



>>Entry Name: Trioctyloxyborane

Synonym(s): Boric acid (H_3BO_3) trioctyl ester, 10Cl, 9Cl, 8Cl. Octyl borate. Trioctyl borate. Trioctyl orthoborate. Tris(octyloxy)borane

CAS Registry Number: 2467-12-1

$[\text{H}_3\text{C}(\text{CH}_2)_7\text{O}]_3\text{B}$

Molecular Formula: $\text{C}_{24}\text{H}_{51}\text{BO}_3$

Molecular Weight: 398.476

Accurate Mass: 398.393125

Percentage Composition: C 72.34%; H 12.90%; B 2.71%; O 12.05%

Use/Importance: Heat stabilizer, plasticizer, insect sterilant, catalyst

Physical Description: Moisture-sensitive liq.

Boiling Point: $\text{Bp}_{0.5}$ 182-184°

Solubility: Sol. non-hydroxylic solvs.

Density: d_4^{20} 0.855

Refractive Index: n_D^{20} 1.4377 n_D^{20} 1.4360

Rare Chemicals Library: S51297-4

References:

Arbuzov, B.A. *et al.*, *Dokl. Akad. Nauk SSSR*, 1947, **55**, 411, (*props*)

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

Maijs, L. *et al.*, *CA*, 1972, **76**, 51486q, (*props*)

Novak, F.I. *et al.*, *CA*, 1979, **90**, 167981r, (*props*)

U.S. Pat., 1980, 4 211 679; *CA*, **93**, 169189z, (*use*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, TMO250