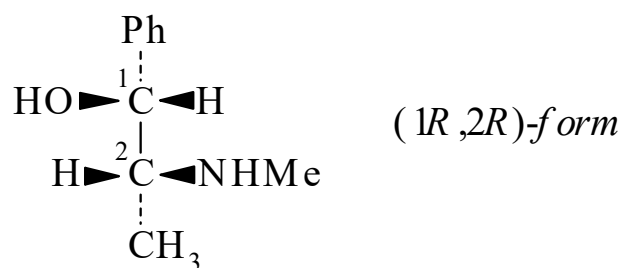




>>Entry Name: 2-(Methylamino)-1-phenyl-1-propanol

Synonym(s): α -[1-(Methylamino)ethyl]benzenemethanol, 9CI



CAS Registry Number: 53214-57-6

Related CAS Registry Numbers(s): 670-40-6 50906-05-3 56979-55-6

Molecular Formula: C₁₀H₁₅NO

Molecular Weight: 165.235

Accurate Mass: 165.115364

Percentage Composition: C 72.69%; H 9.15%; N 8.48%; O 9.68%

Use/Importance: Orally active sympathomimetic agent. Weaker but longer-acting than adrenaline. Hypertensive, cardiac stimulant, bronchodilator, hyperglycaemic agent.

Low toxicity. Has been used clinically against bronchial asthma, hay fever, whooping cough, myasthenia gravis, dysmenorrhea and heart block (Stokes-Adam syndrome).

Resolving agent for aldehydes and ketones *via* chiral oxazolidine formn. Used as 0.2% soln. in CHCl₃ for photometric detn. of As

Calculated Log P Data: Log P 0.89 (calc)

>>Variant: (1R,2R)-form

Synonym(s): (-)- ψ -Ephedrine

CAS Registry Number: 321-97-1

Molecular Formula: C₁₀H₁₅NO

Molecular Weight: 165.235

Accurate Mass: 165.115364

Percentage Composition: C 72.69%; H 9.15%; N 8.48%; O 9.68%

Source/Synthesis: Synthetic

Melting Point: Mp 118-118.5°

Optical Rotation: $[\alpha]_D^{20}$ -52 (EtOH)

Aldrich: 28764-4

Fluka: 82547

Sigma: E9626

>>Variant: (1R,2S)-form

Synonym(s): Ephedrine, BAN

CAS Registry Number: 299-42-3

Molecular Formula: C₁₀H₁₅NO

Molecular Weight: 165.235

Accurate Mass: 165.115364

Percentage Composition: C 72.69%; H 9.15%; N 8.48%; O 9.68%

Biological Source: Main alkaloid from the Chinese drug ``Ma-Huang'', and from many *Ephedra* spp., also in *Aconitum napellus*, *Catha edulis*, *Taxus baccata*, *Sida cordifolia*, *Roemeria refracta* and some other spp. (Ephedraceae, Ranunculaceae, Celastraceae, Taxaceae, Malvaceae, Papaveraceae)

Melting Point: Mp 40°

Boiling Point: Bp 225°

Optical Rotation: $[\alpha]_D$ -6.3 (EtOH)

Solubility: Sol. CHCl₃

pKa Value: pK_a 9.52 (25°)

Calculated Log P Data: Log P 0.89 (calc)

Other Data: More pharmacol. active isomer

Hazard & Toxicity: Adverse effects reported when used therapeutically. LD₅₀ (rat, orl) 600 mg/kg. Exp. teratogen

Aldrich: 13491-0

Fluka: 45261

Sigma: E3000

>>Derivative: Hydrochloride

Synonym(s): Ephedrine hydrochloride, JAN, USAN

CAS Registry Number: 50-98-6

Melting Point: Mp 218°

Optical Rotation: $[\alpha]$