



>>Entry Name: Trioctadecyloxyborane

Synonym(s): Boric acid (H_3BO_3) trioctadecyl ester, 10Cl, 9Cl, 8Cl. Octadecyl borate. Trioctadecyl borate. Trioctadecyl orthoborate. Tris(octadecyloxy)borane

CAS Registry Number: 5337-41-7

$[\text{H}_3\text{C}(\text{CH}_2)_{17}\text{O}]_3\text{B}$

Molecular Formula: $\text{C}_{54}\text{H}_{111}\text{BO}_3$

Molecular Weight: 819.28

Accurate Mass: 818.862625

Percentage Composition: C 79.17%; H 13.66%; B 1.32%; O 5.86%

Use/Importance: Plasticizer, stabilizing agent, vulcanizing agent for polymeric materials

Physical Description: Solid, slowly hydrolysed by moisture

Melting Point: Mp 41-44°

Boiling Point: Bp_{0.3} 339-343°

Solubility: Sol. non-hydroxylic solvs.

Rare Chemicals Library: S51304-0

References:

Steinberg, H. *et al.*, *Ind. Eng. Chem.*, 1957, **49**, 174, (*synth*)

Japan. Pat., 1976, 76 107 348; *CA*, **86**, 18473s, (*use*)

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, TMN750