江苏威凌生化科技有限公司 JIANGSU WILLING BIO-TECH CO., LTD.

Certificate of Analysis for Tiamulin Hydrogen Fumarate

Report No: J-20190313-001

File encoding: WL-QS-FP018-R02 (03)

eport Date: 2019.03.13 Test Items	Batch Size: 675 kg	Standard: WL-QS-FP018(d	urrent LICD
Test Items			unent 05P
	Specif	Specification	
Description	White or almost white crystal powder		White crystalline powder
Identification	1.Infra-red spectrum : Infra-red spectrum of the sample corresponds to that of the reference standard		Complies
	2.HPLC : The retention time of tiamulin fumarate peak obtained from the test solution corresponds to that obtained from the standard solution.		Complies
Color and clarity of solution	The solution should be clear and colorless		Complies
	The absorbance at 400nm is not greater than 0.150		0.025
	The absorbance at 650nm is not greater than 0.030		0.009
Loss on drying	≤0.5%		0.08%
Specific rotation	+24°~+28°		+26°
рН	3.1~4.1		3.6
Content of fumarate	83.7~87.3mg		85.6 mg
Residue on ignition	≪0.1%		0.07%
Chromatographic purity	Any identified impurity: ≤1.0%		Complies
	Any unidentified impurity: $\leq 0.5\%$		Complies
	Total impurities: ≤3.0%		0.8%
Assay(Calculated on the dried basis)	97.0~102.0%		99.0%
Residual solvent	Total: ≤5000 ppm		826 ppm
	Methanol: ≤3000 ppm		311 ppm
	MIBK: ≤2500 ppm		515 ppm
Conclusion	The product complies with the specification(current USP)		
Storage	Preserve in tight, light-resistant containers, and store at room temperatur and dry,		

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