



>>Entry Name: Aluminium 2-butoxide

Synonym(s): 2-Butanol aluminium salt, 9Cl. *sec*-Butyl alcohol aluminium salt, 8Cl. Aluminium tri-*sec*-butoxide

CAS Registry Number: 2269-22-9

$\text{Al}[\text{OCH}(\text{CH}_3)\text{CH}_2\text{CH}_3]_3$

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%

Source/Synthesis: Synth. from Al and $\text{H}_3\text{CCH}_2\text{CH}(\text{CH}_3)\text{OH}$

Use/Importance: Condensing agent; used for redn. of ketones and oxidn. of alcohols

Physical Description: Powder

Boiling Point: Bp_{10} 160°

Other Data: Sublimes *in vacuo*

Hazard & Toxicity: Fl. p. 27°

Aldrich: 20107-3

Fluka: 6190

Other: Gelest AKA020

References:

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

Jackman, L.M. *et al.*, *J.C.S.*, 1952, 3252, (*synth*)

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

Coffey, S. *et al.*, *J.C.S.*, 1954, 2468, (*synth*)

Guertin, D.L. *et al.*, *J. Phys. Chem.*, 1956, **60**, 1018, (*ir*)

Kozlova, I.K. *et al.*, *CA*, 1968, **70**, 3179, (*synth*)