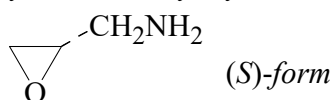




>>Entry Name: (Aminomethyl)oxirane

Synonym(s): Oxiranemethanamine, 9CI. 2,3-Epoxypropylamine. Epihydrinamine. Glycidylamine. Oxiranylmethylamine



CAS Registry Number: 5689-75-8

Molecular Formula: C₃H₇NO

Molecular Weight: 73.094

Accurate Mass: 73.052764

Percentage Composition: C 49.30%; H 9.65%; N 19.16%; O 21.89%

>>Variant: (S)-form

Molecular Formula: C₃H₇NO

Molecular Weight: 73.094

Accurate Mass: 73.052764

Percentage Composition: C 49.30%; H 9.65%; N 19.16%; O 21.89%

>>Derivative: N,N,N-Tri-Me

CAS Registry Number: 101396-92-3

Extra CAS Registry Numbers(s): 123694-15-5

Molecular Formula: C₆H₁₄NO⁽⁺⁾

Molecular Weight: 116.183

Accurate Mass: 116.107539

Percentage Composition: C 62.03%; H 12.15%; N 12.06%; O 13.77%

Melting Point: Mp 121-123.5° (as chloride)

Optical Rotation: [α]_D²⁵ -27.1 (c, 1 in H₂O)

>>Variant: (±)-form

Molecular Formula: C₃H₇NO

Molecular Weight: 73.094

Accurate Mass: 73.052764

Percentage Composition: C 49.30%; H 9.65%; N 19.16%; O 21.89%

>>Derivative: N,N-Di-Et

CAS Registry Number: 2917-91-1

Molecular Formula: C₇H₁₅NO

Molecular Weight: 129.202

Accurate Mass: 129.115364

Percentage Composition: C 65.07%; H 11.70%; N 10.84%; O 12.38%

Boiling Point: Bp₂₀ 58-60°

Other Data: Dec. on standing

>>Derivative: N,N,N-Tri-Me

CAS Registry Number: 3033-77-0

Extra CAS Registry Numbers(s): 13895-77-7 129829-22-7

Molecular Formula: C₆H₁₄NO⁽⁺⁾

Molecular Weight: 116.183

Accurate Mass: 116.107539

Percentage Composition: C 62.03%; H 12.15%; N 12.06%; O 13.77%

Physical Description: Cryst. (as chloride)

Melting Point: Mp 139-141° (130-135°) (chloride)

Other Data: Slowly dec. at r.t. CAS no. refers to chloride

References:

Schmidt, E. *et al.*, *Annalen*, 1904, **333**, 118, ((±)-form, N-tri-Me)

Heywood, D.L. *et al.*, *J.A.C.S.*, 1958, **80**, 1257, (N,N-di-Et)

McClure, J.D., *J.O.C.*, 1970, **35**, 2059, ((±)-form, N-tri-Me)

Voeffray, R. *et al.*, *Helv. Chim. Acta*, 1987, **70**, 2058, (S-form, N-tri-Me)