



CAS Registry Number: 31139-36-3
Molecular Formula: C₁₆H₁₄O₅
Molecular Weight: 286.284
Accurate Mass: 286.084125
Percentage Composition: C 67.13%; H 4.93%; O 27.94%
Use/Importance: Reagent for prepn. of *N*-benzyloxycarbonyl protected amino acids
Physical Description: Cryst. (hexane)
Melting Point: Mp 28°
Aldrich: 31121-9
Fluka: 33730
Sigma: D4303

>>**Derivative:** Di-2-propenyl ester
Synonym(s): Diallyl dicarbonate. Diallyl pyrocarbonate

CAS Registry Number: 115491-93-5
Molecular Formula: C₈H₁₀O₅
Molecular Weight: 186.164
Accurate Mass: 186.052825
Percentage Composition: C 51.61%; H 5.41%; O 42.97%
Use/Importance: Reagent for protection of amino-sugars, aminoacids and nucleosides
Boiling Point: Bp_{0.05} 65°
Other Data: Stable at r.t.
Aldrich: 36723-0
Fluka: 32596
Sigma: D4178

References:

- Aldrich Library of FT-IR Spectra*, 1st edn., 1985, **1**, 611B, (*ir*)
Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **1**, 929B; 929C, (*nmr*)
Aldrich Library of FT-IR Spectra: Vapor Phase, 1989, **3**, 634B; 634C, (*ir*)
Rosnati, L., *Chem. Ber.*, 1963, **96**, 3098, (*synth, di-Et ester*)
Fr. Pat., 1968, 1 542 382; *CA*, **71**, 123555h, (*manuf, di-Me ester*)
Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1974, **4**, 128; 1979, **7**, 91; 1990, **15**, 113; 1982, **10**, 122; 1980, **8**, 145; 1986, **12**, 159, (*use*)
Gejvall, T., *J. Chromatogr.*, 1974, **90**, 157, (*use, Et ester*)
Brysova, V.P. *et al.*, *J.O.C., USSR*, 1974, **10**, 2551, (*synth, di-Me ester*)
Turczan, J.W. *et al.*, *J. Agric. Food Chem.*, 1977, **25**, 594, (*pmr, di-Et ester*)
Org. Synth., 1977, **57**, 45, (*di-tert-butyl ester*)
Pope, B.M. *et al.*, *J.O.C.*, 1978, **43**, 2410, (*di-tert-butyl ester*)
Grehn, L. *et al.*, *Angew. Chem., Int. Ed.*, 1984, **23**, 296; 1985, **24**, 510, (*use*)
Pauli, G.H., *J. Chem. Educ.*, 1984, **61**, 332, (*rev, di-Et ester*)
Sennyey, G. *et al.*, *Tet. Lett.*, 1986, **27**, 5375; 1987, **28**, 5809, (*diallyl, dibenzyl esters*)
Lewis, R.J., *Food Additives Handbook*, Van Nostrand Reinhold International, New York, 1989, DRJ850
McNulty, J. *et al.*, *Synth. Commun.*, 1992, **22**, 979, (*use, deriv*)
Encyclopedia of Food and Color Additives, (ed. Burdock, G.A.), CRC Press, 1997, 821; 853, (*diesters, use*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, DIZ100