



>>Entry Name: Ammonium phosphinite

Synonym(s): Ammonium hypophosphite

CAS Registry Number: 7803-65-8

$[\text{NH}_4][\text{H}_2\text{PO}_2]$

Molecular Formula: $\text{H}_6\text{NO}_2\text{P}$

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 $\text{Ba}(\text{H}_2\text{PO}_2)_2 + (\text{NH}_4)_2\text{SO}_4$

Physical Description: Cryst. (H_2O)

Melting Point: Mp 200°

Hazard & Toxicity: Dec. on heating (240°) with evolution of PH_3 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