



CAS Registry Number: 110-40-7

Molecular Formula: C₁₄H₂₆O₄

Molecular Weight: 258.357

Accurate Mass: 258.18311

Percentage Composition: C 65.09%; H 10.14%; O 24.77%

Use/Importance: Flavouring ingredient

Melting Point: Mp 5°

Boiling Point: Bp 305°. Bp₁₀ 172-174°

Solubility: Sl. sol. H₂O; sol. EtOH, Me₂CO. Misc. EtOH, Et₂O

Density: d¹⁵ 0.964

Refractive Index: n_D¹⁵ 1.4367

Hazard & Toxicity: Fl. p. >71°

Aldrich: W23760-4

Fluka: 84830

Rare Chemicals Library: S56574-1

Sigma: S3013

>>Derivative: Dibutyl ester

Synonym(s): Dibutyl decanedioate. Dibutyl sebacate. FEMA 2373

CAS Registry Number: 109-43-3

Molecular Formula: C₁₈H₃₄O₄

Molecular Weight: 314.464

Accurate Mass: 314.24571

Percentage Composition: C 68.75%; H 10.90%; O 20.35%

Use/Importance: Plasticiser for polymers. Used in fruit food flavouring

Physical Description: Liq.

Melting Point: Mp -11°. Mp 12°

Boiling Point: Bp 345°

Solubility: Insol. H₂O

Density: d²⁵ 0.933

Refractive Index: n_D²⁰ 1.4433

Aldrich: D4950-4

Fluka: 84838

Rare Chemicals Library: S42783-7

Sigma: S2875

>>Derivative: Dioctyl ester

Synonym(s): Dioctyl sebacate

CAS Registry Number: 2432-87-3

Molecular Formula: C₂₆H₅₀O₄

Molecular Weight: 426.679

Accurate Mass: 426.37091

Percentage Composition: C 73.19%; H 11.81%; O 15.00%

Use/Importance: Lubricant, plasticiser, rocket fuel binder

Physical Description: Cryst.

Melting Point: Mp 18.2-18.4°

Boiling Point: Bp_{0.5} 218°

Density: d₂₀²⁰ 0.91

Refractive Index: n_D²⁰ 1.4492

>>Derivative: Bis(2-ethylhexyl) ester

see Bis(2-ethylhexyl) decanedioate, [HFK08-L](#)