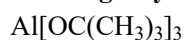




>>Entry Name: Aluminium *tert*-butoxide

Synonym(s): 2-Methyl-2-propanol aluminium salt, 9Cl. *tert*-Butyl alcohol aluminium salt, 8Cl. Aluminium 2-methyl-2-propoxide

CAS Registry Number: 556-91-2



Molecular Formula: $\text{C}_{12}\text{H}_{27}\text{AlO}_3$

Molecular Weight: 246.325

Accurate Mass: 246.177559

Percentage Composition: C 58.51%; H 11.05%; Al 10.95%; O 19.49%

Other Data: Traces of moisture or alcohols cause melting at 160-200°. $\text{Al}_2(\text{NMe}_2)(\text{OBu}^t)_5$ also descr.

Aldrich: 23584-9

Fluka: 6201

Other: Gelest AKA030

>>Derivative: Dimer

Molecular Formula: $\text{C}_{24}\text{H}_{54}\text{Al}_2\text{O}_6$

Molecular Weight: 492.65

Accurate Mass: 492.355118

Percentage Composition: C 58.51%; H 11.05%; Al 10.95%; O 19.49%

Source/Synthesis: Synth. from $\text{Al}_2(\text{NMe}_2)_6$ and Bu^tOH in C_6H_6

Use/Importance: Condensing agent. Reagent for the Oppenauer oxidn. of alcohols to carbonyl compds.

Physical Description: Colourless cryst. (toluene)

Melting Point: Mp 300° (sealed tube)

Boiling Point: Subl. 180°

>>Derivative: NHMe_2 complex

Molecular Formula: $\text{C}_{14}\text{H}_{34}\text{AlNO}_3$

Molecular Weight: 291.409

Percentage Composition: C 57.70%; H 11.76%; Al 9.26%; N 4.81%; O 16.47%

Physical Description: Moisture-sensitive white cryst. (toluene)

Other Data: Subl._{0.1} 40-50°

References: