



>>Entry Name: **Tris(2,2,6,6-tetramethyl-3,5-heptanedionato-*O,O'*)erbium(III)**
Synonym(s): Tris(dipivaloylmethanido)erbium(III). Erbium tris(dipivaloylmethane)

CAS Registry Number: 35733-23-4

As Tris(2,4-pentanedionato-*O,O'*)erbium(III), [HVQ25-A](#) with
 $R^1 = R^2 = C(CH_3)_3$

Molecular Formula: $C_{33}H_{57}ErO_6$

Molecular Weight: 717.07

Accurate Mass: 715.345805

Percentage Composition: C 55.28%; H 8.01%; Er 23.33%; O 13.39%

Physical Description: Hygroscopic pink cryst. (hexane)

Melting Point: Mp 179-181°

Solubility: Sol. C_6H_6 , $CHCl_3$, CCl_4 , MeOH, EtOH, EtOAc, hexane

Other Data: Paramagnetic, $\mu_{eff} = 9.3\mu_B$

Aldrich: 43407-8

Other: Gelest AKE282

>>Derivative: Py complex

Synonym(s): (Pyridine)tris(2,2,6,6-tetramethyl-3,5-heptanedionato-*O,O'*)erbium(III)

CAS Registry Number: 33088-22-1

Molecular Formula: $C_{38}H_{62}ErNO_6$

Molecular Weight: 796.171

Accurate Mass: 794.388004

Percentage Composition: C 57.33%; H 7.85%; Er 21.01%; N 1.76%; O 12.06%

Physical Description: Pink cryst.

Melting Point: Mp 131-133°

Solubility: Sol. Py, C_6H_6

Other Data: $\mu_{eff} = 9.5\mu_B$

>>Derivative: Bipy complex

Synonym(s): (2,2'-Bipyridine-*N,N'*)tris(2,2,6,6-tetramethyl-3,5-heptanedionato-*O,O'*)erbium(III)

CAS Registry Number: 33088-23-2

Molecular Formula: $C_{43}H_{65}ErN_2O_6$

Molecular Weight: 873.256

Accurate Mass: 871.414553

Percentage Composition: C 59.14%; H 7.50%; Er 19.15%; N 3.21%; O 10.99%

Physical Description: Pink cryst.

Melting Point: Mp 183°

Solubility: Sol. CCl_4 , hexane

Other Data: $\mu_{eff} = 9.4 \mu_B$

>>Derivative: Phen complex

Synonym(s): (1,10-Phenanthroline-*N,N'*)tris(2,2,6,6-tetramethyl-3,5-heptanedionato-*O,O'*)erbium(III)

CAS Registry Number: 33088-24-3

Molecular Formula: $C_{45}H_{65}ErN_2O_6$

Molecular Weight: 897.278

Accurate Mass: 895.414553

Percentage Composition: C 60.24%; H 7.30%; Er 18.64%; N 3.12%; O 10.70%

Physical Description: Pink cryst.

Melting Point: Mp 254-256°

Solubility: Sol. CCl_4 , hexane

Other Data: $\mu_{eff} = 9.5\mu_B$