

Product Name:	Emamectin B1a
Product Number:	E033
CAS Number:	121124-29-6
Molecular Formula:	C ₄₉ H ₇₅ NO ₁₃
Molecular Weight:	886.1
Appearance:	White solid
Storage Conditions:	-20°C
Description:	<p>Emamectin B1a is a semi-synthetic 4"-epimethylamino analogue of avermectin B1a prepared by oxidation of the 4"-hydroxy moiety and reductive amination. The introduction of the methylamino group greatly enhances the insecticidal potency of the avermectin class. Emamectin B1a, as a benzoate salt, is the major component (>90%) of the commercial insecticide/acaricide, emamectin.</p> <p>Emamectin B1a is soluble in ethanol, methanol, DMF or DMSO. Poor water solubility.</p>
Mechanism of Action:	Members of the avermectin/milbemycin class exert their insecticidal/anthelmintic effects by binding to glutamate-gated chloride channels expressed on nematode neurones and pharyngeal muscle cells.
References:	<p>Discovery of novel avermectins with unprecedented insecticidal activity. Mrozik H. et al. Experientia 1989, 45, 315.</p> <p>Synthesis of 4"-epi-amino-4"-deoxyavermectins B1. Cvetovich R.J. et al. J. Org. Chem. 1994, 59, 7704.</p>