



>>Entry Name: Tris(2,4-pentanedionato-*O,O'*)lanthanum(*III*)

Synonym(s): Tris(acetylacetonato)lanthanum(*III*). Lanthanum(*III*) acetylacetonate. La(acac)₃

CAS Registry Number: 14284-88-9

Related CAS Registry Numbers(s): 22392-66-1 56831-11-9

Extra CAS Registry Numbers(s): 64424-12-0

As Tris(1,1,1,5,5,5-hexafluoro-2,4-pentanedionato-*O,O'*)lanthanum(*III*), [HRN32-J](#) with
 $R^1 = R^2 = CH_3$

Molecular Formula: C₁₅H₂₁LaO₆

Molecular Weight: 436.233

Accurate Mass: 436.040162

Percentage Composition: C 41.30%; H 4.85%; La 31.84%; O 22.01%

Use/Importance: Plastics additive. Commercially available

Physical Description: Moisture-sensitive amorphous solid

Solubility: Sol. acetylacetone

Hazard & Toxicity: Irritant

Other: Gelest AKL430

>>Derivative: Dihydrate

CAS Registry Number: 22203-88-9

Molecular Formula: C₁₅H₂₅LaO₈

Molecular Weight: 472.263

Percentage Composition: C 38.15%; H 5.34%; La 29.41%; O 27.10%

Physical Description: Colourless cryst. (EtOH)

Melting Point: Mp 150-152°

Solubility: Sol. EtOAc

Other Data: 8-Coord. molecule

>>Derivative: Trihydrate

Molecular Formula: C₁₅H₂₇LaO₉

Molecular Weight: 490.278

Percentage Composition: C 36.75%; H 5.55%; La 28.33%; O 29.37%

Physical Description: Colourless cryst. (EtOH/acetylacetone)

Melting Point: Mp 142-143°

Other Data: Presumed 8-coord.

>>Derivative: Isopropanolamine adduct (1:1)

CAS Registry Number: 42730-97-2

Molecular Formula: C₁₈H₃₀LaNO₇

Molecular Weight: 511.343

Percentage Composition: C 42.28%; H 5.91%; La 27.16%; N 2.74%; O 21.90%

Physical Description: White cryst.

Solubility: Sol. EtOAc

>>Derivative: 1,2-Ethylenediamine complex

CAS Registry Number: 42756-41-2

Molecular Formula: C₁₇H₂₉LaN₂O₆

Molecular Weight: 496.331

Accurate Mass: 496.10891

Percentage Composition: C 41.14%; H 5.89%; La 27.99%; N 5.64%; O 19.34%

Physical Description: White cryst.

Solubility: Sol. EtOAc

>>Derivative: 1,2-Propanediamine complex

CAS Registry Number: 42756-43-4

Molecular Formula: C₁₈H₃₁LaN₂O₆

Molecular Weight: 510.358

Accurate Mass: 510.12456

Percentage Composition: C 42.36%; H 6.12%; La 27.22%; N 5.49%; O 18.81%

Physical Description: White cryst.

Solubility: Sol. EtOAc