



>>Entry Name: Tripropoxyborane

Synonym(s): Boric acid (H_3BO_3) tripropyl ester, 10Cl, 9Cl, 8Cl. Tripropyl borate. Propyl borate. Tripropyl orthoborate. Tris(propoxy)borane

CAS Registry Number: 688-71-1

$(\text{H}_3\text{CCH}_2\text{CH}_2\text{O})_3\text{B}$

Molecular Formula: $\text{C}_9\text{H}_{21}\text{BO}_3$

Molecular Weight: 188.074

Accurate Mass: 188.158375

Percentage Composition: C 57.48%; H 11.25%; B 5.75%; O 25.52%

Use/Importance: Catalyst for crosslinking of epoxy resins; used as heat stabilizer; insect sterilant

Physical Description: Moisture-sensitive liq.

Boiling Point: Bp 177° . Bp₁₂ $68.5\text{-}69^\circ$

Solubility: Sol. non-hydroxylic solvs.

Density: d_4^{20} 0.858086

Refractive Index: n_D^{20} 1.3948 n_D^{20} 1.3969

Aldrich: 22492-8

Rare Chemicals Library: S35677-8

References:

Aldrich Library of ^{13}C and ^1H FT NMR Spectra, 1992, **3**, 725B, (nmr)

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 1132C, (ir)

Aldrich Library of FT-IR Spectra: Vapor Phase, 1989, **3**, 1676D, (ir)

Gerrard, W. *et al.*, *J.C.S.*, 1955, 3084, (synth, props)

O'Brien, K.G., *Aust. J. Chem.*, 1957, **10**, 91, (synth, props)

Fallon, P.J. *et al.*, *Int. J. Mass Spectrom. Ion Phys.*, 1968, **1**, 133, (ms)

Christopher, P.M. *et al.*, *J. Chem. Eng. Data*, 1969, **14**, 437, (props)

Maijs, L. *et al.*, *CA*, 1973, **79**, 131073, (pmr)

Pola, M. *et al.*, *Coll. Czech. Chem. Comm.*, 1979, **44**, 3688, (ir, props)

Jaworski, K. *et al.*, *Przem. Chem.*, 1981, **60**, 18; *CA*, **95**, 42269m, (synth)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, TMY750