Appendix 1.

Appendix figure 1. An illustration of the variation in saturation index with pH for microcrystalline gibbsite, kaolinite, halloysite, imogolite and HAS(B). The solubility of hydroxyaluminosilicate (HAS$_B$) was assessed based on the study by Dobrzynski (2007) following from the work of Schneider et al. (2004) - for this mineral there is no information on temperature influences on the solubility. Note, for the reasons described earlier, the plots are just illustrative as there is incomplete information available on solubility ranges and other thermodynamic information.