



>>Entry Name: Neodymium(III) oxalate

Synonym(s): Tris(oxalato)dineodymium(III). Tris(ethanedioato)dineodymium(III)

CAS Registry Number: 1186-50-1

Related CAS Registry Numbers(s): 10171-49-0 28877-87-4

$\text{Nd}_2(\text{C}_2\text{O}_4)_3$

Molecular Formula: $\text{C}_6\text{Nd}_2\text{O}_{12}$

Molecular Weight: 552.539

Accurate Mass: 547.754418

Percentage Composition: C 13.04%; Nd 52.21%; O 34.75%

>>Derivative: Decahydrate

CAS Registry Number: 14551-74-7

Molecular Formula: $\text{C}_6\text{H}_{20}\text{Nd}_2\text{O}_{22}$

Molecular Weight: 732.691

Accurate Mass: 727.860068

Percentage Composition: C 9.84%; H 2.75%; Nd 39.37%; O 48.04%

Use/Importance: Isostructural series for Y, La - Ho

Physical Description: Violet cryst.

Other Data: 9-Coord., tricapped trigonal prism, Nd bound to $3\text{H}_2\text{O}$, 3 bidentate oxalate

References:

Wendlandt, W.W., *Anal. Chem.*, 1958, **30**, 58, (*synth, tga*)

Weigel, F. *et al.*, *Z. Anorg. Allg. Chem.*, 1966, **345**, 119, (*synth, struct*)

Ollendorff, W. *et al.*, *Inorg. Nucl. Chem. Lett.*, 1969, **5**, 263, (*struct*)

Hansson, E., *Acta Chem. Scand.*, 1970, **24**, 2969; 1973, **27**, 2852, (*cryst struct*)

Bezdenzhnykh, G.V. *et al.*, *Zh. Neorg. Khim.*, 1971, **16**, 2943; *Russ. J. Inorg. Chem. (Engl. Transl.)*, 1971, **16**, 1563, (*ir*)

Sharov, V.A. *et al.*, *Koord. Khim.*, 1979, **5**, 653; *Sov. J. Coord. Chem. (Engl. Transl.)*, 1979, **5**, 512, (*magnetism*)

Fuller, M.J. *et al.*, *J. Less-Common Met.*, 1980, **70**, 127, (*tga, dta*)

Jeyaraj, G.L. *et al.*, *Thermochim. Acta*, 1983, **71**, 345, (*dta*)

Gmelin Handbook Inorg. Chem., Syst. No. 39, 1984, **D5**, 124, (*rev, bibl*)

Morris, D.E. *et al.*, *J. Raman Spectrosc.*, 1988, **19**, 231, (*ir, Raman*)