



Certificate of Analysis

(Representative Sample Certificate)

Product Name: Vitamin C L-Ascorbic Acid
INCI Name: Vitamin C L-Ascorbic Acid
CAS Number: 50-81-7
Lot Number: Not available (data may vary slightly with different lots or batches)
Expiration Date: 24 months from production date

Analytical Results	Requirements	Result
Color	White	White
Appearance	Powder	Powder
Color of solution	Not more than BY7	Not more than BY7
Clarity of Solution	Clear	Clear
Identification	Positive	Positive
Assay	99.00-100.50%	99.9%
Loss on drying	<=0.40%	0.30%
Residue on Ignition	<=0.10%	0.05%
Specific Rotation	20.50-21.50	20.60
pH Value	2.1-2.6	2.3
Related Substance	Meets Requirements	Meets Requirements
Melting Point	190.0-192.0 C	191.0 C
Oxalic Acid	0.2% max.	<0.2%
Heavy Metals	10 ppm max.	10 ppm max.
Arsenic	<=1.000ppm	< 1.000 ppm
Cadmium	<= 1.000 ppm	< 1.000 ppm
Lead	<= 1.000 ppm	< 1.000 ppm
Mercury	<= 1.00 ppm	, 1.000 ppm
Copper	5 ppm max	5 ppm max
Iron	<=2.0 ppm	< 2.0 ppm
Total Palte Count	<1,000 cfu/g	< 1,000 cfu/g
Yeast and Mold	<= 100 cfu/g	< 100 cfu/g
E. Coli	Negative	Negative
Coliforms	<=100 cfu/g	< 100 cfu/g
Salmonella	Negative	Negative
Staphylococcus Aureus	Negative	Negative
Mesh Size	About 100 mesh	90% thru 100 mesh; 62% thru 150 mesh;
Bulk Density	0.40-0.90 g/ml	0.71 g/ml
Tap Density	0.60-1.20 g/ml	1.01 g/ml

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