LKT Laboratories, Inc.

Allyl Disulfide

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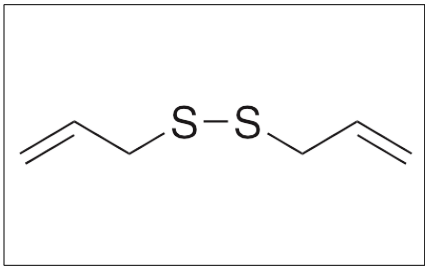
Product Information

Product ID A4544
CAS No. 2179-57-9
Chemical Name Diallyl disulfide



Synonym 2-Propenyl disulfide, 2-Propenyl disulphide, 4,5-Dithia-1,7-octadiene, AI3-35128, Allyl disulphide, BRN 1699241, CCRIS 6290, Di(2-propenyl) disulfide, Diallyl disulphide, Disulfide, di-2-propenyl

Formula $C_6H_{10}S_2$
Formula Wt. 146.28
Melting Point -24.4°C
Purity ≥98%
Solubility Soluble in ethanol (3 mg/mL), oil, DMSO (5 mg/mL), DMF (10 mg/mL), chloroform, methanol. Insoluble in water.

Store Temp -20°C
Ship Temp Ambient

Pricing and Availability

Bulk quanitites available upon request

Product ID	Size	List Price
A4544	100 mg	$88.60
A4544	500 mg	$177.00
A4544	1 g	$334.80
A4544	5 g	$1183.80

Description Allyl disulfide is an organosulfur originally found in garlic that exhibits antioxidative, antiviral, neuroprotective, anti-parasitic, anticancer, and anti-hyperlipidemic activities. Also know as diallyl disulfide, it induces phase II enzymes, inhibits lipid peroxidation, and acts as a radical scavenger. In vitro, allyl disulfide inhibits proliferation of HIV-1, and in vivo, it suppresses growth of *Gyrodactylus*. In other cellular models, diallyl disulfide inhibits 4α-methyl oxidase, suppressing cholesterol synthesis. In Drosophila models of Parkinson's disease, this compound decreases α-synuclein aggregate-induced neuronal death. In leukemia cells, allyl disulfide induces G2/M phase cell cycle arrest and apoptosis, increases levels of p21, release of cytochrome c, and activation of caspase 3 and PARP, and decreases activation of NF-κB.

References

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Trinh K, Moore K, Wes PD, et al. Induction of the phase II detoxification pathway suppresses neuron loss in Drosophila models of Parkinson's disease. J Neurosci. 2008 Jan 9;28(2):465-72. PMID: 18184789.

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Shoji S, Furuishi K, Yanase R, et al. Allyl compounds selectively killed human immunodeficiency virus (type 1)-infected cells. Biochem Biophys Res Commun. 1993 Jul 30;194(2):610-21. PMID: 8343148.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.