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>>Entry Name: Ammonium phosphinite

Synonym(s): Ammonium hypophosphite

CAS Registry Number: 7803-65-8

[NH<sub>4</sub>][H<sub>2</sub>PO<sub>2</sub>]

Molecular Formula: H<sub>6</sub>NO<sub>2</sub>P

Molecular Weight: 83.027

Accurate Mass: 83.013616

Percentage Composition: H 7.28%; N 16.87%; O 38.54%; P 37.31%

Source/Synthesis: Synth. from Ba(H<sub>2</sub>PO<sub>2</sub>)<sub>2</sub> + (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>

Physical Description: Cryst. (H<sub>2</sub>O)

Melting Point: Mp 200°

**Hazard & Toxicity:** Dec. on heating (240°) with evolution of PH<sub>3</sub> which ignites spontaneously

**References:**

Lovejoy, R.W. *et al.*, *J. Phys. Chem.*, 1964, **68**, 544-550, (*ir*)

Weakley, T.J.R., *J. Chem. Soc. Pak.*, 1979, **1**, 37-43, (*cryst struct*)

*Merck Index*, 12th edn., 1996, 559