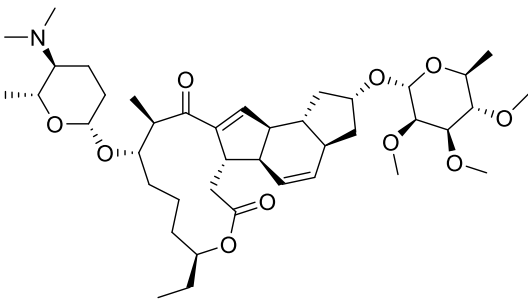


# Product data sheet



MedKoo Cat#: 571212 Name: Spinosad Factor D CAS#: 131929-63-0 (D) Chemical Formula: C <sub>42</sub> H <sub>67</sub> NO <sub>10</sub> Exact Mass: 745.4765 Molecular Weight: 746.00	
Product supplied as:	Powder
Purity (by HPLC):	≥ 98%
Shipping conditions	Ambient temperature
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years. In solvent: -80°C 3 months; -20°C 2 weeks.

## 1. Product description:

Spinosad Factor D, also known as Spinosyn D, is a naturally derived fermentation product that is used as a pesticide against many different insects.

## 2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under “QC And Documents” section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

## 3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
To be determined	To be determined	To be determined

## 4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	1.34 mL	6.70 mL	13.40 mL
5 mM	0.27 mL	1.34 mL	2.68 mL
10 mM	0.13 mL	0.67 mL	1.34 mL
50 mM	0.03 mL	0.13 mL	0.27 mL

## 5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of “Calculator”

## 6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

To be determined

In vivo study

- Creemer LC, Kirst HA, Paschal JW, Worden TV. Synthesis and insecticidal activity of spinosyn analogs functionally altered at the 2'-,3'- and 4'-positions of the rhamnose moiety. J Antibiot (Tokyo). 2000 Feb;53(2):171-8. doi: 10.7164/antibiotics.53.171. PMID: 10805578.

## 7. Bioactivity

Biological target:

Spinosad Factor D demonstrates insecticidal activity against *H. virescens* larvae (tobacco budworm) with an LD50 value of 0.8 ppm.

In vitro activity

To be determined

In vivo activity

Analogues of spinosyns were developed to boost the insecticidal effectiveness of spinosyns. Acylated analogues displayed increased insecticidal potency against *Heliothis virescens* larvae, although not as potent as spinosyns A or D. Deoxy analogues also showed higher

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insecticidal activity. Notably, the 2'-desmethoxy analogs surpassed spinosyns A and D in potency against *H. virescens* larvae, indicating that the polarity in the rhamnose moiety of spinosyn A might not be necessary for insecticidal effectiveness.

Reference: J Antibiot (Tokyo). 2000 Feb;53(2):171-8. <https://pubmed.ncbi.nlm.nih.gov/10805578/>

*Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.*