



>>Entry Name: **Pentyl nitrite**, 9CI

Synonym(s): *n*-Amyl nitrite

CAS Registry Number: 463-04-7

$\text{H}_3\text{C}(\text{CH}_2)_4\text{ONO}$

Molecular Formula: $\text{C}_5\text{H}_{11}\text{NO}_2$

Molecular Weight: 117.147

Accurate Mass: 117.078979

Percentage Composition: C 51.26%; H 9.46%; N 11.96%; O 27.31%

Use/Importance: Can be used for diazotisations

Physical Description: Liq.

Boiling Point: Bp 104°. Bp₁₃₂ 51-52°

Density: d^{20}_4 0.853

Refractive Index: n^{20}_D 1.3851

Hazard & Toxicity: Highly flammable, fl. p. 10°. Inhalation causes flushing of skin, rapid pulse, headache and fall in blood pressure

References:

Sadtler Standard Proton NMR Spectra, 9133, (*pmr*)

Beckwith, A.L.J. *et al.*, *J.C.S.*, 1962, 130, (*synth*)

Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1975, **5**, 18

Suzuki, S. *et al.*, *Bull. Chem. Soc. Jpn.*, 1979, **52**, 65, (*ms*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, A0L500

Luxon, S.G., *Hazards in the Chemical Laboratory*, 5th edn., Royal Society of Chemistry, 1992, 77