



# Certificate of analysis

Product name:Milbemycin oxime

Cas number:129496-10-2

Molecular Formula:  $2C_{31}H_{43}NO_7$  (A<sub>3</sub>:80%) and  $2C_{32}H_{45}NO_7$  (A<sub>4</sub>:20%)

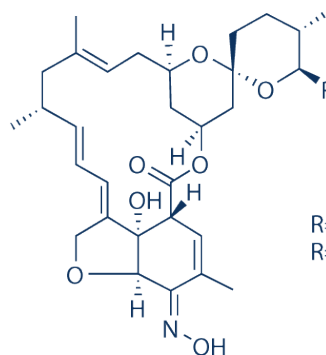
Molecular Weight: 2194.78

Date of production:May. 16, 2019

Batch NO:20190516

Exp Date:May. 14, 2021

Chemical structure:



ITEMS	SPECIFICATIONS	RESULTS	
Description	White to off-white amorphous powder,no visible evidence of contamination by foreign matter	white amorphous powder	
Identification A(IR)	IR spectrum corresponds to the IR spectrum of the reference standard	Conforms	
Identification B(HPLC)	The retention time of the major peak(A3&A4) of sample solution corresponds to that of the standard solution.	Conforms	
Residue on Ignition	≤0.2%	0.11%	
Heavy Metals	≤20ppm	Conforms	
Water	≤2.0%	0.83%	
Milbemycin oxime Assay(A3+A4,On the anhydrous and solvent-free basis)	≥95.0%	A3 20%±5% A4 80%±5%	96.8%
Related Substances	Milbemycin D-Oxime≤2.0% Largest individual impurity≤0.5% Total Impurities(Excluding Milbemycin D-Oxime)≤3.5%	0.44% 0.28% 1.23%	
Residual Solvents	Ethanol≤5000ppm Butyl acetate≤5000ppm Dichloromethane≤600ppm N-Heptane≤5000ppm Chlororm≤60ppm	125ppm 53ppm Absent 32ppm Absent	
Bioburden	Total Aerobic Microbial Count≤500 cfu/g Total Combined Yeast and Mould≤100cfu/g Escherichia coli should be absent	Conforms Conforms Absent	

**Conclusion: It complies with the Enterprise Standard.**

Analyst:Zhao

Checker:Liu

Q.C Director. Fang F

