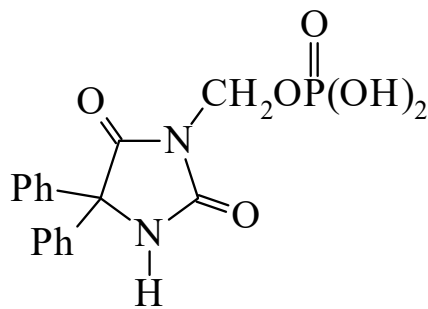




>>Entry Name: Fosphenytoin, INN

Synonym(s): 5,5-Diphenyl-3-[(phosphonoxy)methyl]-2,4-imidazolidinedione, 9Cl. 3-Phosphoryloxymethylphenytoin. Prophenytoin



CAS Registry Number: 93390-81-9

Molecular Formula: C₁₆H₁₅N₂O₆P

Molecular Weight: 362.278

Accurate Mass: 362.066775

Percentage Composition: C 53.05%; H 4.17%; N 7.73%; O 26.50%; P 8.55%

Use/Importance: Anticonvulsant used in the treatment of epilepsy

Physical Description: Solid (Me₂CO)

Development Status: Approved by FDA (1996)

Melting Point: Mp 173-176.5°

Other Data: Prodrug of 5,5-Diphenyl-2,4-imidazolidinedione [DBG20-V](#)

>>Derivative: Di-Na salt

Synonym(s): Fosphenytoin sodium, USAN. CI 982. IACC 9653

CAS Registry Number: 92134-98-0

Physical Description: Solid (H₂O/Et₂O/Me₂CO)

Melting Point: Mp 220° (softens)

References:

Varia, S.A. *et al.*, *J. Pharm. Sci.*, 1984, **73**, 1068; 1074; 1080; 1087, (*synth, pmr, pharmacol*)

Gerber, N. *et al.*, *J. Clin. Pharmacol.*, 1988, **28**, 1023, (*pharmacol*)

Boucher, B.A. *et al.*, *J. Pharm. Sci.*, 1989, **78**, 929, (*metab*)

Bebin, M. *et al.*, *Drugs*, 1994, **48**, 153, (*rev*)