

Product Data Sheet

Product Name: 1,3-Dithiane

Cat. No.: GC60011

Chemical Properties

Cas. No. 505-23-7

SMILES S1CSCCC1

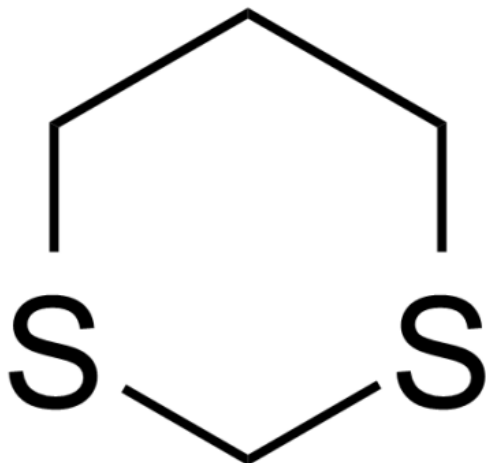
Formula C₄H₈S₂ M.Wt 120.24

Solubility DMSO : 100 mg/mL (831.67 mM; Storage 4°C, stored under nitroge
Need ultrasonic)

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure



Caution: Product has not been fully validated for medical applications. For research use only.

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Background

1,3-Dithiane is a protected formaldehyde anion equivalent that could serve as a useful labeled synthon[1]. 1,3-Dithiane is also a sulfur-containing Maillard reaction products (MRPs) found in boiled beef extracts. 1,3-Dithiane shows a potent direct-acting mutagenicity toward *S. typhimurium* TA98 and TA100[2].

[1]. Lee H, et al. Genotoxicity of 1,3-dithiane and 1,4-dithiane in the CHO/SCE assay and the Salmonella/microsomal test. *Mutat Res.* 1994 Jun;321(4):213-8. [2]. Martinez RA, et al. Synthesis of isotopically labeled 1,3-dithiane. *J Labelled Comp Radiopharm.* 2014 May 15;57(5):338-41.

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