

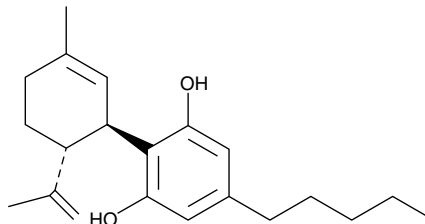
# Product Information



## Cannabidiol

Item No. 90080 • Lot No. XXXXXX • Size: XX mg

**CAS Registry No.:** 13956-29-1  
**Formal Name:** 2-[1R-3-methyl-6R-(1-methylethenyl)-2-cyclohexen-1-yl]-5-pentyl-1,3-benzenediol  
**Synonym:** CBD  
**MF:** C<sub>21</sub>H<sub>30</sub>O<sub>2</sub>  
**FW:** 314.5  
**Purity:** ≥99%  
**Stability:** ≥1 year at -20°C  
**Supplied as:** A crystalline solid  
**UV/Vis.:** λ<sub>max</sub>: 209, 275 nm  
**Packaged by:** Cayman Chemical Company



### Laboratory Procedures

For long term storage, we suggest that cannabidiol be stored as supplied at -20°C. It should be stable for at least one year.

Cannabidiol is supplied as a crystalline solid. A stock solution may be made by dissolving the cannabidiol in an organic solvent purged with an inert gas. Cannabidiol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of cannabidiol in these solvents is approximately 36 mg/ml.

Cannabidiol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, cannabidiol should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Cannabidiol has a solubility of 250 µg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Cannabidiol is one of the major phenolic components of hemp. In contrast to the minor component Δ<sup>9</sup>-THC, it is not psychoactive. Antioxidant activity has been reported to be a general property of the phenolic components of marijuana. Unlike Δ<sup>9</sup>-THC, cannabidiol can be administered at relatively high doses without undesired toxic or psychological effects.<sup>1</sup> Cannabidiol at a concentration of 10 µM was neuroprotective against both excitatory neurotransmitter (glutamate) and oxidant (hydroperoxide) induced neurotoxicity.<sup>2</sup>

### References

1. Consroe, P., Laguna, J., Allender, J., *et al.* Controlled clinical trial of cannabidiol in Huntington's disease. *Pharmacol. Biochem. Behav.* **40**, 701-708 (1991).
2. Hampson, A.J., Grimaldi, M., Axelrod, J., *et al.* Cannabidiol and (-)Δ<sup>9</sup>-tetrahydrocannabinol are neuroprotective antioxidants. *Proc. Nat. Acad. Sci USA* **95**, 8268-8273 (1998).

### Related Products

For a list of related products please visit: [www.caymanchem.com/catalog/90080](http://www.caymanchem.com/catalog/90080)

**WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY; NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

#### MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent *via* email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will meet our specifications at the time of delivery.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer's **exclusive remedy** and Cayman's sole liability hereunder shall be limited to a refund of the purchase price, or at Cayman's option, the replacement, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our **Warranty and Limitation of Remedy** located on our website and in our catalog.

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