



>>Entry Name: Diethyl carbonate

Synonym(s): Carbonic acid diethyl ester, 9Cl. Ethyl carbonate‡. Diatol

CAS Registry Number: 105-58-8

O=C(OEt)₂

Molecular Formula: C₅H₁₀O₃

Molecular Weight: 118.132

Accurate Mass: 118.062995

Percentage Composition: C 50.84%; H 8.53%; O 40.63%

Source/Synthesis: Manuf. by phosgenation of Ethanol [BGT97-X](#)

Use/Importance: Widely used for the carbethoxylation of compds. having an active methylene group, also used for prodn. of aliph. polycarbonates, polyurethanes and polyureas and as a solvent

Physical Description: Liquid with pleasant, ethereal odour, low oral toxicity

Melting Point: Mp -43°

Boiling Point: Bp 126°

Solubility: Insol. H₂O; misc. most org. solvs.

Density: d₄²⁰ 0.975

Refractive Index: n_D²⁰ 1.3848

Hazard & Toxicity: Eye and respiratory tract irritant, flammable, fl. p. 25/32°

Aldrich: D9155-1

Fluka: 32080

Sigma: D3167

References:

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