## **Product** Data Sheet

## Dimethyl trisulfide

Cat. No.: HY-128454 CAS No.: 3658-80-8 Molecular Formula:  $C_2H_6S_3$ Molecular Weight: 126.26

Target: **Endogenous Metabolite** Pathway: Metabolic Enzyme/Protease Pure form -20°C Storage: 3 years

> 2 years -80°C In solvent 6 months -20°C 1 month

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## **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 100 mg/mL (792.02 mM; Need ultrasonic) H<sub>2</sub>O: 1 mg/mL (7.92 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	7.9202 mL	39.6008 mL	79.2017 mL
	5 mM	1.5840 mL	7.9202 mL	15.8403 mL
	10 mM	0.7920 mL	3.9601 mL	7.9202 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: PBS Solubility: 100 mg/mL (792.02 mM); Clear solution; Need ultrasonic

2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (19.80 mM); Clear solution

3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (19.80 mM); Clear solution

4. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (19.80 mM); Clear solution

## **BIOLOGICAL ACTIVITY**

Description Dimethyl trisulfide is an organic chemical compound and the simplest organic trisulfide found in garlic, onion, broccoli, and

similar plants. Dimethyl trisulfide is a cyanide antidote<sup>[1]</sup>.

IC<sub>50</sub> & Target Microbial Metabolite Human Endogenous Metabolite

REFERENCES
[1]. Rockwood GA, et al. Dimethyl trisulfide: A novel cyanide countermeasure. Toxicol Ind Health. 2016 Dec;32(12):2009-2016.
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