



CERTIFICATE OF ANALYSIS

The Power to Question

Catalog Number: sc-237107
Lot Number: SAMPLE
Product Name: Tiamulin
CAS Number: 55297-95-5
Molecular Formula: $C_{28}H_{47}NO_4S$
Molecular Weight: 493.74

Test	Specification	Result
Appearance	White or almost white crystal powder	Complies
Chromatographic Purity	Single impurity: $\leq 1.0\%$ Any unidentified impurity: $\leq 0.5\%$ Total impurities: $\leq 2.0\%$	Complies
Identification (HPLC)	The retention time obtained from the test solution corresponds to that obtained from the standard solution	Complies
Identification (Infrared Spectrum)	IR spectrum of the sample corresponds to that of the reference standard	Complies
Purity	98 - 102 % (anhydrous)	98.2%
Melting Point	143 - 149 °C	143.5 - 144.4 °C
pH	3.1 - 4.1	3.6
Residual Solvents	$\leq 0.5\%$	0.44%
Residue on Ignition	$\leq 0.1\%$	0.07%
Solution	The solution should be clear and colorless, and the absorbance at 400 nm and 650 nm is not greater than 0.150 and 0.03	Clear and colorless 400 nm 0.02 650 nm 0.008
Optical Rotation	+24° - +28°	+25.8°
Heavy Metals	$\leq 0.001\%$	Complies
Impurity	Fumarate: 83.7 - 87.3 mg	86.4 mg
Loss on Drying	$\leq 0.5\%$	0.48%

Satisfaction Guarantee: We appreciate your business and are committed to providing the highest level of quality and service. Any product that does not meet the performance standards indicated in our product literature will be replaced at no charge. Our policy is valid for one year from the date of your purchase.

Santa Cruz Biotechnology, Inc. 800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 62221 4503 0 www.scbt.com