

Product Name: Spinosyn A

Product Number: S084

CAS Number: 131929-60-7

Molecular Formula: $C_{41}H_{65}NO_{10}$

Molecular Weight: 732.0

Appearance: White solid

Storage Conditions: -20°C

Description: Spinosyn A is the major component of a complex of unusual, hydrophobic macrocyclic lactones isolated from *Saccharopolyspora spinosa* in 1991. The 12-membered macrocyclic lactone is fused to form a rare 12-5-6-5 tetracyclic ring system, with the macrocycle and the terminal cyclopentane bearing glycosides. Spinosyn A is a potent insecticide for crop pathogens and ectoparasite control on animals. The spinosyns have a unique mechanism of action involving disruption of nicotinic acetylcholine receptors.

Spinosyn A is soluble in ethanol, methanol, DMF and DMSO.

References: A 83543A-D, unique fermentation-derived tetracyclic macrolides. Kirst H.A. et al. Tetrahedron Lett. 1991, 32, 4839.

The spinosyn family of insecticides: realizing the potential of natural products research. Kirst H.A. J. Antibiot. 2010, 63, 101.