

## PRODUCT DATA SHEET

Code No.: BIA-S1530

Pack sizes: 1 mg, 5 mg

Synonyms :

## Specifications

Selamectin

CAS # : 220119-17-5 Molecular Formula :  $C_{43}H_{63}NO_{11}$  Molecular Weight : 770.0

Source : Semi-synthetic

Appearance : White solid

Purity : >99% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in ethanol, methanol, DMF or DMSO. Poor water solubility.

## **Application Notes**

Selamectin is a semi-synthetic avermectin derivative prepared by selective hydrolysis and oximation of doramectin. Selamectin is a potent nematocide used for the treatment of endo- and exo- parasites of domestic animals, notably cats and dogs. Like the other milbemycin/avermectins, selamectin selectively binds to parasite glutamate-gated chloride ion channels and disrupts neurotransmission leading to paralysis and death of the parasite.

## References

1. Avermectins and flea control: structure-activity relationships and the selection of selamectin for development as an endectocide for companion animals. Banks B.J. Bioorg Med Chem. 2000, 8, 2017.

Updated: 2 December 2014