



>>Entry Name: Silver(I) nitrite (AgNO₂)

Synonym(s): Argentous nitrite

CAS Registry Number: 7783-99-5

AgNO₂

Molecular Formula: AgNO₂

Molecular Weight: 153.874

Accurate Mass: 152.897996

Percentage Composition: Ag 70.10%; N 9.10%; O 20.80%

Use/Importance: Used to prepare standard NaNO₂ soln. for water anal.; reagent for prepn. of aliphatic nitro-compds. Commercially available

Physical Description: Non-hygroscopic pale yellow needles

Solubility: Mod. sol. boiling H₂O; insol. alcohols

Other Data: Dec. at 140°. Dec. by dil. acids or by prolonged boiling in H₂O. $\Delta H_f^\circ -24.86 \text{ kJ mol}^{-1}$, $\Delta G_f^\circ 11.11 \text{ kJ mol}^{-1}$

Aldrich: 22718-8

Fluka: 85240

Sigma: S2523

References:

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 1239A, (*ir*)

Hess, H., *Ann. Phys. (Leipzig)*, 1828, **12**, 257, (*synth*)

Prasad, M. *et al.*, *Proc. Indian Acad. Sci., Sect. A, Sect. A*, 1950, **31**, 389, (*magnetism*)

Haworth, F.E., *J. Appl. Phys.*, 1951, **22**, 606, (*thermal props*)

Plummer, C.W. *et al.*, *J.A.C.S.*, 1954, **76**, 2720, (*synth, use*)

Eberhardt, W.H., *J. Chem. Phys.*, 1954, **22**, 1462, (*uv*)

Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1967, **1**, 1011, (*use*)

Patil, K.C. *et al.*, *Inorg. Chim. Acta*, 1967, **1**, 155, (*ir*)

Ohba, S. *et al.*, *Acta Cryst. B*, 1981, **37**, 1911, (*cryst struct*)

Merck Index, 11th edn., 1989, No. 8466