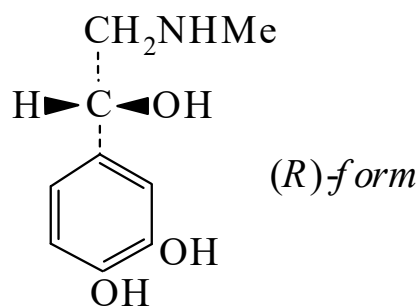




>>Entry Name: Adrenaline, BAN

Synonym(s): 4-[1-Hydroxy-2-(methylamino)ethyl]-1,2-benzenediol, 9CI. 3,4-Dihydroxy- α -[(methylamino)methyl]benzyl alcohol, 8CI. 1-(3,4-Dihydroxyphenyl)-2-methylaminoethanol. **Epinephrine**, INN, USAN. Bronkaid. Epifrin. Glaucon. Bosmin. Suprarenin. NSC 62786



CAS Registry Number: 6912-68-1

Molecular Formula: C₉H₁₃NO₃

Molecular Weight: 183.207

Accurate Mass: 183.089544

Percentage Composition: C 59.00%; H 7.15%; N 7.65%; O 26.20%

Use/Importance: Used in photometric detn. of Ti

Biological Use/Importance: Active constit. of the adrenal gland. α , β -Adrenoceptor agonist, vasoconstrictor, inotropic agent. Mydriatic. Used in management of anaphylaxis, and in cardiopulmonary resuscitation. Orally inactive. Used in combination with fluorouracil in the treatment of genital warts (*AccuSite*)

Calculated Log P Data: Log P -0.68 (calc)

Other Data: First hormone to be isol. (1901) and synthesised (1904)

Hazard & Toxicity: May cause contact dermatitis

>>Variant: (R)-form

Synonym(s): L-form (obsol.)

CAS Registry Number: 51-43-4

Molecular Formula: C₉H₁₃NO₃

Molecular Weight: 183.207

Accurate Mass: 183.089544

Percentage Composition: C 59.00%; H 7.15%; N 7.65%; O 26.20%

Physical Description: Powder

Melting Point: Mp 216 dec.°

Optical Rotation: $[\alpha]_D^{20} -53$ (c, 4 in 1M HCl)

Solubility: Sol. alkalis, acids; spar. sol. H₂O, EtOH; insol. Et₂O

Other Data: Pharmacol. active isomer

Hazard & Toxicity: LD₅₀ (rat, skn) 62 mg/kg. LD₅₀ (rat, ivn) 0.15 mg/kg

Aldrich: 21930-4

Fluka: 2250

Sigma: E4250

>>Derivative: Hydrochloride

CAS Registry Number: 55-31-2

Melting Point: Mp 157°

>>Derivative: Tartrate

Synonym(s): Epinephrine bitartrate, USAN. Epitrate

CAS Registry Number: 51-42-3

Extra CAS Registry Numbers(s): 24351-82-4

Biological Use/Importance: Ophthalmic adrenergic agent

Fluka: 2260

Rare Chemicals Library: S39321-5

Sigma: E4375

>>Derivative: Cyclic borate

Synonym(s): Epinephryl borate, USAN. **Epinal**‡. Epinephrine borate

CAS Registry Number: 5579-16-8

Biological Use/Importance: Ophthalmic adrenergic agent