

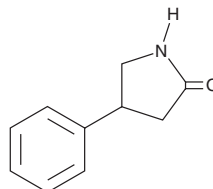
# PRODUCT INFORMATION



## 4-Phenyl-2-pyrrolidinone

Item No. 30490

CAS Registry No.: 1198-97-6  
MF: C<sub>10</sub>H<sub>11</sub>NO  
FW: 161.2  
Purity: ≥98%  
Supplied as: A crystalline 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

4-Phenyl-2-pyrrolidinone is supplied as a crystalline solid. A stock solution may be made by dissolving the 4-phenyl-2-pyrrolidinone in the solvent of choice, which should be purged with an inert gas. 4-Phenyl-2-pyrrolidinone is soluble in ethanol, DMSO, and dimethyl formamide. The solubility of 4-phenyl-2-pyrrolidinone in these solvents is approximately 30 mg/ml.

### Description

4-Phenyl-2-pyrrolidinone is a precursor and synthetic intermediate.<sup>1,2</sup> It has been used as a precursor in the synthesis of compounds with anticonvulsant and nootropic activities and is an intermediate in the synthesis of bromodomain-containing protein 4 (BRD4) bromodomain 1 inhibitors.

### References

1. Zhmurenko, L.A., Litvinova, S.A., Mokrov, G.V., *et al.* Synthesis of 4-phenylpyrrolidone derivatives with anticonvulsant and nootropic activity. *Pharm. Chem. J.* **53**(5), 429-435 (2019).
2. Hilton-Proctor, J.P., Ilyichova, O., Zheng, Z., *et al.* Substituted 1-methyl-4-phenylpyrrolidin-2-ones – Fragment-based design of N-methylpyrrolidone-derived bromodomain inhibitors. *Eur. J. Med. Chem.* **191**, 112120 (2020).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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