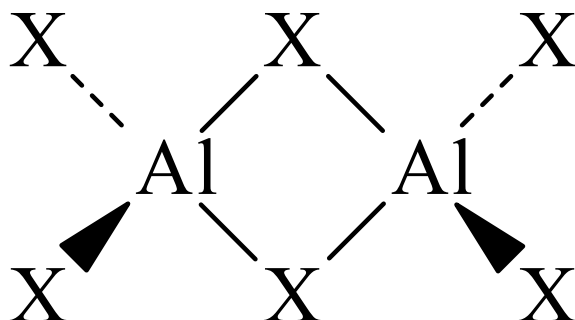




>>Entry Name: Aluminium(III) bromide (AlBr₃)

Synonym(s): Aluminium tribromide



Dimer



CAS Registry Number: 7727-15-3

Molecular Formula: AlBr₃

Molecular Weight: 266.693

Accurate Mass: 263.796547

Percentage Composition: Al 10.12%; Br 89.88%

studied in Ar matrix

Source/Synthesis: Synth. from elements at 100°

Use/Importance: Lewis acid. Friedel Crafts catalyst. Catalyst for alkane isom. Agent for chemical transport in metal halide synth. Commercially available

Other Data: Forms many complexes with Lewis bases and weak adducts with aromatic hydrocarbons, alkenes and alkynes. $\Delta H_f^\circ(s)$ -494.8 kJ mol⁻¹ (per AlBr₃); $\Delta H_f^\circ(298)$ -527.2 kJ mol⁻¹; S° 180.2 J K⁻¹ mol⁻¹

Hazard & Toxicity: Reacts violently with H₂O

Aldrich: 21007-2

Fluka: 6180

Sigma: A8080