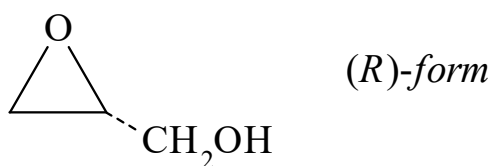




>>Entry Name: Oxiranemethanol, 9CI

Synonym(s): 2,3-Epoxypropanol, 8CI. Hydroxymethyloxirane. Glycidol. Epihydrin alcohol. Glycide



CAS Registry Number: 556-52-5

Related CAS Registry Numbers(s): 7665-72-7 14618-80-5 20731-08-2 26447-14-3 101693-39-4 113826-06-5

Molecular Formula: C₃H₆O₂

Molecular Weight: 74.079

Accurate Mass: 74.03678

Percentage Composition: C 48.64%; H 8.16%; O 43.20%

Use/Importance: Polym. feedstock. Amyl glycidyl ethers are key intermediates for synth. of cardiovascular compds.

Hazard & Toxicity: Can polym. explosively. Skin, eye, and respiratory tract irritant. Readily absorbed through the skin. LD₅₀ (rat, orl) 420 mg/kg. LD₅₀ (rbt, skn) 1980 mg/kg. Exp. reprod. and teratogenic effects

Aldrich: G580-9

Fluka: 49931

Sigma: G0887

>>Variant: (R)-form

CAS Registry Number: 57044-25-4

Molecular Formula: C₃H₆O₂

Molecular Weight: 74.079

Accurate Mass: 74.03678

Percentage Composition: C 48.64%; H 8.16%; O 43.20%

Physical Description: Oil

Boiling Point: Bp₁₁ 56-56.5°

Optical Rotation: [α]_D²⁰ +15 (neat)

Aldrich: 31829-9

Fluka: 50026

Sigma: G5394

>>Derivative: Butanoyl

CAS Registry Number: 60456-26-0

Molecular Formula: C₇H₁₂O₃

Molecular Weight: 144.17

Accurate Mass: 144.078645

Percentage Composition: C 58.32%; H 8.39%; O 33.29%

Boiling Point: Bp₁₉ 90°

Optical Rotation: [α]_D²⁵ -32 (neat)

Density: d 1.02

Refractive Index: n_D²⁰ 1.4280

Other: Daiso

>>Derivative: 4-Nitrobenzoyl

CAS Registry Number: 106268-95-5

Physical Description: Lemon-yellow cryst.

Melting Point: Mp 59-60°

Optical Rotation: [α]_D²⁰ +37.9 (CHCl₃)

Aldrich: 30043-8

Fluka: 50037

>>Derivative: 4-Methylbenzenesulfonyl

CAS Registry Number: 113826-06-5

Molecular Formula: C₁₀H₁₂O₄S

Molecular Weight: 228.268

Accurate Mass: 228.04563

Percentage Composition: C 52.62%; H 5.30%; O 28.04%; S 14.05%

Melting Point: Mp 46-49°