

# Certificate of Analysis

<b>Product</b>	<u>Ascorbic Acid Fine Powder</u>	<b>Date of Certificate</b>	<u>12/24/2011</u>
<b>Batch No.</b>	<u>1112813013</u>	<b>Date of Expiry</b>	<u>12/22/2013</u>
<b>Quantity</b>	<u>20kg×50</u>	<b>Date of Manufacture</b>	<u>12/23/2011</u>

<b>Analysis Contents</b>	<b>Analysis Standard</b>	<b>Analysis Results</b>
Appearance	White or Almost White Crystalline Powder	Pass
Identification	Positive Reaction	Positive
Melting Point	About 190°C	191°C
pH(With 2% Water Solution)	2.4~2.8	2.6
pH(With 5% Water Solution)	2.1~2.6	2.3
Clarity of Solution	Clear	Clear
Colour of Solution	≤ BY7	< BY7
Copper	≤ 5ppm	< 5ppm
Heavy Metals	≤ 10ppm	< 10ppm
Lead	≤ 2ppm	< 2ppm
Iron	≤ 2ppm	< 2ppm
Cadmium	≤ 1ppm	< 1ppm
Arsenic	≤ 3ppm	< 3ppm
Mercury	≤ 0.1ppm	< 0.1ppm
Zinc	≤ 25ppm	< 25ppm
Oxalic Acid	≤ 0.2%	< 0.2%
Sulphate Ash(Residue on Ignition)	≤ 0.1%	0.04%
Specific Optical Rotation	+20.5° ~ +21.5°	+20.9°
Assay	99.0% ~ 100.5%	100.0%
Loss on Drying	≤ 0.4%	0.03%
Particles Size	Through 200 mesh%	98.0%
Residual Solvents	Methanol:NMT 3000 ppm	< 200ppm
Related Substances	Impurity C ≤ 0.15%	Complies
	Impurity D ≤ 0.15%	Complies
	Any Other Unspecific Impurities ≤ 0.10%	Complies
	Total Impurities ≤ 0.2%	Complies

**Conclusion: The Above Product Conforms to BP2011, USP33, EP7. 0, FCC7**