



>>Entry Name: Manganese hypophosphite

Synonym(s): Manganese(II) hydrogen phosphite. Manganese phosphinate

CAS Registry Number: 10043-84-2

$\text{Mn}(\text{H}_2\text{PO}_2)_2$

Molecular Formula: $\text{H}_4\text{MnO}_4\text{P}_2$

Molecular Weight: 184.915

Accurate Mass: 184.896531

Percentage Composition: H 2.18%; Mn 29.71%; O 34.61%; P 33.50%

Use/Importance: Heat and light stabilizer for polyamide fibres

Physical Description: Pale pink granules or powder

>>Derivative: Monohydrate

CAS Registry Number: 7783-16-6

Molecular Formula: $\text{H}_6\text{MnO}_5\text{P}_2$

Molecular Weight: 202.93

Accurate Mass: 202.907096

Percentage Composition: H 2.98%; Mn 27.07%; O 39.42%; P 30.53%

Source/Synthesis: Synth. from $\text{Ba}(\text{H}_2\text{PO}_2)_2 + \text{MnSO}_4$

Physical Description: Pink cryst.

Other Data: Stable to 250°

References:

Ger. Pat., 1974, 1 669 509; *CA*, **82**, 99903z, (*stabilizer, use*)

Golub, A.M. *et al.*, *Ukr. Khim. Zh. (Russ. edn.)*, 1977, **43**, 1019-1021; *CA*, **87**, 210380w, (*synth*)

Weakley, T.J.R. *et al.*, *Acta Cryst. B*, 1979, **35**, 42-45, (*cryst struct*)

U.S. Pat., 1981, 4 282 260; *CA*, **95**, 131194a, (*preservative, use*)

Lewis, R.J., *Food Additives Handbook*, Van Nostrand Reinhold International, New York, 1989, MAS815

Marcos, M.D. *et al.*, *J. Alloys Compd.*, 1992, **188**, 133-137, (*cryst struct*)