



>>Entry Name: (Ethylamine)trifluoroboron

Synonym(s): (Ethanamine)trifluoroboron, 10Cl. Ethanamine compd. with trifluoroborane, 9Cl. Ethylamine compd. with boron fluoride (BF₃) (1:1), 8Cl. Boron trifluoride ethylamine. Trifluoroborane ethylamine

CAS Registry Number: 75-23-0

EtNH₂-BF₃

Molecular Formula: C₂H₇BF₃N

Molecular Weight: 112.89

Accurate Mass: 113.062363

Percentage Composition: C 21.28%; H 6.25%; B 9.58%; F 50.49%; N 12.41%

Use/Importance: Widely used as a catalyst in industrial processes

Physical Description: Cryst. Et₂O, dec. rapidly when heated in air above Mp

Melting Point: Mp 75-76°. Mp 89°

Boiling Point: Bp₁ 147-148°

Solubility: Sol. C₆H₆, sl. sol. Et₂O

Aldrich: 29224-9

Fluka: 15730

References:

Kraus, C.A. *et al.*, *J.A.C.S.*, 1929, **51**, 2690, (*synth*)

Gallais, F. *et al.*, *CA*, 1960, **54**, 16064d, (*struct, mord*)

Spitsyn, V.I. *et al.*, *Dokl. Akad. Nauk SSSR, Ser. Khim.*, 1965, **160**, 1101, (*synth*)

Meek, D.W. *et al.*, *Inorg. Chem.*, 1966, **5**, 445, (*nmr*)

Elter, G. *et al.*, *J. Organomet. Chem.*, 1972, **36**, 257

Barber, M. *et al.*, *J.C.S. Faraday 2*, 1973, **69**, 551, (*pe*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, EFU500