



>>Entry Name: Aluminium oxide (Al₂O₃)

Synonym(s): Alumina. Dialuminium trioxide. Aluminium sesquioxide. Alundum. Aloxite. Alumite. Many other names

CAS Registry Number: 1344-28-1

Related CAS Registry Numbers(s): 1333-84-2 12252-63-0 12522-88-2

Extra CAS Registry Numbers(s): 53809-96-4 157516-29-5
Al₂O₃

Molecular Formula: Al₂O₃

Molecular Weight: 101.961

Accurate Mass: 101.947823

Percentage Composition: Al 52.93%; O 47.07%

Use/Importance: Commercially available

Physical Description: White solid

Solubility: Sol. hot NaOH

Aldrich: 26774-0

Fluka: 6285

Sigma: H8006

>>Derivative: ¼ Hydrate

Synonym(s): Akdalaite

CAS Registry Number: 12043-15-1

Source/Synthesis: Mineral from Kazakhstan, USSR

Physical Description: White translucent cryst.

>>Variant: α-form

Synonym(s): Corundum. Emery

CAS Registry Number: 1302-74-5

Molecular Formula: Al₂O₃

Molecular Weight: 101.961

Accurate Mass: 101.947823

Percentage Composition: Al 52.93%; O 47.07%

oxide with Al in *O_h* holes; solid solns. with small amounts of M₂O₃ give rise to various gem varieties

Source/Synthesis: Mineral of haematite group of widespread occurrence or may be synth. from γ-form or any hydrous oxide ≤450°