5\text{H}_2\text{O} = \text{PtCl}_4 + 5\text{H}_2\text{O}(\text{g})$ | 5 | 14.2 | 2.5 | 62.9 | 163 |
| $\text{KF} \cdot 2\text{H}_2\text{O} = \text{KF} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 14.0 | 2.6 | 57.0 | 144 |
| $\text{Ca}(\text{NO}_3)_2 \cdot 3\text{H}_2\text{O} = \text{Ca}(\text{NO}_3)_2 \cdot 2\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 14.0 | 2.7 | 55.4 | 139 |
| $\text{UOFOH} \cdot 0.5\text{H}_2\text{O} = \text{UOFOH} + 0.5\text{H}_2\text{O}(\text{g})$ | 0.5 | 13.8 | 2.9 | 57.0 | 145 |
| $\text{CrCl}_2 \cdot 4\text{H}_2\text{O} = \text{CrCl}_2 \cdot 3\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 13.8 | 2.9 | 58.4 | 150 |
| $\text{MgSO}_3 \cdot 6\text{H}_2\text{O} = \text{MgSO}_3 \cdot 3\text{H}_2\text{O} + 3\text{H}_2\text{O}(\text{g})$ | 3 | 13.7 | 3.0 | 55.9 | 142 |
| $\text{RaBr}_2 \cdot 2\text{H}_2\text{O} = \text{RaBr}_2 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 13.7 | 3.0 | 59.7 | 154 |

| | | | | | |
|--|-----|------|-----|------|-----|
| $\text{CoSO}_4 \cdot 6\text{H}_2\text{O} = \text{CoSO}_4 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 13.6 | 3.1 | 57.5 | 147 |
| $\text{CdCl}_2 \cdot \text{H}_2\text{O} = \text{CdCl}_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 13.4 | 3.3 | 53.3 | 134 |
| $\text{BaBr}_2 \cdot 2\text{H}_2\text{O} = \text{BaBr}_2 \cdot \text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 13.4 | 3.3 | 57.3 | 147 |
| $\text{H}_2\text{SO}_4 \cdot 4\text{H}_2\text{O} = \text{H}_2\text{SO}_4 \cdot 3\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 13.3 | 3.5 | 49.0 | 120 |
| $\text{RbAl}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O} = \text{RbAl}(\text{SO}_4)_2 + 12\text{H}_2\text{O}(\text{g})$ | 12 | 13.3 | 3.5 | 57.7 | 149 |
| $\text{Cr}_2(\text{SO}_4)_3 \cdot 14\text{H}_2\text{O} = \text{Cr}_2(\text{SO}_4)_3 \cdot 8\text{H}_2\text{O} + 6\text{H}_2\text{O}(\text{g})$ | 6 | 13.2 | 3.6 | 57.7 | 149 |
| $\text{NiSO}_4 \cdot 4\text{H}_2\text{O} = \text{NiSO}_4 \cdot \text{H}_2\text{O} + 3\text{H}_2\text{O}(\text{g})$ | 3 | 13.2 | 3.6 | 57.7 | 149 |
| $\text{MgSeO}_3 \cdot 6\text{H}_2\text{O} = \text{MgSeO}_3 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 13.1 | 3.8 | 58.4 | 152 |
| $\text{Na}_2\text{CO}_3 \cdot \text{H}_2\text{O} = \text{Na}_2\text{CO}_3 + \text{H}_2\text{O}(\text{g})$ | 1 | 13.0 | 4.0 | 59.4 | 156 |
| $\text{Ca}(\text{NO}_3)_2 \cdot 4\text{H}_2\text{O} = \text{Ca}(\text{NO}_3)_2 \cdot 3\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 12.9 | 4.1 | 52.5 | 133 |
| $\text{KOH} \cdot 2\text{H}_2\text{O} = \text{KOH} \cdot \text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 12.9 | 4.2 | 56.7 | 147 |
| $\text{BaBr}_2 \cdot \text{H}_2\text{O} = \text{BaBr}_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 12.9 | 4.2 | 57.8 | 151 |
| $\text{Sr}(\text{IO}_3)_2 \cdot \text{H}_2\text{O} = \text{Sr}(\text{IO}_3)_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 12.9 | 4.2 | 52.0 | 131 |
| $\text{Cu}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O} = \text{Cu}(\text{NO}_3)_2 + 6\text{H}_2\text{O}(\text{g})$ | 6 | 12.7 | 4.5 | 58.0 | 152 |
| $\text{RaCl}_2 \cdot 2\text{H}_2\text{O} = \text{RaCl}_2 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 12.6 | 4.7 | 57.7 | 151 |
| $\text{MgSeO}_4 \cdot 4\text{H}_2\text{O} = \text{MgSeO}_4 \cdot \text{H}_2\text{O} + 3\text{H}_2\text{O}(\text{g})$ | 3 | 12.5 | 4.8 | 56.4 | 147 |
| $\text{CuSO}_4 \cdot 3\text{H}_2\text{O} = \text{CuSO}_4 \cdot \text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 12.5 | 4.8 | 57.3 | 150 |
| $\text{VOSO}_4 \cdot 5\text{H}_2\text{O}(\text{A}) = \text{VOSO}_4 \cdot 3\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 12.5 | 4.9 | 56.9 | 149 |
| $\text{Na}_2\text{CO}_3 \cdot 10\text{H}_2\text{O} = \text{Na}_2\text{CO}_3 \cdot 7\text{H}_2\text{O} + 3\text{H}_2\text{O}(\text{g})$ | 3 | 12.5 | 4.9 | 54.6 | 141 |
| $\text{Ba}(\text{OH})_2 \cdot 3\text{H}_2\text{O} = \text{Ba}(\text{OH})_2 \cdot \text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 12.4 | 5.1 | 57.5 | 152 |
| $\text{NaHSO}_4 \cdot \text{H}_2\text{O} = \text{NaHSO}_4 + \text{H}_2\text{O}(\text{g})$ | 1 | 12.3 | 5.3 | 52.3 | 134 |
| $\text{NaI} \cdot 2\text{H}_2\text{O} = \text{NaI} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 12.2 | 5.4 | 57.3 | 151 |
| $\text{NaI} \cdot 2\text{H}_2\text{O} = \text{NaI} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 12.2 | 5.4 | 57.3 | 151 |
| $\text{AgF} \cdot \text{H}_2\text{O} = \text{AgF} + \text{H}_2\text{O}(\text{g})$ | 1 | 12.2 | 5.5 | 59.2 | 158 |
| $\text{Na}_2\text{SiO}_3 \cdot 5\text{H}_2\text{O} = \text{Na}_2\text{SiO}_3 + 5\text{H}_2\text{O}(\text{g})$ | 5 | 12.2 | 5.5 | 52.6 | 135 |
| $\text{Zn}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O} = \text{Zn}(\text{NO}_3)_2 \cdot 4\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 12.2 | 5.5 | 62.1 | 167 |
| $\text{KAl}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O} = \text{KAl}(\text{SO}_4)_2 \cdot 3\text{H}_2\text{O} + 9\text{H}_2\text{O}(\text{g})$ | 9 | 12.1 | 5.7 | 56.0 | 147 |
| $\text{NiCl}_2 \cdot 4\text{H}_2\text{O} = \text{NiCl}_2 \cdot 2\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 12.0 | 5.9 | 59.8 | 160 |
| $\text{MnCl}_2 \cdot 4\text{H}_2\text{O} = \text{MnCl}_2 \cdot 2\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 11.9 | 6.1 | 55.7 | 147 |
| $\text{Na}_2\text{CrO}_4 \cdot 4\text{H}_2\text{O} = \text{Na}_2\text{CrO}_4 + 4\text{H}_2\text{O}(\text{g})$ | 4 | 11.9 | 6.2 | 54.5 | 143 |
| $\text{FeCl}_2 \cdot 4\text{H}_2\text{O} = \text{FeCl}_2 \cdot 2\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 11.8 | 6.5 | 56.1 | 149 |
| $\text{CaSO}_4 \cdot 2\text{H}_2\text{O} = \text{CaSO}_4 \cdot 0.5\text{H}_2\text{O} + 1.5\text{H}_2\text{O}(\text{g})$ | 1.5 | 11.8 | 6.5 | 55.4 | 146 |
| $\text{UOF}_2 \cdot \text{H}_2\text{O} = \text{UOF}_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 11.8 | 6.5 | 55.6 | 147 |
| $\text{CaCl}_2 \cdot 6\text{H}_2\text{O} = \text{CaCl}_2 \cdot 4\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 11.7 | 6.6 | 66.1 | 182 |
| $\text{CoCl}_2 \cdot 6\text{H}_2\text{O} = \text{CoCl}_2 \cdot 2\text{H}_2\text{O} + 4\text{H}_2\text{O}(\text{g})$ | 4 | 11.5 | 7.1 | 57.0 | 153 |
| $\text{BaI}_2 \cdot 2\text{H}_2\text{O} = \text{BaI}_2 \cdot \text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 11.4 | 7.5 | 55.2 | 147 |
| $\text{H}_2\text{SO}_4 \cdot 6.5\text{H}_2\text{O} = \text{H}_2\text{SO}_4 \cdot 4\text{H}_2\text{O} + 2.5\text{H}_2\text{O}(\text{g})$ | 2.5 | 11.4 | 7.7 | 47.0 | 120 |
| $\text{CuSO}_4 \cdot 5\text{H}_2\text{O} = \text{CuSO}_4 \cdot 3\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 11.4 | 7.7 | 55.9 | 149 |
| $\text{NaClO}_2 \cdot 3\text{H}_2\text{O} = \text{NaClO}_2 + 3\text{H}_2\text{O}(\text{g})$ | 3 | 11.3 | 7.8 | 55.9 | 149 |
| $\text{UO}_2(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O} = \text{UO}_2(\text{NO}_3)_2 \cdot 3\text{H}_2\text{O} + 3\text{H}_2\text{O}(\text{g})$ | 3 | 11.3 | 8.0 | 53.9 | 143 |
| $\text{Na}_2\text{WO}_4 \cdot 2\text{H}_2\text{O} = \text{Na}_2\text{WO}_4 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 11.2 | 8.1 | 55.3 | 148 |
| $\text{SrCl}_2 \cdot 6\text{H}_2\text{O} = \text{SrCl}_2 \cdot 2\text{H}_2\text{O} + 4\text{H}_2\text{O}(\text{g})$ | 4 | 11.2 | 8.2 | 54.6 | 146 |
| $\text{LiNO}_3 \cdot 3\text{H}_2\text{O} = \text{LiNO}_3 + 3\text{H}_2\text{O}(\text{g})$ | 3 | 11.2 | 8.3 | 55.6 | 149 |
| $\text{UO}_2(\text{OH})_2 \cdot \text{H}_2\text{O} = \text{UO}_2(\text{OH})_2 + \text{H}_2\text{O}(\text{g})$ | 1 | 11.2 | 8.3 | 51.4 | 135 |

| | | | | | |
|--|------|------|-------------|------|-----|
| $\text{NaCN} \cdot 0.5\text{H}_2\text{O} = \text{NaCN} + 0.5\text{H}_2\text{O}(\text{g})$ | 0.5 | 11.2 | 8.3 | 55.2 | 148 |
| $\text{Na}_2\text{B}_4\text{O}_7 \cdot 10\text{H}_2\text{O} = \text{Na}_2\text{B}_4\text{O}_7 + 10\text{H}_2\text{O}(\text{g})$ | 10 | 11.0 | 9.0 | 55.5 | 149 |
| $\text{CuSeO}_3 \cdot 2\text{H}_2\text{O} = \text{CuSeO}_3 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 10.9 | 9.1 | 44.1 | 111 |
| $\text{Na}_3\text{PO}_4 \cdot 12\text{H}_2\text{O} = \text{Na}_3\text{PO}_4 + 12\text{H}_2\text{O}(\text{g})$ | 12 | 10.9 | 9.1 | 55.1 | 148 |
| $\text{Na}_2\text{HPO}_4 \cdot 2\text{H}_2\text{O} = \text{Na}_2\text{HPO}_4 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 10.8 | 9.6 | 57.2 | 156 |
| $\text{CuBr}_2 \cdot 4\text{H}_2\text{O} = \text{CuBr}_2 + 4\text{H}_2\text{O}(\text{g})$ | 4 | 10.7 | 10.0 | 54.8 | 148 |
| $\text{Na}_2\text{S}_2\text{O}_3 \cdot 5\text{H}_2\text{O} = \text{Na}_2\text{S}_2\text{O}_3 + 5\text{H}_2\text{O}(\text{g})$ | 5 | 10.6 | 10.2 | 54.0 | 145 |
| $\text{ZnF}_2 \cdot 4\text{H}_2\text{O} = \text{ZnF}_2 + 4\text{H}_2\text{O}(\text{g})$ | 4 | 10.6 | 10.2 | 55.7 | 151 |
| $\text{Na}_2\text{SiO}_3 \cdot 6\text{H}_2\text{O} = \text{Na}_2\text{SiO}_3 \cdot 5\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 10.6 | 10.6 | 51.9 | 139 |
| $\text{ZnSO}_4 \cdot 7\text{H}_2\text{O} = \text{ZnSO}_4 \cdot 6\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 10.6 | 10.6 | 59.4 | 164 |
| $\text{Na}_4\text{P}_2\text{O}_7 \cdot 10\text{H}_2\text{O} = \text{Na}_4\text{P}_2\text{O}_7 + 10\text{H}_2\text{O}(\text{g})$ | 10 | 10.2 | 12.0 | 54.1 | 147 |
| $\text{AgF} \cdot 4\text{H}_2\text{O} = \text{AgF} \cdot 2\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 10.2 | 12.1 | 51.6 | 139 |
| $\text{MgSO}_4 \cdot 7\text{H}_2\text{O} = \text{MgSO}_4 \cdot 6\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 10.2 | 12.3 | 59.6 | 166 |
| $\text{CsAl}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O} = \text{CsAl}(\text{SO}_4)_2 + 12\text{H}_2\text{O}(\text{g})$ | 12 | 10.2 | 12.3 | 54.8 | 150 |
| $\text{FeSO}_4 \cdot 7\text{H}_2\text{O} = \text{FeSO}_4 \cdot 4\text{H}_2\text{O} + 3\text{H}_2\text{O}(\text{g})$ | 3 | 10.1 | 12.5 | 53.8 | 147 |
| $\text{NiCl}_2 \cdot 6\text{H}_2\text{O} = \text{NiCl}_2 \cdot 4\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 10.1 | 12.9 | 51.3 | 138 |
| $\text{U}(\text{SO}_4)_2 \cdot 8\text{H}_2\text{O} = \text{U}(\text{SO}_4)_2 \cdot 4\text{H}_2\text{O} + 4\text{H}_2\text{O}(\text{g})$ | 4 | 10.1 | 12.9 | 53.0 | 144 |
| $\text{NaBr} \cdot 2\text{H}_2\text{O} = \text{NaBr} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 10.0 | 13.4 | 53.1 | 145 |
| $\text{ZnSO}_4 \cdot 6\text{H}_2\text{O} = \text{ZnSO}_4 \cdot 2\text{H}_2\text{O} + 4\text{H}_2\text{O}(\text{g})$ | 4 | 10.0 | 13.5 | 53.5 | 146 |
| $\text{Na}_2\text{SO}_4 \cdot 10\text{H}_2\text{O} = \text{Na}_2\text{SO}_4 \cdot 7\text{H}_2\text{O} + 3\text{H}_2\text{O}(\text{g})$ | 3 | 9.9 | 13.5 | 48.3 | 129 |
| $\text{Na}_2\text{SiO}_3 \cdot 8\text{H}_2\text{O} = \text{Na}_2\text{SiO}_3 \cdot 6\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 9.9 | 13.6 | 53.8 | 147 |
| $\text{NaCN} \cdot 2\text{H}_2\text{O} = \text{NaCN} \cdot 0.5\text{H}_2\text{O} + 1.5\text{H}_2\text{O}(\text{g})$ | 1.5 | 9.9 | 13.9 | 54.1 | 148 |
| $\text{Na}_2\text{HPO}_4 \cdot 7\text{H}_2\text{O} = \text{Na}_2\text{HPO}_4 \cdot 2\text{H}_2\text{O} + 5\text{H}_2\text{O}(\text{g})$ | 5 | 9.6 | 15.4 | 53.2 | 146 |
| $\text{FeSO}_4 \cdot 4\text{H}_2\text{O} = \text{FeSO}_4 \cdot \text{H}_2\text{O} + 3\text{H}_2\text{O}(\text{g})$ | 3 | 9.5 | 16.1 | 53.4 | 147 |
| $\text{UO}_2\text{SO}_4 \cdot 3.5\text{H}_2\text{O} = \text{UO}_2\text{SO}_4 \cdot 3\text{H}_2\text{O} + 0.5\text{H}_2\text{O}(\text{g})$ | 0.5 | 9.5 | 16.3 | 58.4 | 164 |
| $\text{ZnSO}_4 \cdot 2\text{H}_2\text{O} = \text{ZnSO}_4 \cdot \text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 9.4 | 16.7 | 49.6 | 135 |
| $\text{NH}_4(\text{UO}_2)_2\text{F}_5 \cdot 4\text{H}_2\text{O} = \text{NH}_4(\text{UO}_2)_2\text{F}_5 \cdot 3\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 9.4 | 16.7 | 48.5 | 131 |
| $\text{CdCl}_2 \cdot 2.5\text{H}_2\text{O} = \text{CdCl}_2 \cdot \text{H}_2\text{O} + 1.5\text{H}_2\text{O}(\text{g})$ | 1.5 | 9.4 | 16.9 | 53.4 | 148 |
| $\text{AuCl}_3 \cdot 2\text{H}_2\text{O} = \text{AuCl}_3 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 9.3 | 17.3 | 56.5 | 158 |
| $\text{CoSO}_4 \cdot 7\text{H}_2\text{O} = \text{CoSO}_4 \cdot 6\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 9.3 | 17.4 | 54.2 | 150 |
| $\text{MgCO}_3 \cdot 5\text{H}_2\text{O} = \text{MgCO}_3 \cdot 3\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 9.3 | 17.4 | 53.0 | 146 |
| $\text{BeSO}_4 \cdot 3\text{H}_2\text{O} = \text{BeSO}_4 \cdot 2\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 9.3 | 17.4 | 55.7 | 155 |
| $\text{Na}_2\text{HPO}_4 \cdot 12\text{H}_2\text{O} = \text{Na}_2\text{HPO}_4 \cdot 7\text{H}_2\text{O} + 5\text{H}_2\text{O}(\text{g})$ | 5 | 9.3 | 17.6 | 53.7 | 149 |
| $\text{FePO}_4 \cdot 2\text{H}_2\text{O} = \text{FePO}_4 + 2\text{H}_2\text{O}(\text{g})$ | 2 | 9.0 | 19.6 | 53.8 | 150 |
| $\text{Na}_2\text{SO}_4 \cdot 10\text{H}_2\text{O} = \text{Na}_2\text{SO}_4 + 10\text{H}_2\text{O}(\text{g})$ | 10 | 9.0 | 19.9 (19.0) | 52.1 | 145 |
| $\text{MgSeO}_4 \cdot 6\text{H}_2\text{O} = \text{MgSeO}_4 \cdot 4\text{H}_2\text{O} + 2\text{H}_2\text{O}(\text{g})$ | 2 | 8.9 | 20.7 | 52.7 | 147 |
| $\text{Na}_2\text{SO}_3 \cdot 7\text{H}_2\text{O} = \text{Na}_2\text{SO}_3 + 7\text{H}_2\text{O}(\text{g})$ | 7 | 8.9 | 21.1 | 52.1 | 145 |
| $\text{UO}_2\text{F}_2 \cdot 3\text{H}_2\text{O} = \text{UO}_2\text{F}_2 + 3\text{H}_2\text{O}(\text{g})$ | 3 | 8.8 | 21.2 | 51.8 | 144 |
| $\text{CdBr}_2 \cdot 4\text{H}_2\text{O} = \text{CdBr}_2 + 4\text{H}_2\text{O}(\text{g})$ | 4 | 8.7 | 22.3 | 52.1 | 145 |
| $\text{CdSO}_4 \cdot 2.67\text{H}_2\text{O} = \text{CdSO}_4 \cdot \text{H}_2\text{O} + 1.67\text{H}_2\text{O}(\text{g})$ | 1.67 | 8.7 | 22.6 | 51.5 | 144 |
| $\text{NiSO}_4 \cdot 7\text{H}_2\text{O} = \text{NiSO}_4 \cdot 6\text{H}_2\text{O} + \text{H}_2\text{O}(\text{g})$ | 1 | 8.7 | 22.9 | 51.7 | 144 |
| $\text{U}(\text{SO}_4)_2 \cdot 4\text{H}_2\text{O} = \text{U}(\text{SO}_4)_2 + 4\text{H}_2\text{O}(\text{g})$ | 4 | 8.6 | 23.2 | 51.6 | 144 |
| $\text{MgCO}_3 \cdot 3\text{H}_2\text{O} = \text{MgCO}_3 + 3\text{H}_2\text{O}(\text{g})$ | 3 | 8.6 | 23.3 | 51.9 | 145 |
| $\text{Na}_2\text{SO}_4 \cdot 7\text{H}_2\text{O} = \text{Na}_2\text{SO}_4 + 7\text{H}_2\text{O}(\text{g})$ | 7 | 8.6 | 23.4 | 53.7 | 151 |

| | | | | | |
|--|-----|-----|-------|------|-----|
| $\text{H}_2\text{O(s)} = \text{H}_2\text{O(g)}^3$ | 1 | 8.1 | 23.8 | 50.0 | 141 |
| $\text{CaSO}_3 \cdot 2\text{H}_2\text{O} = \text{CaSO}_3 \cdot 0.5\text{H}_2\text{O} + 1.5\text{H}_2\text{O(g)}$ | 1.5 | 8.6 | 23.8 | 52.4 | 147 |
| $(\text{UO}_2)_3(\text{PO}_4)_2 \cdot 6\text{H}_2\text{O} = (\text{UO}_2)_3(\text{PO}_4)_2 \cdot 4\text{H}_2\text{O} + 2\text{H}_2\text{O(g)}$ | 2 | 8.4 | 24.8 | 52.8 | 149 |
| $\text{V}_2\text{O}_5 \cdot \text{H}_2\text{O} = \text{V}_2\text{O}_5 + \text{H}_2\text{O(g)}$ | 1 | 8.2 | 26.9 | 52.2 | 147 |
| $\text{Sr}(\text{NO}_3)_2 \cdot 4\text{H}_2\text{O} = \text{Sr}(\text{NO}_3)_2 + 4\text{H}_2\text{O(g)}$ | 4 | 8.0 | 29.9 | 51.3 | 145 |
| $\text{CaCl}_2 \cdot 2\text{H}_2\text{O} = \text{CaCl}_2 \cdot \text{H}_2\text{O} + \text{H}_2\text{O(g)}$ | 1 | 8.0 | 30.0 | 51.2 | 145 |
| $\text{Na}_2\text{CO}_3 \cdot 7\text{H}_2\text{O} = \text{Na}_2\text{CO}_3 \cdot \text{H}_2\text{O} + 6\text{H}_2\text{O(g)}$ | 6 | 8.0 | 30.3 | 51.6 | 146 |
| $\text{UO}_2\text{SO}_4 \cdot 3\text{H}_2\text{O} = \text{UO}_2\text{SO}_4 \cdot 2.5\text{H}_2\text{O} + 0.5\text{H}_2\text{O(g)}$ | 0.5 | 7.6 | 35.1 | 47.2 | 133 |
| $\text{VOSO}_4 \cdot 6\text{H}_2\text{O} = \text{VOSO}_4 \cdot 5\text{H}_2\text{O(A)} + \text{H}_2\text{O(g)}$ | 1 | 7.6 | 35.4 | 52.0 | 149 |
| $\text{MnSO}_4 \cdot 4\text{H}_2\text{O} = \text{MnSO}_4 \cdot \text{H}_2\text{O} + 3\text{H}_2\text{O(g)}$ | 3 | 7.4 | 38.3 | 52.0 | 150 |
| $\text{UO}_3 \cdot 2\text{H}_2\text{O} = \text{UO}_3 \cdot \text{H}_2\text{O} + \text{H}_2\text{O(g)}$ | 1 | 7.1 | 42.3 | 47.3 | 135 |
| $\text{Sr}(\text{IO}_3)_2 \cdot 6\text{H}_2\text{O} = \text{Sr}(\text{IO}_3)_2 \cdot \text{H}_2\text{O} + 5\text{H}_2\text{O(g)}$ | 5 | 7.0 | 43.9 | 53.6 | 156 |
| $\text{NaIO}_3 \cdot 5\text{H}_2\text{O} = \text{NaIO}_3 \cdot \text{H}_2\text{O} + 4\text{H}_2\text{O(g)}$ | 4 | 6.9 | 46.0 | 51.4 | 149 |
| $\text{Ba}(\text{N}_3)_2 \cdot \text{H}_2\text{O} = \text{Ba}(\text{N}_3)_2 + \text{H}_2\text{O(g)}$ | 1 | 6.9 | 46.5 | 44.3 | 126 |
| $\text{MgSO}_4 \cdot 6\text{H}_2\text{O} = \text{MgSO}_4 \cdot 5\text{H}_2\text{O} + \text{H}_2\text{O(g)}$ | 1 | 6.8 | 49.0 | 49.7 | 144 |
| $\text{MnF}_2 \cdot 4\text{H}_2\text{O} = \text{MnF}_2 + 4\text{H}_2\text{O(g)}$ | 4 | 6.5 | 54.6 | 50.2 | 147 |
| $\text{SrCl}_2 \cdot \text{H}_2\text{O} = \text{SrCl}_2 + \text{H}_2\text{O(g)}$ | 1 | 6.4 | 57.0 | 61.1 | 184 |
| $\text{YPO}_4 \cdot 2\text{H}_2\text{O} = \text{YPO}_4 + 2\text{H}_2\text{O(g)}$ | 2 | 6.2 | 61.3 | 50.7 | 149 |
| $\text{K}_3\text{PO}_4 \cdot 7\text{H}_2\text{O} = \text{K}_3\text{PO}_4 + 7\text{H}_2\text{O(g)}$ | 7 | 5.8 | 72.2 | 49.9 | 148 |
| $\text{As}_2\text{O}_5 \cdot 4\text{H}_2\text{O} = \text{As}_2\text{O}_5 + 4\text{H}_2\text{O(g)}$ | 4 | 5.6 | 77.2 | 50.3 | 150 |
| $\text{Rb}_2\text{CO}_3 \cdot 3.5\text{H}_2\text{O} = \text{Rb}_2\text{CO}_3 \cdot 1.5\text{H}_2\text{O} + 2\text{H}_2\text{O(g)}$ | 2 | 5.6 | 79.4 | 51.3 | 153 |
| $\text{Al}_2\text{O}_3 \cdot 3\text{H}_2\text{O} = \text{Al}_2\text{O}_3 \cdot \text{H}_2\text{O} + 2\text{H}_2\text{O(g)}$ | 2 | 5.5 | 82.7 | 51.9 | 156 |
| $\text{CePO}_4 \cdot 2\text{H}_2\text{O} = \text{CePO}_4 + 2\text{H}_2\text{O(g)}$ | 2 | 5.4 | 83.2 | 50.5 | 151 |
| $\text{Ra}(\text{IO}_3)_2 \cdot \text{H}_2\text{O} = \text{Ra}(\text{IO}_3)_2 + \text{H}_2\text{O(g)}$ | 1 | 5.3 | 88.0 | 51.2 | 154 |
| $\text{NaClO}_4 \cdot \text{H}_2\text{O} = \text{NaClO}_4 + \text{H}_2\text{O(g)}$ | 1 | 4.0 | 151.5 | 47.8 | 147 |
| $\text{PuO}_2(\text{OH})_2 \cdot \text{H}_2\text{O} = \text{PuO}_2(\text{OH})_2 + \text{H}_2\text{O(g)}$ | 1 | 3.4 | 188.5 | 34.1 | 103 |
| $\text{EuPO}_4 \cdot 2\text{H}_2\text{O} = \text{EuPO}_4 + 2\text{H}_2\text{O(g)}$ | 2 | 3.3 | 200.9 | 49.0 | 153 |
| $\text{Th}(\text{NO}_3)_4 \cdot 5\text{H}_2\text{O} = \text{Th}(\text{NO}_3)_4 \cdot 4\text{H}_2\text{O} + \text{H}_2\text{O(g)}$ | 1 | 3.2 | 203.0 | 47.3 | 148 |
| $\text{MnBr}_2 \cdot 4\text{H}_2\text{O} = \text{MnBr}_2 + 4\text{H}_2\text{O(g)}$ | 4 | 1.9 | 342.9 | 46.7 | 150 |
| $\text{K}_2\text{SO}_3 \cdot \text{H}_2\text{O} = \text{K}_2\text{SO}_3 + \text{H}_2\text{O(g)}$ | 1 | 1.8 | 364.4 | 45.6 | 147 |
| $\text{LiBr} \cdot 2\text{H}_2\text{O} = \text{LiBr} \cdot \text{H}_2\text{O} + \text{H}_2\text{O(g)}$ | 1 | 1.4 | 427.6 | 56.7 | 185 |
| $\text{Na}_2\text{SiO}_3 \cdot 9\text{H}_2\text{O} = \text{Na}_2\text{SiO}_3 \cdot 8\text{H}_2\text{O} + \text{H}_2\text{O(g)}$ | 1 | 1.2 | 460.0 | 53.1 | 174 |
| $\text{Ca}(\text{IO}_3)_2 \cdot 6\text{H}_2\text{O} = \text{Ca}(\text{IO}_3)_2 \cdot \text{H}_2\text{O} + 5\text{H}_2\text{O(g)}$ | 5 | 0.8 | 541.8 | 46.4 | 153 |

1. Outotec Research Oy, HSC Chemistry 7. *HSC Chemistry 7* **2009**.
2. Lide, D. R., ed., *Handbook of Chemistry and Physics*. 87th ed.; CRC Press: Boca Raton, 2006-2007.
3. Glasser, L.; Jones, F., Systematic Thermodynamics of Hydration (and of Solvation) of Inorganic Solids. *Inorg. Chem.* **2009**, *48* (4), 1661-1665.
4. Halling, P. J., Salt hydrates for water activity control with biocatalysts in organic media. *Biotechnol. Tech.* **1992**, *6*, 271-6.