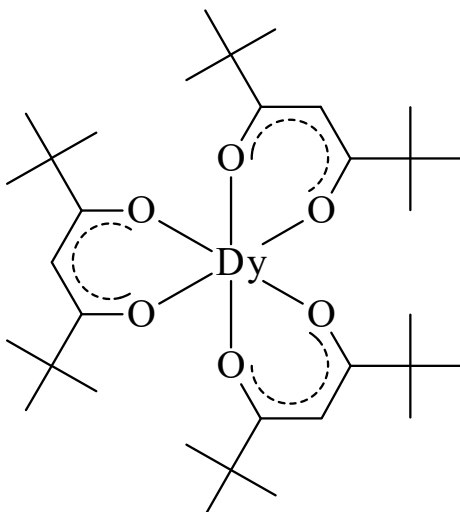




>>Entry Name: Tris(2,2,6,6-tetramethyl-3,5-heptanedionato-*O,O'*)dysprosium(III)

Synonym(s): Tris(dipivaloylmethanido)dysprosium(III). Dysprosium tris(dipivaloylmethane). Resolve-AlDy. Dy(thd)<sub>3</sub>



CAS Registry Number: 15522-69-7

Molecular Formula: C<sub>33</sub>H<sub>57</sub>DyO<sub>6</sub>

Molecular Weight: 712.31

Accurate Mass: 713.344686

Percentage Composition: C 55.64%; H 8.07%; Dy 22.81%; O 13.48%

Use/Importance: Commercially available. Nmr upfield shift reagent

Physical Description: Hygroscopic white cryst. (hexane)

Melting Point: Mp 180-183.5° (182-183°)

Boiling Point: Subl. 180° *in vacuo*

Solubility: Sol. C<sub>6</sub>H<sub>6</sub>, CCl<sub>4</sub>, CHCl<sub>3</sub>, MeOH, EtOH, EtOAc, hexane

Other Data: Paramagnetic,  $\mu_{\text{eff}} = 10.3\mu_{\text{B}}$

Aldrich: 16273-6

Sigma: T4141

Other: Gelest AKD272

>>Derivative: Monohydrate

Molecular Formula: C<sub>33</sub>H<sub>59</sub>DyO<sub>7</sub>

Molecular Weight: 730.325

Accurate Mass: 731.355251

Percentage Composition: C 54.27%; H 8.14%; Dy 22.25%; O 15.34%

Physical Description: White cryst.

>>Derivative: Py complex

CAS Registry Number: 33135-12-5

Molecular Formula: C<sub>38</sub>H<sub>62</sub>DyNO<sub>6</sub>

Molecular Weight: 791.411

Accurate Mass: 792.386885

Percentage Composition: C 57.67%; H 7.90%; Dy 20.53%; N 1.77%; O 12.13%

Physical Description: White cryst.

Melting Point: Mp 135-137°

Solubility: Sol. Py, C<sub>6</sub>H<sub>6</sub>

Other Data:  $\mu_{\text{eff}} = 10.7\mu_{\text{B}}$

>>Derivative: Bipy complex

CAS Registry Number: 33135-13-6

Molecular Formula: C<sub>43</sub>H<sub>65</sub>DyN<sub>2</sub>O<sub>6</sub>

Molecular Weight: 868.496

Accurate Mass: 869.413434

Percentage Composition: C 59.47%; H 7.54%; Dy 18.71%; N 3.23%; O 11.05%

Physical Description: White cryst.

Melting Point: Mp 193°

Solubility: Sol. CCl<sub>4</sub>, hexane

Other Data:  $\mu_{\text{eff}} = 10.2\mu_{\text{B}}$