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Product Information

Product ID	A4544			
CAS No.	2179-57-9			
Chemical Name	Diallyl disulfide		S-S	
Synonym	Allyl disulphide, BRN 1699241, CCRIS 6290, Di(2-propenyl) disulfide, Diallyl disulphide, Disulfide, di-2-propenyl			
Formula Formula Wt.	C ₆ H ₁₀ S ₂ 146.28			
Melting Point	-24.4°C	Bulk quanit	ulk quanitites available upon request	
Solubility	Soluble in ethanol (3 mg/mL), oil, DMSO (5 mg/mL), DMF (10 mg/mL), chloroform, methanol. Insoluble in water.	Product ID A4544 A4544 A4544	Size 500 mg 1 g 5 g	
Store Temp	-20°C		Ũ	
Ship Temp	Ambient			
Description	Allyl disulfide is an organosulfur originally found in garlic that exhibits antioxidative, antiviral, neuroprotective, anti- parasitic, anticancer, and anti-hyperlipidemic activities. Allyl disulfide 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 <i>Gyrodactylus</i> . In other cellular models, allyl disulfide inhibits 4a-methyl oxidase, suppressing			

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, allyl 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 Schelkle B, Snellgrove D, Cable J. In vitro and in vivo efficacy of garlic compounds against Gyrodactylus turnbulli infecting the guppy (Poecilia reticulata). Vet Parasitol. 2013 Nov 15;198(1-2):96-101. PMID: 24074607.

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