

#### PRODUCT DATA SHEET

Code No.: BIA-A1576

Pack sizes: 1 mg, 5 mg

# epi-Avermectin B1a

Synonyms :

## Specifications

CAS # : 106434-14-4

Molecular Formula : C<sub>48</sub>H<sub>72</sub>O<sub>14</sub>

Molecular Weight : 873.1

Source : Semi-synthetic

Appearance : White solid

Purity : >95% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in ethanol, methanol, DMF or DMSO.

### Application Notes

epi-Avermectin B1a is a base-catalysed intermediate in the decomposition of avermectin B1a. epi-Avermectin B1a is formed by epimerisation at the 2-position which ultimately rearranges irreversibly to the isomeric alkene analogue,  $\Delta^2$ -avermectin B1a. epi-Avermectin B1a is only very weakly active as a nematocide showing ~100-fold loss of biological activity compared with the parent avermectin. epi-Avermectin B1a is formed in vivo following treatment with avermectin and is an environmental degradation product.

#### References

- 1. Base-catalyzed isomerization of avermectins. Pivnichny J.V. et al., J. Agric. Food Chem. 1988, 36, 826.
- 2. Direct determination of avermectins in plasma at nanogram levels by High-Performance Liquid Chromatography. Pivnichny J.V. et al., J. Pharm. Sci. 1980, 72, 1447.

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