

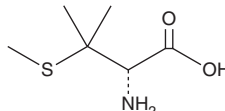
PRODUCT INFORMATION



S-Methyl-D-penicillamine

Item No. 36297

CAS Registry No.: 29913-84-6
Formal Name: 3-(methylthio)-D-valine
MF: $C_6H_{13}NO_2S$
FW: 163.2
Purity: $\geq 95\%$
Supplied as: A solid
Storage: $-20^\circ C$
Stability: ≥ 4 years



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

Laboratory Procedures

S-Methyl-D-penicillamine is supplied as a solid. A stock solution may be made by dissolving the S-methyl-D-penicillamine in the solvent of choice, which should be purged with an inert gas. S-Methyl-D-penicillamine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of S-methyl-D-penicillamine in DMF is approximately 3 mg/ml and approximately 5 mg/ml in ethanol and DMSO.

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 S-methyl-D-penicillamine can be prepared by directly dissolving the solid in aqueous buffers. The solubility of S-methyl-D-penicillamine in PBS (pH 7.2) is approximately 3 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

S-Methyl-D-penicillamine is a metabolite of the chelating agent penicillamine (D-penicillamine; Item No. 23955).¹ It is formed from D-penicillamine by thiol methyltransferase in the membrane fraction of isolated human red blood cells.

Reference

1. Keith, R.A., Otterness, D.M., Kerremans, A.L., *et al.* S-Methylation of D- and L-penicillamine by human erythrocyte membrane thiol methyltransferase. *Drug Metab. Dispos.* **13**(6), 669-676 (1985).

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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