



>>Entry Name: Aluminium ethoxide

Synonym(s): Ethanol aluminium salt, 9Cl. Ethyl alcohol aluminium salt, 8Cl

CAS Registry Number: 555-75-9

Al(OEt)₃

Molecular Formula: C₆H₁₅AlO₃

Molecular Weight: 162.164

Accurate Mass: 162.083659

Percentage Composition: C 44.44%; H 9.32%; Al 16.64%; O 29.60%

General Statement: Mixt. of oligomers in soln. Phys. props. drastically affected by traces of moisture

Source/Synthesis: Synth. from Al + EtOH

Use/Importance: Reagent for the redn. of carbonyl compds. to alcohols. Catalyst for prepn. of esters from aldehydes and alcoholysis of diketones. Polym. catalyst.

Physical Description: Liq. which solidifies to a white glassy solid

Melting Point: Mp 140°

Boiling Point: Bp₇ 200° (lit. gives a pressure range). Bp₃ 175-180°

Solubility: Sl. sol. xylene

Hazard & Toxicity: Highly irritant

Aldrich: 23585-7

Fluka: 6170

Other: Gelest AKA060

References:

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 1140D, (*ir*)

Mehrotra, R.C., *J. Indian Chem. Soc.*, 1953, **30**, 585, (*synth*)

Wilhoit, R.C. *et al.*, *J. Inorg. Nucl. Chem.*, 1962, **24**, 851, (*synth, ir*)

Oliver, J.G. *et al.*, *J.C.S.(A)*, 1970, 2347, (*ms*)