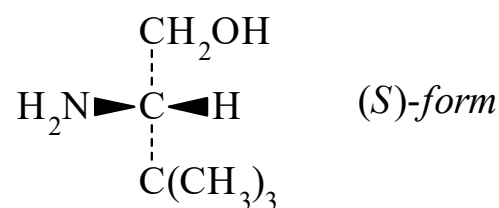




>>Entry Name: 2-Amino-3,3-dimethyl-1-butanol, 9CI

Synonym(s): *tert*-Leucinol



CAS Registry Number: 3907-02-6

Molecular Formula: C₆H₁₅NO

Molecular Weight: 117.191

Accurate Mass: 117.115364

Percentage Composition: C 61.49%; H 12.90%; N 11.95%; O 13.65%

Use/Importance: Important synthon for asymmetric synthesis, showing high stereoselectivity

>>Variant: (*R*)-form

Synonym(s): D-form

CAS Registry Number: 112245-09-7

Molecular Formula: C₆H₁₅NO

Molecular Weight: 117.191

Accurate Mass: 117.115364

Percentage Composition: C 61.49%; H 12.90%; N 11.95%; O 13.65%

Melting Point: Mp 28-36°

Boiling Point: Bp₁₉ 100°

Optical Rotation: [α]_D²⁰ -38.1 (c, 2.0 in EtOH)

>>Variant: (*S*)-form

Synonym(s): L-form

CAS Registry Number: 112245-13-3

Molecular Formula: C₆H₁₅NO

Molecular Weight: 117.191

Accurate Mass: 117.115364

Percentage Composition: C 61.49%; H 12.90%; N 11.95%; O 13.65%

Physical Description: Oil, solidifying on cooling

Boiling Point: Bp₂₀ 90-92°

Optical Rotation: [α]_D +37 (c, 1 in EtOH)

Aldrich: 40773-9

Fluka: 61925

Sigma: L4406

>>Variant: (±)-form

CAS Registry Number: 93684-72-1

Molecular Formula: C₆H₁₅NO

Molecular Weight: 117.191

Accurate Mass: 117.115364

Percentage Composition: C 61.49%; H 12.90%; N 11.95%; O 13.65%

Physical Description: Liq.

Boiling Point: Bp₂₂ 102-103°

Refractive Index: n_D²⁵ 1.4482

>>Derivative: Sulfate

CAS Registry Number: 42163-45-1

Physical Description: Solid

Melting Point: Mp 278-279°

References:

Pracejus, H. *et al.*, *Chem. Ber.*, 1964, **97**, 3173, (*synth*)

Bafford, R.A. *et al.*, *Bull. Soc. Chim. Fr.*, 1973, 971, (*synth, deriv*)

Romo, D. *et al.*, *Tetrahedron*, 1990, **46**, 4951, (*synth, pmr, cmr*)

Drauz, K. *et al.*, *Chem. Eur. J.*, 1995, **1**, 540, (*synth, resoln, bibl*)

Evans, D.A. *et al.*, *J.O.C.*, 1998, **63**, 4541-4544, (*S-form, synth, ir, pmr, cmr*)