

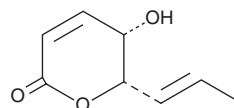
# PRODUCT INFORMATION



## Phomalactone

Item No. 28854

**CAS Registry No.:** 28921-94-0  
**Formal Name:** (5S,6S)-5,6-dihydro-5-hydroxy-6-(1E)-1-propen-1-yl-2H-pyran-2-one  
**Synonym:** (+)-Phomalactone  
**MF:** C<sub>8</sub>H<sub>10</sub>O<sub>3</sub>  
**FW:** 154.2  
**Purity:** ≥70%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years  
**Item Origin:** Fungus/*Nigrospora* sp.



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Phomalactone is supplied as a solid. A stock solution may be made by dissolving the phomalactone in the solvent of choice, which should be purged with an inert gas. Phomalactone is soluble in organic solvents such as ethanol, DMSO, and dichloromethane.

### Description

Phomalactone is a fungal metabolite that has been found in *N. sphaerica* and has fungicidal activity.<sup>1,2</sup> It is active against strains of the plant pathogenic fungi *C. sasaki*, *P. graminicola*, *M. griesea*, *P. capsica*, and *P. infestans* (IC<sub>50</sub>s = 200, 120, 83, 120, and 0.83 mg/L, respectively), but not *F. oxysporum*, *A. alternate*, *B. cinerea*, or *C. gloeosporioides* (IC<sub>50</sub>s = >200 mg/L for all).<sup>1</sup> Phomalactone is also active against the plant pathogenic fungi *A. niger* and *O. minus* (MICs = 62.5 and 125 µg/ml, respectively).<sup>2</sup>

### References

1. Kim, J.-C., Choi, G.J., Park, J.-H., *et al.* Activity against plant pathogenic fungi of phomalactone isolated from *Nigrospora sphaerica*. *Pest Manag. Sci.* **57(6)**, 554-559 (2001).
2. Wu, S.-H., Chen, Y.-W., Shao, S.-C., *et al.* Two new solanapyrone analogues from the endophytic fungus *Nigrospora* sp. YB-141 of *Azadirachta indica*. *Chem. Biodivers.* **6(1)**, 79-85 (2009).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM