

## Tiamulin PRODUCT DATA SHEET

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Product Name: Tiamulin

Product Number: T091

**CAS Number:** 55297-95-5

Molecular Formula:  $C_{28}H_{47}NO_4S$ 

Molecular Weight: 493.7

**Appearance:** Evaporated resin

Storage Conditions: -20°C

**Description:** Tiamulin is a semi-synthetic analogue of pleuromutilin in which the

hydroxyacetyl side chain is replaced with a larger diethylaminoethylthioacetyl moiety, providing greater hydrophobicity and an ionisable group for salt formation and greater water solubility. Tiamulin is a potent and highly selective antibiotic active against a range of Gram positive bacteria, with no cross resistance to existing antibiotic classes due to its unique mode of action. Like pleuromutilin, it inhibits protein synthesis by binding to domain V of 23S rRNA.

Tiamulin is soluble in ethanol, methanol, DMF and DMSO.

**References:** New pleuromutilin derivative with enhanced antimicrobial activity. I. Synthesis.

Egger H. & Reinshagen H. J. Antibiot. 1976, 29, 915.

Pleuromutilin antibiotics. Hunt E. Drugs Future 2000, 25, 1163.

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