



>>Entry Name: Neodymium(III) oxide (Nd₂O₃)

Synonym(s): Neodymia

CAS Registry Number: 1313-97-9

Extra CAS Registry Numbers(s): 12648-30-5

Nd₂O₃

Molecular Formula: Nd₂O₃

Molecular Weight: 336.478

Accurate Mass: 331.800183

Percentage Composition: Nd 85.74%; O 14.26%

Use/Importance: Used in many catalytic systems. After H₂ reduction, catalyses hydrogenation of C₂H₄. Used in glasses for colour TV tubes

Physical Description: Light blue solid (red fluorescence)

Melting Point: Mp 2233°

Boiling Point: Bp 3760°

Solubility: Insol. H₂O; sol. acid

Other Data: Synth. by thermal dec. of Nd salts

Aldrich: 20385-8

Fluka: 72130

Sigma: N1751

References:

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Boldish, S.I. *et al.*, *Spectrochim. Acta A*, 1979, **35**, 1235, (*ir, Raman*)

Greis, O., *J. Solid State Chem.*, 1980, **34**, 39, (*cryst struct*)

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