

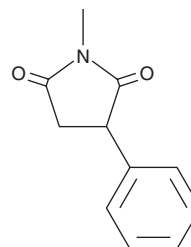
# PRODUCT INFORMATION



## Phensuximide

Item No. 27601

**CAS Registry No.:** 86-34-0  
**Formal Name:** 1-methyl-3-phenyl-2,5-pyrrolidinedione  
**Synonym:** (±)-Phensuximide  
**MF:** C<sub>11</sub>H<sub>11</sub>NO<sub>2</sub>  
**FW:** 189.2  
**Purity:** ≥98%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years



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

### Laboratory Procedures

Phensuximide is supplied as a solid. A stock solution may be made by dissolving the phensuximide in the solvent of choice, which should be purged with an inert gas. Phensuximide is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of phensuximide in these solvents is approximately 10, 15, and 1 mg/ml, respectively.

Phensuximide is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, phensuximide should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Phensuximide has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Phensuximide is an anticonvulsant.<sup>1</sup> It inhibits seizures induced by maximal electroshock (MES) and pentylenetetrazole (Item No. 18682) in mice (ED<sub>50</sub>s = 112 and 50 mg/kg, respectively). Phensuximide (1.25 mmol/kg, i.p.) induces proteinuria and hematuria in rats.<sup>2</sup> Formulations containing phensuximide have been used in the treatment of petit mal seizures.

### References

1. Kornet, M.J., Crider, A.M., and Magarian, E.O. Potential long-acting anticonvulsants. 1. Synthesis and activity of succinimides containing an alkylating group at the 2 position. *J. Med. Chem.* **20**(3), 405-409 (1977).
2. Rankin, G.O., Cressey-Veneziano, K., Wang, R.T., *et al.* Urinary tract effects of phensuximide in the Sprague-Dawley and Fischer 344 rat. *J. Appl. Toxicol.* **6**(5), 349-356 (1986).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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