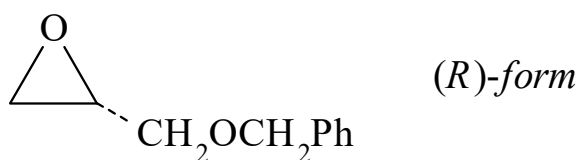




>>Entry Name: (Benzyloxymethyl)oxirane

Synonym(s): [(Phenylmethoxy)methyl]oxirane, 9CI. 1-Benzyloxy-2,3-epoxypropane, 8CI. Benzyl 2,3-epoxypropyl ether. Benzyl glycidyl ether



CAS Registry Number: 2930-05-4

Molecular Formula: $C_{10}H_{12}O_2$

Molecular Weight: 164.204

Accurate Mass: 164.08373

Percentage Composition: C 73.15%; H 7.37%; O 19.49%

Hazard & Toxicity: Mutagenic activity

>>Variant: (R)-form

CAS Registry Number: 14618-80-5

Molecular Formula: $C_{10}H_{12}O_2$

Molecular Weight: 164.204

Accurate Mass: 164.08373

Percentage Composition: C 73.15%; H 7.37%; O 19.49%

Use/Importance: Chiral synthon for nat. prods.

Physical Description: Oil

Boiling Point: $B_{p0.1}$ 63°

Optical Rotation: $[\alpha]_D^{21} +15$

Aldrich: 36352-9

Fluka: 13423

>>Variant: (S)-form

CAS Registry Number: 16495-13-9

Molecular Formula: $C_{10}H_{12}O_2$

Molecular Weight: 164.204

Accurate Mass: 164.08373

Percentage Composition: C 73.15%; H 7.37%; O 19.49%

Use/Importance: Chiral synthon for nat. prods.

Boiling Point: $B_{p0.1}$ 68°

Optical Rotation: $[\alpha]_D^{20} -15.3$ (neat)

Aldrich: 36353-7

Fluka: 13425

>>Variant: (±)-form

CAS Registry Number: 89616-40-0

Molecular Formula: $C_{10}H_{12}O_2$

Molecular Weight: 164.204

Accurate Mass: 164.08373

Percentage Composition: C 73.15%; H 7.37%; O 19.49%

Boiling Point: $B_{p0.8}$ 80°

Aldrich: 46978-5

References:

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Anisuzzaman, A.K.M. *et al.*, *J.C.S.(C)*, 1967, 1021, (synth)

Bacon, J.R. *et al.*, *Chem. Ind. (London)*, 1971, 930, (synth)

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Takano, S. *et al.*, *Chem. Comm.*, 1988, 1004; 1527, (use)

Baig, M.H.A. *et al.*, *Tetrahedron*, 1995, **51**, 4723, (synth, pmr, S-form)