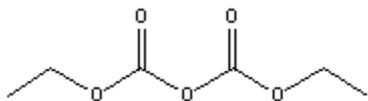


Catalog Number: 150902

Diethylpyrocarbonate

Structure:



Molecular Formula: C₆H₁₀O₅

Molecular Weight: 162.1

CAS # 1609-47-8

Synonym: DEP

Physical Description: Clear, colorless liquid

Recommended Storage: +4°C. **CAUTION: May develop pressure in the bottle during storage. Open with Caution.**

Density: 1.12 gm/ml

Synonym: DEP; DEPC; Diethyl oxydiformate; Pyrocarbonic acid diethyl ester; Dicarboxic acid diethyl ester; Oxydiformic acid diethyl ester

Description: Used to modify proteins and nucleic acids. Ribonuclease inhibitor.

Solubility: Soluble in alcohols, esters, ketones, hydrocarbons. A 50% w/w solution in ethanol may be prepared. Slowly soluble in water with hydrolytic decomposition yielding ethanol and CO₂.

For Treatment of water to inhibit RNase: Add 1 ml DEPC to 1 liter of water. Let sit overnight. Autoclave.

References:

1. *Merck Index*, 12th Ed., No. 8182

2. Kovalenko, *Zh. Obshch. Khim.*, v. **22**, 1546 (1952)
3. Thoma, Rinke, *Ann.*, v. **624**, 30 (1959)
4. Degering et al., *J. Am. Pharm. Assoc. Sci. Ed.*, v. **39**, 626 (1950)