

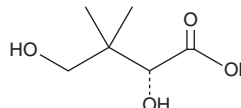
PRODUCT INFORMATION



Pantoic Acid

Item No. 36685

CAS Registry No.: 1112-33-0
Formal Name: (2R)-2,4-dihydroxy-3,3-dimethyl-butanoic acid
Synonyms: D-Pantoic Acid, FA 6:0;O2
MF: $C_6H_{12}O_4$
FW: 148.2
Purity: $\geq 90\%$
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

Pantoic acid is supplied as a solid. A stock solution may be made by dissolving the pantoic acid in the solvent of choice, which should be purged with an inert gas. Pantoic acid is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of pantoic acid in these solvents is approximately 1 and 2 mg/ml, respectively. Pantoic acid is also slightly soluble in ethanol.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of pantoic acid can be prepared by directly dissolving the solid in aqueous buffers. The solubility of pantoic acid in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Pantoic acid is an intermediate in the biosynthesis of D-pantothenic acid (Item No. 17288), also known as vitamin B₅, and, subsequently, coenzyme A (CoA; Item Nos. 16147 | 21499 | 21722) in bacteria.¹

Reference

1. Begley, T.P., Kinsland, C., and Strauss, E. The biosynthesis of coenzyme A in bacteria. *Vitam. Horm.* **61**, 157-171 (2001).

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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 02/20/2024

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM