PRODUCT INFORMATION



Spinosyn D

Item No. 19158

CAS Registry No.: Formal Name:	$(2S,3aR,5aS,5bS,9S,13S,14R,16aS,16 bS)-2-[(6-deoxy-2,3,4-tri-O-methyl-\alpha-L-mannopyranosyl)oxy]-13-[[(2R,5S,6R)-5-(dimethylamino)tetrahydro-6-methyl-2H-pyran-2-yl]oxy]-9-ethyl-2,3,3a,5a,5b,6,9, 10,11,12,13,14,16a,16b-tetradecahydro-4,14-dimethyl-1H-as-indaceno[3,2-d] oxacyclododecin-7,15-dione$
Synonyms	A-83543D, Lepicidin D
MF:	$C_{42}H_{67}NO_{10}$
FW:	746.0
Purity:	≥95%
Supplied as:	A solid
Storage:	-20°C
Stability:	≥4 years

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

Laboratory Procedures

Spinosyn D is supplied as a solid. A stock solution may be made by dissolving spinosyn D in the solvent of choice. Spinosyn D is soluble in organic solvents such as ethanol, methanol, DMSO, and dimethyl formamide, which should be purged with an inert gas.

Description

Spinosyn D is a spinosoid that is a minor component of spinosad, an insecticide based on chemical compounds found in a bacterial species isolated from sugarcane, S. spinosa.¹ It acts as an agonist of insect nicotinic acetylcholinesterase receptors.¹ Spinosyn D demonstrates insecticidal activity against H. virescens larvae (tobacco budworm) with an LD_{50} value of 0.8 ppm.²

References

- 1. Duke, S.O., Cantrell, C.L., Meepagala, K.M., et al. Natural toxins for use in pest management. Toxins (Basel) 2(8), 1943-1962 (2010).
- 2. Creemer, L.C., Kirst, H.A., Paschal, J.W., et al. Synthesis and insecticidal activity of spinosyn analogs functionally altered at the 2'-,3'- and 4'-positions of the rhamnose moiety. J. Antibiot. (Tokyo) 53(2), 171-178 (2000).

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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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