

CERTIFICATE OF ANALYSIS

L-Ascorbic Acid ($C_6H_8O_6$) EP/BP/USP/FCC/E300

Test Items		Test parameters	Test Results
1	Characteristics	White almost white crystals or crystalline powder	White crystallin powder
2	Identification	Positive	Positive
3	Melting Point	190°C- 192°C	191°C
4	pH (5% W/V)	2.2 – 2.5	2.4
5	pH (2% W/V)	2.4 – 2.8	2.6
6	Specific Optical Rotation	+20.5° - +21.5°	+21.1°
7	Clarity and color of solution	Clear, Not more intense than BY7	Clear, not more intensely than BY7
8	Heavy Metals	$\leq 0.0003\%$	< 0.0003%
9	Assay (as $C_6H_8O_6$)	99.0% - 100.5%	99.9%

The above items are based on routine batch analysis.

11	Copper (ppm)	≤ 3	< 3
12	Iron (ppm)	≤ 2	< 2
13	Mercury (ppm)	≤ 1	< 1
14	Arsenic	$\leq 0.0002\%$	< 0.0002%
15	Lead	$\leq 0.0002\%$	< 0.0002%
16	Oxalic Acid (Impurity E)	$\leq 0.2\%$	< 0.2%
17	Loss on drying	$\leq 0.1\%$	< 0.1%
18	Sulphated Ash	$\leq 0.1\%$	< 0.1%
19	Related Substances	Impurity C $\leq 0.15\%$ Impurity D $\leq 0.15\%$ Unspecified Impurities $\leq 0.10\%$ Total $\leq 0.2\%$	< 0.15% < 0.15% < 0.10% < 0.2%
20	Residual Solvents (as Methanol) (ppm)	≤ 3000	< 3000
21	Total Plate Count (cfu/g)	≤ 1000	< 1000
22	Yeast & Molds (cfu/g)	≤ 100	< 100
23	Escherichia Coli	Absence in 1g	Absence in 1g
24	Salmonella	Absence 25g	Absence in 25g
25	Staphylococcus Aureus	Absence in 25g	Absence in 25g