

---

**Product Data Sheet**

---

Product Name: Alternariol monomethyl ether

Cat. No.: GC18437

**Chemical Properties**

Cas. No. 23452-05-3

Chemical Name 3,7-dihydroxy-9-methoxy-1-methyl-6H-dibenzo[b,d]pyran-6-one

SMILES CC1=C(C2=C(C(O3)=O)C(O)=CC(OC)=C2)C3=CC(O)=C1Formula  $C_{15}H_{12}O_5$  M.Wt 272.3

Solubility DMSO : 5 mg/mL (18.36 mM; ultrasonic and warming and heat to 60°C) Storage Store at -20°C

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 **Background**

Alternariol monomethyl ether (AME) is a mycotoxin originally isolated from *A. brassicae* extracts. AME is a common contaminant in cereal grains such as wheat, barley, and sorghum that is cytotoxic to bacterial (MIC = 500 µg/disc for *B. mycoides* in a bacterial halo assay) and mammalian cells (IC<sub>50</sub> = 120 µM in HCT116 cells). It inhibits human topoisomerase II and bacterial gyrase at initial inhibitory concentrations of 25 and 10 µM, respectively. AME selectively inhibits monoamine oxidase A (MOA-A; K<sub>i</sub> = 0.34 µM). AME also provokes DNA damage that induces mitochondrial permeability transition pore-mediated activation of apoptosis.

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA