



>>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: C₃₃H₅₇ErO₆
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. C₆H₆, CHCl₃, CCl₄, MeOH, EtOH, EtOAc, hexane
Other Data: Paramagnetic, $\mu_{\text{eff}} = 9.3\mu_B$

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: C₃₈H₆₂ErNO₆
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, C₆H₆
Other Data: $\mu_{\text{eff}} = 9.5\mu_B$

>>**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: C₄₃H₆₅ErN₂O₆
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. CCl₄, hexane
Other Data: $\mu_{\text{eff}} = 9.4 \mu_B$

>>**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: C₄₅H₆₅ErN₂O₆
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. CCl₄, hexane
Other Data: $\mu_{\text{eff}} = 9.5\mu_B$