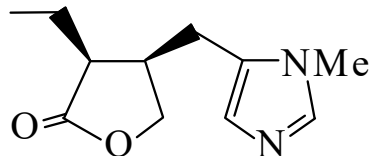




>>Entry Name: **Pilocarpine**, BAN, USAN

Synonym(s): 3-Ethyl-2-methyl-2-(1-methyl-1*H*-imidazol-5-yl)-5-oxo-2,3-dihydrofuran, 9Cl. Syncarpine



Molecular Formula: C₁₁H₁₆N₂O₂

Molecular Weight: 208.26

Accurate Mass: 208.121178

Percentage Composition: C 63.44%; H 7.74%; N 13.45%; O 15.36%

Use/Importance: Cholinergic muscarinic agonist used as a miotic, especially for glaucoma, and in the treatment of nephritis. Exp. convulsant. Used in animal models of epilepsy

Calculated Log P Data: Log P -0.2 (calc)

>>Variant: (+)-form

CAS Registry Number: 92-13-7

Molecular Formula: C₁₁H₁₆N₂O₂

Molecular Weight: 208.26

Accurate Mass: 208.121178

Percentage Composition: C 63.44%; H 7.74%; N 13.45%; O 15.36%

Biological Source: Alkaloid from *Pilocarpus microphyllus* and several other *Pilocarpus* spp. (Rutaceae)

Melting Point: Mp 34°

Boiling Point: Bp₅ 260°

Optical Rotation: [α]_D²⁰ +100.5 (H₂O)

pKa Value: pK_{a2} 12.57 (20°)

Hazard & Toxicity: Adverse ocular effects reported when used therapeutically. LD₅₀ (rat, orl) 402 mg/kg

>>Derivative: Hydrochloride

Synonym(s): Pilocarpine hydrochloride, USAN. Akarpine. Almocarpin. Pilomiotin. Pilopine VS. Pilovisc

CAS Registry Number: 54-71-7

Physical Description: Cryst. (EtOH)

Melting Point: Mp 204-205°

Optical Rotation: [α]_D¹⁸ +91

Other Data: Component of Pilocar

Hazard & Toxicity: Human systemic effect from ocular administration. Adverse ocular effects reported when used therapeutically. LD₅₀ (mus, orl) 200 mg/kg, exp. reprod. and teratogenic effects

Aldrich: 14188-7

Fluka: 80475

Sigma: P6503

>>Derivative: Picrate

Melting Point: Mp 159-160°

>>Derivative: Nitrate

Synonym(s): Licarpin. Pilofrin. Pilagan

CAS Registry Number: 148-72-1

Melting Point: Mp 173-174° (dec.)

Optical Rotation: [α]_D +77

Fluka: 80477

Sigma: P6628