



>>Entry Name: Lutetium(III) sulfate ($\text{Lu}_2(\text{SO}_4)_3$)

CAS Registry Number: 14986-89-1

$\text{Lu}_2(\text{SO}_4)_3$

Molecular Formula: $\text{Lu}_2\text{O}_{12}\text{S}_3$

Molecular Weight: 638.125

Accurate Mass: 637.73673

Percentage Composition: Lu 54.84%; O 30.09%; S 15.08%

Source/Synthesis: Prepd. by dehydration of hydrate

Use/Importance: Commercially available as hydrate

Physical Description: White solid

>>Derivative: Octahydrate

CAS Registry Number: 13473-77-3

Physical Description: Colourless cryst.

Solubility: Sol. H_2O

References:

von Welsbach, C.A., *Monatsh. Chem.*, 1908, **29**, 181, (*synth*)

Jackson, K.S. *et al.*, *J.C.S.*, 1930, 1687, (*soly*)

Bukovec, N. *et al.*, *Vestn. Slov. Kem. Drus.*, 1975, **22**, 5; *CA*, **86**, 64712, (*synth*)

Pokrovskii, A.N. *et al.*, *Zh. Neorg. Khim.*, 1976, **21**, 567; *Russ. J. Inorg. Chem. (Engl. Transl.)*, 1976, **21**, 305, (*tga, dta*)

Gmelin Handbook Inorg. Chem., Syst. No. 39, 1981, **C8**, 196, (*rev*)

Saito, A., *Thermochim. Acta*, 1988, **124**, 217, (*synth, dta*)