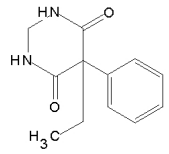

Formula: C12H14N2O2

MW: 218.26

CAS: 125-33-7

MDL NUMBER: MFCD00038662

IUPAC: 5-ethyl-5-phenyl-1,2,3,5-tetrahydropyrimidine-4,6-dione

Smiles: C1(C(NCNC1=O)=O)(c1ccccc1)CC

THERAPEUTIC CATEGORY: Anticonvulsant

VET THERAP CATEGORY: Anticonvulsant. Chiefly to control epileptiform seizures

ACCEPTORS: 2

DONORS: 2

ROTATION BONDS: 1

N+O: 4

Chiral Centers: 0

LogP: 2.98

LogS: -3.71

LIPINSKI: 4

Monograph Number: 0007835

Title: Primidone

CAS Registry Number: 125-33-7

CAS Name: 5-Ethyldihydro-5-phenyl-4,6(1H,5H)-pyrimidinedione

Additional Names: 5-ethyl-5-phenylhexahydropyrimidine-4,6-dione; 5-phenyl-5-ethylhexahydropyrimidine-4,6-dione; 2-desoxyphenobarbital

Trademarks: Liskantin (Desitin); Mylepsinum (AstraZeneca); Mysoline (AstraZeneca); Resimatil (Sanofi-Synthelabo); Sertan (Chinoin)

Molecular Formula: C12H14N2O2

Molecular Weight: 218.25.

Percent Composition: C 66.04%, H 6.47%, N 12.84%, O 14.66%

Literature References: Prepd by electrolytic reduction of phenobarbital or by catalytic desulfuration of the corresp 2-thiobarbituric acid: Boon et al., GB 666027 (1952 to I.C.I.); Bogue, Carrington, Br. J. Pharmacol. 8, 230 (1953). Comprehensive description: R. D. Daley in Anal. Profiles Drug Subs. 2, 409-437 (1973); A. A. Al-Badr, H. A. El-Obeid, ibid. 17, 749-795 (1988).

Properties: Crystals, mp 281-282. Practically tasteless. Has no acidic properties. Sparingly sol in water (0.6 g/l at 37); in most organic solvents.

Melting point: mp 281-282

Therap-Cat: Anticonvulsant.

Therap-Cat-Vet: Anticonvulsant. Chiefly to control epileptiform seizures.

Synonyms: 2-deoxyphenobarbital;2-DESOXYPHENOBARBITAL;5-ETHYLDIHYDRO-5-PHENYL-4,6(1H,5H)-PYRIMIDINEDIONE;5-phenyl-5-ethyl-hexahydropyrimidine-4,6-dione;PRIMIDONE;4,6(1H,5H)-Pyrimidinedione, 5-ethyldihydro-5-phenyl-;5-Aethyl-5-phenyl-hexahydropyrimidin-4,6-dion;5-Ethyl-5-phenyldihydro-4,6(1H,5H)-pyrimidinedione

CAS:125-33-7

MF:C12H14N2O2

MW:218.25

EINECS:204-737-0

Product Categories:Intermediates & Fine Chemicals;Pharmaceuticals;GABA/Glycine receptor Primidone

Chemical Properties: mp 281-282C storage temp. Store at RT Water Solubility