



>>Entry Name: Terbium(III) oxide (Tb₂O₃)

Synonym(s): Terbia

CAS Registry Number: 12036-41-8

Extra CAS Registry Numbers(s): 12738-76-0

Tb₂O₃

Molecular Formula: O₃Tb₂

Molecular Weight: 365.849

Accurate Mass: 365.835429

Percentage Composition: O 13.12%; Tb 86.88%

Physical Description: White solid

Melting Point: Mp 2303°

Solubility: Insol. H₂O; sol. acid

Other Data: μ_{eff} = 9.63μ_B

References:

Hubbert-Paletta, E. *et al.*, *Z. Anorg. Allg. Chem.*, 1968, **363**, 145, (*synth, cryst struct*)

Gmelin Handbook Inorg. Chem., Syst. No. 39, 1974, **C1**, 387, (*rev, bibl*)

Andreeva, A.F. *et al.*, *Izv. Akad. Nauk SSSR, Neorg. Mater.*, 1978, **14**, 502, (*synth*)

Lal, H.B. *et al.*, *Pramana*, 1978, **10**, 409, (*magnetism*)

Eyring, L., *Handbook on the Physics and Chemistry of Rare Earths*, 1979, **3**, 337, (*rev*)

McPherson, R., *J. Mater. Sci.*, 1983, **18**, 1341, (*synth*)