



>>Entry Name: Hydroxybis(octadecanoato-*O*)aluminium

Synonym(s): Hydroxyaluminium distearate. Aluminium distearate. Hydroxybis(stearato)aluminium. Aluminium hydroxide distearate

CAS Registry Number: 300-92-5

$[\text{H}_3\text{C}(\text{CH}_2)_{16}\text{COO}]_2\text{AlOH}$

Molecular Formula: $\text{C}_{36}\text{H}_{71}\text{AlO}_5$

Molecular Weight: 610.935

Accurate Mass: 610.511689

Percentage Composition: C 70.78%; H 11.71%; Al 4.42%; O 13.09%

Source/Synthesis: Synth. from $\text{Al}_2(\text{SO}_4)_3$ or AlCl_3 + Na stearate in H_2O at pH 7.3, or from $\text{Al}(\text{OPr}^i)_3$ + stearic acid

Use/Importance: Thickener for paints, inks, greases, lubricant in cosmetics; water repellent

Physical Description: White powder

Melting Point: Mp 145°. Mp 175-177°

Solubility: Insol. H_2O

References:

Smith, G.H. *et al.*, *J.A.C.S.*, 1948, **70**, 1053-1054, (*synth*)

Friberg, S. *et al.*, *Acta Chem. Scand.*, 1965, **19**, 2267-2273, (*synth, ir*)

J. Am. Coll. Toxicol., 1982, **1**, 143-177, (*props, tox, rev*)

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