

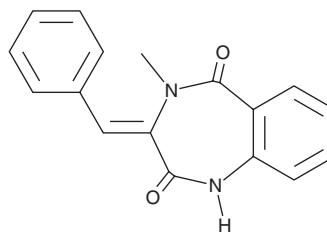
# PRODUCT INFORMATION



## Dehydrocyclopeptine

Item No. 23638

**CAS Registry No.:** 31965-37-4  
**Formal Name:** 3,4-dihydro-4-methyl-3-(phenylmethylene)-1H-1,4-benzodiazepine-2,5-dione  
**MF:** C<sub>17</sub>H<sub>14</sub>N<sub>2</sub>O<sub>2</sub>  
**FW:** 278.3  
**Purity:** ≥99%  
**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

Dehydrocyclopeptine is supplied as a solid. A stock solution may be made by dissolving the dehydrocyclopeptine in the solvent of choice, which should be purged with an inert gas. Dehydrocyclopeptine is soluble in organic solvents such as ethanol, methanol, DMSO, and dimethyl formamide.

Dehydrocyclopeptine is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

### Description

Dehydrocyclopeptine is an intermediate in the synthesis of benzodiazepine alkaloids in *Penicillium*.<sup>1</sup> It is formed when the 3S-isomer of cyclopeptine (Item No. 23476) undergoes reversible transformation by cyclopeptine dehydrogenase to displace hydrogens from the 3- and 10-positions of the benzodiazepine core.

### Reference

1. Luckner, M. Alkaloid biosynthesis in *Penicillium cyclopoum* - does it reflect general features of secondary metabolism? *J. Nat. Prod.* **43(1)**, 21-40 (1980).

**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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