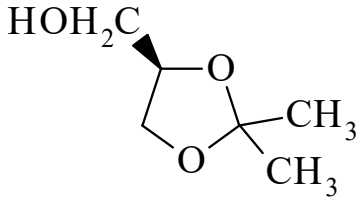
>>**Entry Name: 2,2-Dimethyl-1,3-dioxolane-4-methanol,** 9CI, 8CI
Synonym(s): 1,2-*O*-Isopropylideneglycerol. 4-(Hydroxymethyl)-2,2-dimethyl-1,3-dioxolan. Acetoneglycerol. Glycerol acetonide. Solketal. Glycerolacetone



(*R*)-*form*

CAS Registry Number: 100-79-8

Molecular Formula: $C_6H_{12}O_3$
Molecular Weight: 132.159
Accurate Mass: 132.078645
Percentage Composition: C 54.53%; H 9.15%; O 36.32%
Source/Synthesis: Important synthetic intermed. for chiral compds. Use limited by instability and hydrophilicity
Hazard & Toxicity: Eye irritant. LD_{50} (rat, orl) 7000 mg/kg

Aldrich: 12269-6
Fluka: 59447
Rare Chemicals Library: S13280-2
Sigma: I8380

>>**Variant:** (*R*)-form
Synonym(s): D-form. 2,3-*O*-Isopropylidene-*sn*-glycerol

CAS Registry Number: 14347-78-5
Type of Compound Code(s): AF8500
Molecular Formula: $C_6H_{12}O_3$
Molecular Weight: 132.159
Accurate Mass: 132.078645
Percentage Composition: C 54.53%; H 9.15%; O 36.32%
Use/Importance: Intermed. for synth. of lipids etc.
Physical Description: Liq.
Boiling Point: $Bp_{11.5}$ 80-80.5° (lit. gives a pressure range). $Bp_{0.5}$ 24°
Optical Rotation: $[\alpha]_D^{20}$ –11.12 (c, 5 in MeOH). $[\alpha]_D^{20}$ –14.41 (pure liq.)
Aldrich: 24180-6
Fluka: 59446
Sigma: I6633

>>**Derivative:** Benzoyl
Synonym(s): 1-*O*-Benzoyl-2,3-*O*-isopropylidene-*sn*-glycerol

CAS Registry Number: 51432-60-1
Type of Compound Code(s): AF8500
Molecular Formula: $C_{13}H_{16}O_4$
Molecular Weight: 236.267
Accurate Mass: 236.10486
Percentage Composition: C 66.09%; H 6.83%; O 27.09%
Optical Rotation: $[\alpha]_D^{22}$ –9.9 (c, 1 in $CHCl_3$)

>>**Derivative:** Tosyl
Synonym(s): 2,3-*O*-Isopropylidene-1-*O*-tosyl-*sn*-glycerol

CAS Registry Number: 23735-43-5
Type of Compound Code(s): AF8500
Molecular Formula: $C_{13}H_{18}O_5S$
Molecular Weight: 286.348
Accurate Mass: 286.087495
Percentage Composition: C 54.53%; H 6.34%; O 27.94%; S 11.20%
Optical Rotation: $[\alpha]_D$ +4.5 (EtOH)
Other Data: Has (*S*)-chirality
Aldrich: 33742-0
Fluka: 59452