

## CERTIFICATE OF ANALYSIS

<b>Product Name:</b>	Valsartan	<b>Manufacture Date:</b>	Jul. 02,2019
<b>Batch Number:</b>	SA190702	<b>Analysis Date:</b>	Jul. 17,2019
<b>Batch Quantity:</b>	50kg	<b>Certificate Date:</b>	Jul. 17,2019
<b>CAS:</b>	137862-53-4	<b>Specification Standard</b>	USP41

ANALYSIS	SPECIFICATION	RESULTS
Appearance	White or almost white powder	Conforms
Identify	Infrared absorption: The IR spectrum of the sample corresponds to the IR spectrum of the RS	Conforms
	Identity Test of HPLC: The retention time of the Assay preparation corresponds to the Standard preparation	Conforms
Specific rotation	-64.0° ~ -69.0°	-66.0°
Absorbance	≤0.02	Conforms
Water	≤2.0%	0.2%
Residue on ignition	≤0.1%	0.05%
Heavy metals	≤0.001%	Conforms
Related compound	Valsartan related compound A: NMT 1.0%	0.7%
	Valsartan related compound B: NMT 0.2%	Conforms
	Valsartan related compound C: NMT 0.1%	Conforms
	Valsartan related compound D: NMT 0.1%	Conforms
	NDMA: NMT0.3PPM	Negative
	NDEA: NMT0.3PPM	Negative
	NDIPA: NMT0.3PPM	Negative
	NMBA: NMT0.3PPM	Negative
	EIPNA: NMT0.3PPM	Negative

	Not more than 0.10% of any other individual impurity, excluding Valsartan related compound A	Conforms
	Not more than 0.3% of total impurities, excluding Valsartan related compound A	Conforms
Related Solvents	DMF $\leq$ 880ppm	Negative
	Toluene $\leq$ 890ppm	Negative
	Methano $\leq$ 13000ppm	Negative
	Ethyl acetate $\leq$ 5000ppm	0.35%
	Acetonitrile $\leq$ 410ppm	Negative
	Valeric acid $\leq$ 1000ppm	Negative
	Ben zene $\leq$ 2ppm	Negative
Assay	Calculate on anhydrous, it contains not less than 98.0% and not more than 102% of Valsartan	99.1%

Test by: Wenling Sun

Check by: Yuxia Chen

Issued by: Yajian Hou

**Conclusion**

Comply with required USP 41 specification

**Storage**

Store in sealed containers at cool & dry place.

Protect from light, moisture and pest infestation.

**Shelf life**

3 years when properly stored

**Quality Assurance Officer:**

西安素克生物技术有限公司  
SALUS NUTRA INC.