



>>Entry Name: Tripropylaluminium

Synonym(s): Aluminium tripropyl. Tripropylalane

CAS Registry Number: 102-67-0



Molecular Formula: $\text{C}_9\text{H}_{21}\text{Al}$

Molecular Weight: 156.246

Accurate Mass: 156.145864

Percentage Composition: C 69.18%; H 13.55%; Al 17.27%

Source/Synthesis: Synth. from Al, H_2 and $\text{H}_3\text{CCH}=\text{CH}_2$ at 110°

Use/Importance: Polym. catalyst for alkenes

Physical Description: Air- and moisture-sensitive liq.

Melting Point: Mp -107°

Boiling Point: Bp₂ $82-84^\circ$. Bp_{0.2} 56°

Aldrich: 25724-9

>>Derivative: Anisole complex

Molecular Formula: $\text{C}_{16}\text{H}_{29}\text{AlO}$

Molecular Weight: 264.386

Accurate Mass: 264.203379

Percentage Composition: C 72.69%; H 11.06%; Al 10.21%; O 6.05%

Physical Description: Colourless liq.

Boiling Point: Bp_{0.2} $100-105^\circ$

References:

Ziegler, K. *et al.*, *Annalen*, 1957, **608**, 1; 1960, **629**, 1, (*synth*)

Köster, R., *Annalen*, 1958, **618**, 31, (*synth*)

Hoffmann, E.G., *Z. Elektrochem.*, 1960, **64**, 616, (*ir, Raman*)

Crompton, T.R. *et al.*, *Analyst (London)*, 1963, **88**, 713, (*anal*)

Poole, C.P. *et al.*, *J. Chem. Phys.*, 1965, **42**, 2576, (*nmr*)

Ramey, K.C. *et al.*, *J. Phys. Chem.*, 1965, **69**, 3418, (*pmr*)

Smith, G.H. *et al.*, *J. Phys. Chem.*, 1968, **72**, 3567, (*deriv*)

Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1975, **5**, 734, (*use*)

Benn, R. *et al.*, *J. Organomet. Chem.*, 1987, **333**, 155, (*Al-27 nmr*)

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