



>>Entry Name: Glycerol 1,3-diacetate

Synonym(s): 1,2,3-Propanetriol 1,3-diacetate. 1,3-Diacetin. 1,3-Diacetylglycerol

CAS Registry Number: 105-70-4

Extra CAS Registry Numbers(s): 25395-31-7

AcOCH2CH(OH)CH2OAc

Molecular Formula: $C_7H_{12}O_5$

Molecular Weight: 176.169

Accurate Mass: 176.068475

Percentage Composition: C 47.73%; H 6.87%; O 45.41%

Use/Importance: Solvent

Physical Description: Hygroscopic liq.

Boiling Point: Bp 259-261°. Bp₁₂ 149°

Solubility: Sol. H₂O

Density: d¹⁵ 1.179

Refractive Index: n_D²⁰ 1.4395

Other Data: Component of coml. Diacetin (Diacetylglycerol), a mixt. with Glycerol 1,2-diacetate [DHM01-K](#)

References:

Wegscheider, R. *et al.*, *Monatsh. Chem.*, 1913, **34**, 1067; 1081, (*synth*)

Wahl, A., *Bull. Soc. Chim. Fr.*, 1925, **37**, 713, (*bibl*)

Lagenbeck, W. *et al.*, *Naturwissenschaften*, 1955, **42**, 389, (*synth*)

Japan. Pat., 1977, 78 98 920; *CA*, **90**, 22339c, (*synth*)

Suemune, H. *et al.*, *Chem. Pharm. Bull.*, 1986, **34**, 3440, (*synth, pmr*)

Sax, N.I., *Dangerous Properties of Industrial Materials*, 5th edn., Van Nostrand Reinhold, 1979, 706