



>>Entry Name: Lanthanum(III) oxide (La₂O₃)

Synonym(s): Lanthana

CAS Registry Number: 1312-81-8

Extra CAS Registry Numbers(s): 12680-02-3

La₂O₃

Molecular Formula: La₂O₃

Molecular Weight: 325.809

Accurate Mass: 325.797439

Percentage Composition: La 85.27%; O 14.73%

Use/Importance: Catalyst for many reactions e.g. when doped with CdO, catalyses oxidation of CO. Doped with Pd catalyses methanation of CO by H₂. Used to make ferrite magnets when impregnated with Li₂O or SrO(1%). V. efficient selective catalyst for oxidative coupling of CH₄ to C₂H₆ + C₂H₄. Used to improve temp. dependence + dielectric props. of BaTiO₃, SrTiO₃ ferroelectrics. Used to make fibre optics and optical glass

Physical Description: White solid

Melting Point: Mp 2256° (2304°, 2315°)

Boiling Point: Bp 4200° (3620°)

Solubility: Insol. H₂O

Aldrich: 21161-3

Fluka: 61550

Sigma: L4000

References:

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