

Certificate of Analysis / Certificat D'Analyse

Ascorbic Acid USP/FCC

Acide Ascorbique USP/FCC

Properties	Specifications	Results	Results
Appearance	White or almost white crystalline powder or colorless crystals	Pass	Pass
*Identification A, infrared absorption	Pass	Pass	Pass
Identification B, reduction of cupric tartrate	Tests positive for ascorbic acid	Pass	Pass
Assay	99.0 ~ 100.5%	99.9%	99.8%
Melting Point	~190 C +/- 2°	190°C	190°C
pH (not in current FCC/USP)	2.1 ~ 2.6	2.3	2.4
Specific rotation	+20.5° ~ +21.5°	+21.0°	+21.1°
Copper salts (not in current FCC/USP)	≤ 5 ppm	< 5ppm	< 5ppm
Iron, as ferrit (not in current FCC/USP)	≤ 2 ppm	< 2ppm	< 2ppm
*Heavy metals, as Pb	≤ 10 ppm	< 3ppm	< 3ppm
*Lead, Pb	≤ 2 ppm	< 2ppm	< 2ppm
Residue on ignition (sulfated ash)	≤ 0.1%	0.03%	0.03%
*Residual solvents	Methanol < 3,000ppm; Ethanol < 5,000ppm	Pass	Pass
*Moisture (not in current FCC/USP)	≤ 0.15%	< 0.15%	< 0.15%
*Mercury, Hg (not in current FCC/USP)	≤ 1 ppm	< 1ppm	< 1ppm
*Total Plate Count	≤ 1000cfu/g	< 1000cfu/g	< 1000cfu/g
*E. Coli	Negative	Negative	Negative
*Salmonella	Negative	Negative	Negative
*Coliform	Negative	Negative	Negative
*Yeast and Molds	≤ 100cfu/g	< 100cfu/g	< 100cfu/g
*S. aureus	Negative	Negative	Negative
Retained on 40 mesh (not in current FCC/USP)	≤ 25%	9%	11%
Retained on 80 mesh (not in current FCC/USP)	≥ 50%	59%	58%
*Cadium (ICP-MS)	≤ 1 ppm	< 1ppm	< 1ppm
*Arsenic (ICP-MS)	≤ 3 ppm	< 3ppm	< 3ppm
*Impurity E	≤ 0.3%	< 0.3%	< 0.3%

* Data based on manufacturer's document

John

Quality Control

