Lote: 00105/5

东北制药集团股份有限公司
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CERTIFICATE OF ANALYSIS

Ascorbic Acid ($C_6H_8O_6$) EP/E300/USP/FCC

Food Additive

BATCH NUMBER	DY 0261410073	MANUFACTURE DATE	Jan.22.2014
BATCH SIZE	3500 kg	TEST DATE OF APPLICATION	Jan.22.2014
QUANTITY	140 Cartons	RETEST DATE	Jan.21.2017

	Analysis Items	Specifications	Analysis Results
1.	Characteristics	White or almost white, crystalline powder or colorless crystals	White crystalline powder
2.	Identification	IR: Complies CA: Positive	Complies Positive
3.	Clarity of Solution	Clear	Clear
4.	Colour of Solution	≤BY_7	<BY_7
5.	Melting Point	About 190°C	190°C
6.	Assay	99.0% ~ 100.5%	99.6%
7.	Acidity (pH)	2.1 ~ 2.6 (5% aqueous solution)	2.34
8.	Sulphated Ash	≤0.1%	0.04%
9.	Specific Rotation	+20.5 ° ~ +21.5 °	+21.25°
10.	Heavy Metals	≤10ppm	<3ppm
11.	Oxalic Acid	≤0.2%	<0.2%
12.	Copper	≤5ppm	<5ppm
13.	Iron	≤2 ppm	<2ppm
14.	Related Substances	Impurity C: ≤0.15% Impurity D: ≤0.15% Unspecified Impurities: ≤0.10% Total Impurities other than C、D: ≤0.2%	Not detected 0.05% Less than disregard limit Less than disregard limit
15.	Residual Solvents	Ethanol ≤0.5% Methanol ≤0.3%	Not detected 0.0086%
16.	Particle-Size	≤30% more than 40 mesh. ≥45% between 40 and 80 mesh.	More than 40 mesh:2% Between 40 and 80 mesh:62%
17.	Arsenic	≤3ppm	<3ppm
18.	Lead	≤2ppm	<2ppm
19.	Mercury	≤1ppm	<1ppm
20.	Acidity(pH)	2.4~2.8 (2% aqueous solution)	2.51
21.	Loss on Drying	≤0.4%	0.01%
22.	Staphylococcus aureus	Not detected	Not detected
23.	Salmonella	Not detected	Not detected
24.	Escherichia coli	Not detected	Not detected
25.	Total plate count	≤1000CFU/g	40 CFU/g
26.	Yeasts、Moulds	≤100CFU/g	20 CFU/g

We, **Northeast Pharmaceutical Group Co., Ltd.**, certify that this batch of **Ascorbic Acid** meets the requirements of **European Pharmacopoeia 8th, E300, United States Pharmacopoeia 36, and FCCVIII, GMO free.**

Supervisor
Final Batch Disposition
Approved

QUALITY CONTROL DEPARTMENT

By:

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