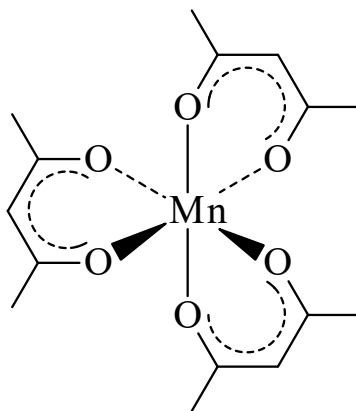




>>Entry Name: Tris(2,4-pentanedionato-*O,O'*)manganese(III), 9CI

Synonym(s): Tris(acetylacetonato)manganese(III). Manganese(III) acetylacetonate. Mn(acac)₃



CAS Registry Number: 14284-89-0

Molecular Formula: C₁₅H₂₁MnO₆

Molecular Weight: 352.265

Accurate Mass: 352.071862

Percentage Composition: C 51.14%; H 6.01%; Mn 15.60%; O 27.25%

Source/Synthesis: Synth. from MnCl₂·4H₂O + acac in the presence of NaOAc followed by oxidation with KMnO₄; or from KMnO₄ and acac

Use/Importance: Commercially available. Catalyst for vinyl polym. Reagent for oxidative coupling of phenols and synth. of 1,2-dioxanes from alkenes

Aldrich: M228-4

Other: Gelest AKM545

>>Variant: α-form

Molecular Formula: C₁₅H₂₁MnO₆

Molecular Weight: 352.265

Accurate Mass: 352.071862

Percentage Composition: C 51.14%; H 6.01%; Mn 15.60%; O 27.25%

>>Variant: β-form

Molecular Formula: C₁₅H₂₁MnO₆

Molecular Weight: 352.265

Accurate Mass: 352.071862

Percentage Composition: C 51.14%; H 6.01%; Mn 15.60%; O 27.25%

Physical Description: Lustrous cryst. (C₆H₆/petrol) which are black or dark brown by reflected light and green by transmitted light

Solubility: Sol. C₆H₆, CHCl₃, EtOAc, sl. sol. H₂O

Other Data: Dec. >150°

>>Variant: γ-form

Molecular Formula: C₁₅H₂₁MnO₆

Molecular Weight: 352.265

Accurate Mass: 352.071862

Percentage Composition: C 51.14%; H 6.01%; Mn 15.60%; O 27.25%

Physical Description: Black-green cryst. (MeOH or MeCN)

References:

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