

## Primidone (Cas No 125-33-7)



Primidone

CAS number 125-33-7

Systematic (IUPAC) name

5-ethyl-5-phenyl-hexahydropyrimidine-4,6-dione

Identifiers

CAS number 125-33-7

ATC code N03AA03

PubChem 4909

DrugBank APRD00549

ChemSpider 4740

Chemical data

Formula C<sub>12</sub>H<sub>14</sub>N<sub>2</sub>O<sub>2</sub> Mol. mass 218.252 g/mol

Pharmacokinetic data

Bioavailability ~100%

Protein binding 25%

Metabolism Hepatic

Half life Primidone: 5-18 hours,

Phenobarbital: 75-120 hours,

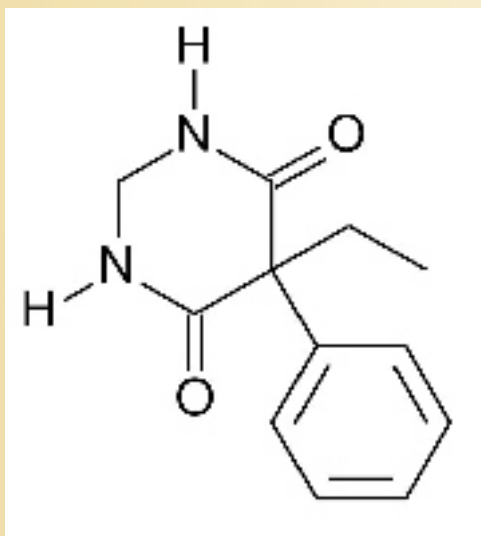
PEMA: 16 hours

Time to reach steady state:

Primidone: 2-3 days,

Phenobarbital&PEMA 1-4weeks

Excretion Renal



Primidone is an anticonvulsant of the pyrimidinedione class whose active metabolites, phenobarbital and phenylethylmalonamide are also anticonvulsants. It is used mainly to treat complex partial, simple partials, generalized tonic-clonic seizures, myoclonic, akinetic seizures and it has been a valuable alternative to propranolol in the treatment of essential tremor. Unlike other anticonvulsants such as carbamazepine and valproic acid, primidone is rarely used in the treatment of bipolar disorder or any other psychiatric problem. It is also not widely used in treatment of neuropathic pain, trigeminal neuralgia, or migraine. Primidone has been occasionally used to treat long QT syndrome, cerebral palsy, and athetosis.