**Ethotoin**

*Item No. 24022*

**CAS Registry No.:** 86-35-1  
**Formal Name:** 3-ethyl-5-phenyl-2,4-imidazolidinedione  
**Synonym:** (±)-Ethotoin  
**MF:** C_{11}H_{12}N_{2}O_{2}  
**FW:** 204.2  
**Purity:** ≥95%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥2 years

*Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.*

### Laboratory Procedures

Ethotoin is supplied as a solid. A stock solution may be made by dissolving the ethotoin in the solvent of choice, which should be purged with an inert gas. Ethotoin is slightly soluble in DMSO and methanol.

### Description

Ethotoin is a hydantoin anticonvulsant.\(^1\)\(^2\) It shortens the duration of the tonic extensor aspect of seizures induced by maximal electroshock in rats when administered at doses ranging from 500-1,000 mg/kg.\(^2\) It also decreases the duration of the tonic phase of seizures at a dose of 1,000 mg/kg but does not affect the duration of the clonic phase at any dose.\(^2\) Ethotoin (20 mg/kg, i.p.) decreases serum cholesterol and triglyceride concentrations in mice to 67 and 60%, respectively, of control after 16 days of treatment.\(^3\) Formulations containing ethotoin have been used in the treatment of tonic-clonic and complex partial seizures.

### References