



>>Entry Name: Glycerol 1,2-diacetate

ENTRY UNDER REVIEW

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

CAS Registry Number: 102-62-5

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

AcOCH<sub>2</sub>CH(OAc)CH<sub>2</sub>OH

Molecular Formula: C<sub>7</sub>H<sub>12</sub>O<sub>5</sub>

Molecular Weight: 176.169

Accurate Mass: 176.068475

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

>>Variant: (±)-form

CAS Registry Number: 101364-64-1

Molecular Formula: C<sub>7</sub>H<sub>12</sub>O<sub>5</sub>

Molecular Weight: 176.169

Accurate Mass: 176.068475

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

Use/Importance: Plasticiser, solv.; used for decaffeinating coffee, low acute toxicity

Physical Description: Hygroscopic liq.

Boiling Point: Bp<sub>12</sub> 140-142°

Solubility: Sol. H<sub>2</sub>O

Density: d<sub>4</sub><sup>15</sup> 1.117

Other Data: Component of coml. Diacetin (Diacetyl glycerol), a mixt. with Glycerol 1,3-diacetate [DHM03-M](#)

References:

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

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

Golendeev, V.P., *J. Gen. Chem. USSR (Engl. Transl.)*, 1936, **6**, 1841, (*synth*)

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

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, DBF600