

677425**Lot: 830067****Tilmicosin**1. General Information

Formula	C ₄₆ H ₈₀ N ₂ O ₁₃	Expiry Date	01 Feb 2030
Mol. Weight	869.13 g/mol	Store at	20°C (in the dark)
CAS-No.	108050-54-0		

2. Batch Analysis

Identity	confirmed by LC-MS		
Overall Purity	98.35 % (g/g)	Expanded Uncertainty	0.58 % (g/g)
Assay Purity (HPLC)	98.35 % (g/g)	Uncertainty	0.29 % (g/g)

Certified on 28 Jan 2025

by Jacqueline Seidel
RM ReleaseThe overall purity is calculated by: $\text{Purity(\%)} = \text{Assay purity} \cdot (100 - \text{water content} - \text{impurities}) / 100$

The reported uncertainties are determined in accordance with ISO 17034 with a 95% confidence level ($k=2$). The Uncertainty is based on the combined uncertainties, including uncertainties of characterization and stability testing. The expiry date is based on the current knowledge and holds only for proper storage conditions in the originally closed flask. If the substance is proven to be unstable under the given storage conditions, you will be contacted immediately. The warranty of this product is limited to the purchasing price of this product and to the first point of use. The indicated long-term storage temperature can vary in a range of ± 4 °C.

Our standards are for laboratory use only and can be used as reference material for calibration of chromatographic systems or related analytical techniques. For handling instructions see the MSDS. A minimum sample of 2 mg is recommended. Deploying less material will increase the uncertainty by a factor 2 for half of sample and 4 for a quarter of sample. The material in the vial can be used multiple times, but it is strongly recommended that all external negative influences to the material are considered and ruled out (e.g. high temperatures, UV-radiation, moisture, oxygen). It is strongly recommended to open the vial at room temperature only and handle the material under inert gas if necessary. The integrity of the purity cannot be guaranteed if the substance is handled under unfavorable conditions.

The balances used are calibrated with weights traceable to the national standards (DKD).

HPC Standards GmbH produces reference materials according to ISO 17034. For further information, check:

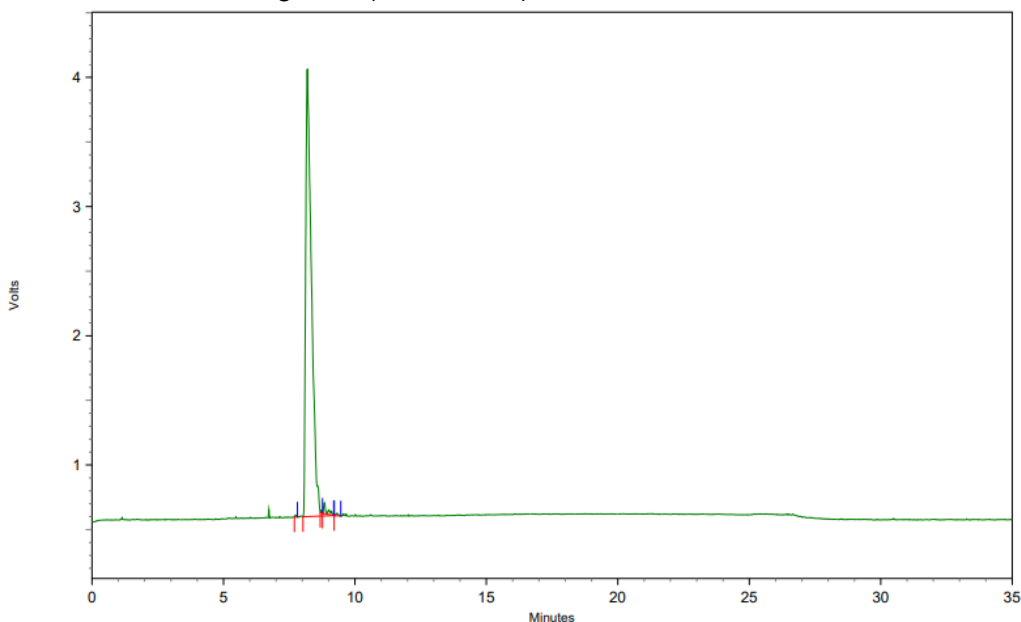


HPLC-Method

Article 677425
 Lot-No. 830067
 Column L=100mm, ID=4.6mm; Kinetex C18, 100A, 2.6µm
 Eluent A Acetonitrile + 0.1% Formic acid
 Eluent B Water + 0.1% Formic acid
 Gradient

time	%A	%B
0min	0	100
19min	90	10
25min	90	10

Flow 0.9 ml min⁻¹
 Detector ELSD
 Injection-Volume 5 µl
 Sample 3.5 mg ml⁻¹ (Acetonitrile)



Retention Time	Area	Area Percent
7.733	4901	0.09
8.192	5397920	98.45
8.708	2940	0.05
8.867	65574	1.20
9.325	11840	0.22
Totals	5483175	100.00

Exemplary chromatogram of given method.

Version	Article	Lot	Reason for Change	Date
1	677425	830067	Initial Version	28 Jan 2025