

1991

**Am(OH)₃(s), AmOHCO₃(s), Am₂CO₃(s) stabilities
in environmental conditions**

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These three solid phases have been proposed to calculate Am solubility in environmental conditions, predicted solubility can hence differ by several orders of magnitude. Thermodynamic considerations are here used to predict the stability domains of these solid phases in contact with aqueous solutions of various chemical compositions: it is only $p(\text{CO}_2)$ (carbonic gas partial pressure equilibrated with the solution) dependent, which is consistent with all published works about Am solid phases (preparation and solubility).