



Percentage Composition: C 70.55%; H 10.66%; O 18.80%

Physical Description: Liq.

Boiling Point: Bp 211-220°

Density: d_4^{20} 0.94

Refractive Index: n_D^{20} 1.4570

>>**Derivative:** Dihexyl ester

Synonym(s): Dihexyl fumarate

CAS Registry Number: 19139-31-2

Molecular Formula: $C_{16}H_{28}O_4$

Molecular Weight: 284.395

Accurate Mass: 284.19876

Percentage Composition: C 67.57%; H 9.92%; O 22.50%

Physical Description: Liq.

Boiling Point: Bp₆ 180-182°

Density: d^{20} 0.95

Refractive Index: n_D^{20} 1.4518

Other: PB: D26590

>>**Derivative:** Di-Ph ester

Synonym(s): Diphenyl fumarate

CAS Registry Number: 6338-19-8

Molecular Formula: $C_{16}H_{12}O_4$

Molecular Weight: 268.268

Accurate Mass: 268.07356

Percentage Composition: C 71.64%; H 4.51%; O 23.86%

Physical Description: Cryst. (MeOH)

Melting Point: Mp 162-163°

Boiling Point: Bp₁₄ 219°

Solubility: Insol. H₂O; sl. sol. EtOH

>>**Derivative:** Me ester-chloride

Synonym(s): Methyl fumaryl chloride

CAS Registry Number: 17081-97-9

Molecular Formula: $C_5H_5ClO_3$

Molecular Weight: 148.545

Accurate Mass: 147.992722

Percentage Composition: C 40.43%; H 3.39%; Cl 23.87%; O 32.31%

Physical Description: Liq.

Melting Point: Mp 16°

Boiling Point: Bp₁₄ 69.5°

>>**Derivative:** Dichloride

Synonym(s): Fumaroyl chloride

CAS Registry Number: 627-63-4

Molecular Formula: $C_4H_2Cl_2O_2$

Molecular Weight: 152.964

Accurate Mass: 151.943184

Percentage Composition: C 31.41%; H 1.32%; Cl 46.35%; O 20.92%

Physical Description: Oil

Boiling Point: Bp 158-160°

Density: d^{20} 1.408

Refractive Index: n_D^{18} 1.5004

Hazard & Toxicity: Corrosive and irritating to eyes, skin and mucous membranes. LD₅₀ (rat, orl) 810 mg/kg

Aldrich: 15138-6

Fluka: 47960