



>>Entry Name: Iron(III) ethoxide

Synonym(s): Ethanol iron(3+) salt (3:1). Ferric ethoxide. Triethoxyiron(III)

CAS Registry Number: 5058-42-4

Fe(OEt)₃

Molecular Formula: C₆H₁₅FeO₃

Molecular Weight: 191.03

Accurate Mass: 191.037059

Percentage Composition: C 37.73%; H 7.91%; Fe 29.23%; O 25.13%

Source/Synthesis: Synth. from FeCl₃ + EtOH + NH₃

Physical Description: Brown cryst. (EtOH)

Melting Point: Mp 120°

Boiling Point: Bp_{0.1} 155°

Solubility: Sol. C₆H₆, EtOH

Other Data: Magnetic behaviour supports cluster formn. Antiferromagnetic coupling of $S = 5/2$ Fe centres obsd.

Other: Gelest AKI400

>>Derivative: Trimer

Molecular Formula: C₁₈H₄₅Fe₃O₉

Molecular Weight: 573.089

Accurate Mass: 573.111177

Percentage Composition: C 37.73%; H 7.91%; Fe 29.23%; O 25.13%

References:

Bradley, D.C. *et al.*, *J.C.S.*, 1958, 126, (*synth*)

Adams, R.W. *et al.*, *Inorg. Chem.*, 1966, **5**, 346, (*magnetism*)