



>> **Name: Ammonium nitrite**

Synonym(s): Nitrous acid ammonium salt, 10Cl

CAS Registry Number: 13446-48-5

NH_4NO_2

Molecular Formula: $\text{H}_4\text{N}_2\text{O}_2$

Molecular Weight: 64.044

Accurate Mass: 64.027278

Percentage Composition: H 6.30%; N 43.74%; O 49.96%

Source/Synthesis: Synth. from $\text{Ba}(\text{NO}_3)_2 + (\text{NH}_4)_2\text{SO}_4$

Physical Description: Deliquescent colourless cryst.

Solubility: Sol. H_2O , EtOH

Other Data: Dec. by light in H_2O to NO_2

Hazard & Toxicity: Potentially explosive; may detonate at 60-70° to form $\text{N}_2 + \text{H}_2\text{O}$

References:

Nouveau Traite de Chimie Minerale, (ed. Pascal, P.), 1956, **10**, 204-208

Harrison, C.C. *et al.*, *J. Photochem. Photobiol., A*, 1995, **89**, 215-219, (dec)