

Product Name:	Milbemycin A4
Product Number:	M059
CAS Number:	51596-11-3
Molecular Formula:	$C_{32}H_{46}O_7$
Molecular Weight:	542.3
Appearance:	White solid
Storage Conditions:	-20°C
Description:	<p>Milbemycins are a complex family of macrocyclic lactones containing a highly characteristic spiroketal group, produced by <i>Streptomyces hydroscopicus</i> subsp. <i>aureolarcrimosus</i>. Milbemycin A4 is the dominant member of a group of analogues containing a 25-ethyl substituent. Milbemycin A4 is a highly selective and potent nematocide and insecticide.</p> <p>Milbemycin A4 is soluble in ethanol, methanol, DMF or DMSO. Poor water solubility.</p>
Mechanism of Action:	Like the closely related avermectins, milbemycins are thought to act by opening glutamate sensitive chloride channels.
References:	<p>Milbemycins, a new family of macrolide antibiotics: fermentation, isolation and physico-chemical properties. Takiguchi Y. et al. J Antibiot. 1980, 33, 1120.</p> <p>Milbemycins, a new family of macrolide antibiotics: producing organism and its mutants. Okazaki T. et al. J Antibiot. 1983, 36, 438.</p>