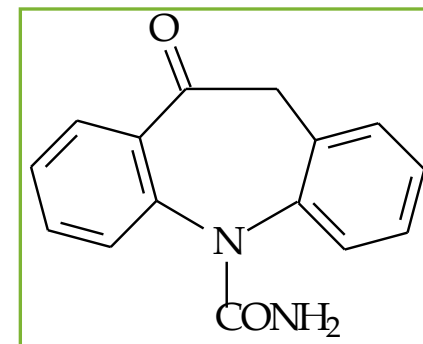


Oxcarbazepine

- Oxcarbazepine is an antiepileptic drug available as 150 mg, 300 mg and 600 mg film coated tablets for oral administration. Oxcarbazepine is 10,11-Dihydro-10-oxo-5*H*-dibenz[*b,f*]azepine-5-carboxamide.
- Oxcarbazepine is a white to faintly orange crystalline powder. It is slightly soluble in chloroform, dichloromethane, acetone, and methanol and practically insoluble in ethanol, ether and water. Its molecular weight is 252.27.
- The pharmacological activity of oxcarbazepine is primarily exerted through the 10-monohydroxy metabolite (MHD) of oxcarbazepine. The precise mechanism by which oxcarbazepine and MHD exert their antiseizure effect is unknown; however, in vitro electrophysiological studies indicate that they produce blockade of voltage-sensitive sodium channels, resulting in stabilization of hyperexcited neural membranes, inhibition of repetitive neuronal firing, and diminution of propagation of synaptic impulses. These actions are thought to be important in the prevention of seizure spread in the intact brain. In addition, increased potassium conductance and modulation of high-voltage activated calcium channels may contribute to the anticonvulsant effects of the drug. No significant interactions of oxcarbazepine or MHD with brain neurotransmitter or modulator receptor sites have been demonstrated.



CAS: [28721-07-5]
Formula: C₁₅H₁₂N₂O₂
M. Weight: 282,0