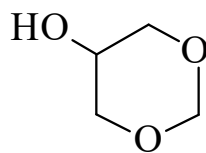




>>Entry Name: **1,3-Dioxan-5-ol**, 9CI

Synonym(s): Glycerol 1,3-methylene ether. 5-Hydroxy-1,3-dioxane



CAS Registry Number: 4740-78-7

Molecular Formula: C<sub>4</sub>H<sub>8</sub>O<sub>3</sub>

Molecular Weight: 104.105

Accurate Mass: 104.047345

Percentage Composition: C 46.15%; H 7.75%; O 46.11%

Physical Description: Sl. viscous, hygroscopic liq.

Boiling Point: Bp 191°. Bp<sub>11</sub> 82°

Density: d<sub>4</sub><sup>20</sup> 1.23

Refractive Index: n<sub>D</sub><sup>20</sup> 1.4533

Fluka: 49920

Sigma: G1513

>>Derivative: Benzoyl

CAS Registry Number: 49784-60-3

Molecular Formula: C<sub>11</sub>H<sub>12</sub>O<sub>4</sub>

Molecular Weight: 208.213

Accurate Mass: 208.07356

Percentage Composition: C 63.45%; H 5.81%; O 30.74%

Physical Description: Needles

Melting Point: Mp 74.6°

>>Derivative: Phenylurethane

Physical Description: Needles (EtOH)

Melting Point: Mp 133°

>>Derivative: Me ether

Synonym(s): 5-Methoxy-1,3-dioxane

Molecular Formula: C<sub>5</sub>H<sub>10</sub>O<sub>3</sub>

Molecular Weight: 118.132

Accurate Mass: 118.062995

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

Boiling Point: Bp 152°

#### References:

Hibbert, H. *et al.*, *J.A.C.S.*, 1928, **50**, 3120, (*synth*)

v. Roon, J.D., *Rec. Trav. Chim. (J. R. Neth. Chem. Soc.)*, 1929, **48**, 186, (*synth, props*)

Showler, A.J. *et al.*, *Chem. Rev.*, 1967, **67**, 427, (*derivs, use*)