

Jenkins, F., Kessel, H. V., Tompkins, D., & Dzwiniel, M. (1996). *Nelson chemistry*. Scarborough, ON: Nelson Canada.

SOLUBILITY OF IONIC COMPOUNDS AT SATP – GENERALIZATIONS							
Anion	Cl <sup>-</sup> , Br <sup>-</sup> , I <sup>-</sup>	S <sup>2-</sup>	OH <sup>-</sup>	SO <sub>4</sub> <sup>2-</sup>	CO <sub>3</sub> <sup>2-</sup> , PO <sub>4</sub> <sup>3-</sup> , SO <sub>3</sub> <sup>2-</sup>	CH <sub>3</sub> COO <sup>-</sup>	NO <sub>3</sub> <sup>-</sup>
High Solubility (aq) ≥ 0.1 mol/L (at SATP)	most	Group 1, NH <sub>4</sub> <sup>+</sup> Group 2	Group 1, NH <sub>4</sub> <sup>+</sup> Sr <sup>2+</sup> , Ba <sup>2+</sup> , Tl <sup>+</sup>	most	Group 1, NH <sub>4</sub> <sup>+</sup>	most	all
Low Solubility (s) < 0.1 mol/L (at SATP)	Ag <sup>+</sup> , Pb <sup>2+</sup> , Tl <sup>+</sup> , Hg <sub>2</sub> <sup>2+</sup> (Hg <sup>+</sup> ), Cu <sup>+</sup>	most	most	Ag <sup>+</sup> , Pb <sup>2+</sup> , Ca <sup>2+</sup> , Ba <sup>2+</sup> , Sr <sup>2+</sup> , Ra <sup>2+</sup>	most	Ag <sup>+</sup>	none

All Group 1 compounds, including acids, and all ammonium compounds, are assumed to have high solubility in water.