**Milbemycin D**

**Synonyms**: Antibiotic B 41D

**Specifications**

- **CAS #**: 77855-81-3
- **Molecular Formula**: C\textsubscript{33}H\textsubscript{48}O\textsubscript{7}
- **Molecular Weight**: 556.7
- **Source**: *Streptomyces hygroscopicus* subsp. *aureolacrimosus* MST-AS4496
- **Appearance**: White solid
- **Purity**: > 95% by HPLC
- **Long Term Storage**: -20°C
- **Solubility**: Soluble in ethanol, methanol, DMF or DMSO.

**Application Notes**

Milbemycins are a complex family of macrocyclic lactones containing a highly characteristic spiroketal group. They are produced by *Streptomyces hygroscopicus* subsp. *aureolacrimosus*. Milbemycin D is a minor member of a group of analogues containing a 25-isopropyl substituent. Milbemycin D is a highly selective and potent nematocide and insecticide. Like the closely related avermectin, milbemycins are thought to act on chloride-gated ion channels.

**References**