



LKT Laboratories, Inc.

## Diallyl Sulfide

Phone: 888-558-5227  
651-644-8424  
Fax: 888-558-7329  
Email: [getinfo@lctlabs.com](mailto:getinfo@lctlabs.com)  
Web: [lctlabs.com](http://lctlabs.com)

### Product Information

**Product ID** D3201

**CAS No.** 592-88-1

**Chemical Name** Di-2-propenyl sulfide

**Synonym** 2-Propenyl sulphide, 3,3-Thiobis(1-propene), Diallyl monosulfide, Diallyl thioether, Allyl monosulfide, Allyl sulfide

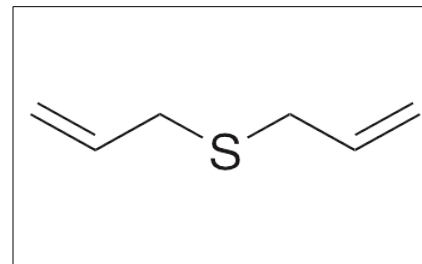
**Formula** C<sub>6</sub>H<sub>10</sub>S

**Formula Wt.** 114.21

**Melting Point** -83° C

**Purity** ≥97%

**Solubility** Insoluble in water.



**Bulk quantities available upon request**

Product ID	Size
D3201	25 ml
D3201	100 ml

**Store Temp** Ambient

**Ship Temp** Ambient

**Description** Diallyl sulfide is an organosulfur initially found in garlic; it exhibits anticancer chemotherapeutic, chemopreventive, neuroprotective, anti-inflammatory, antioxidative, anti-angiogenic, and anti-metastatic activities. Diallyl sulfide decreases DES-induced DNA damage and carcinogenesis in vitro and in vivo; it also inhibits the development of colon polyps in other carcinogenesis models. In animal models of cerebral ischemia/reperfusion, diallyl sulfide decreases infarct volume, apoptosis, and caspase 3 activation and increases levels of Bcl-2. In vitro, this compound decreases TNF- $\alpha$ -induced activation of NF- $\kappa$ B and suppresses histamine-induced levels of ROS, IL-1 $\beta$ , and TNF- $\alpha$ . Like other organosulfurs, diallyl sulfide induces phase II enzymes, increasing glutathione-S-transferase, glutathione reductase, superoxide dismutase, catalase, glutathione peroxidase, and Nrf2 in vivo. In animal models of osteosarcoma, diallyl sulfide decreases VEGF levels, microvessel density, cellular invasion, and tumor growth.

**References** McCaskill ML, Rogan E, D Thomas R. Diallyl sulfide inhibits diethylstilbestrol induced DNA damage in human breast epithelial cells (MCF-10A). *Steroids*. 2014 Sep 30. [Epub ahead of print]. PMID: 25278253.

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