

SPECIFICATION

Vitamin C 99 % (Ascorbic acid E300)

Production unit

Heilongjiang NHU Biotechnologies

Description

Ingredients	Ascorbic acid
Synonym	Vitamin C; L-Ascorbic acid, 3-Oxo-L-gulofuranolactone
Formula	$C_6H_8O_6$
Molecular weight	176.13
Product code	SPVC05
CAS No	50-81-7

Properties

Shelf life	36 months
Aspect	White or almost white crystals crystalline powder
Assay (GC)	99,0 – 100,5 %
Melting point	190 – 192 °C
Loss on drying	≤ 0,4 %
pH (5 % water solution)	2,1 – 2,6
pH (2 % water solution)	2,4 – 2,8
Colour of solution	≤ BY ₇
Clarity of solution	clear
Optical rotation	+20,5 - +21,5 °
Density (20 °C)	1,65 g/cm ³
Sulphated ash	≤ 0,1 %
Particle size	≤ 20 % ≥ 40 mesh ≥ 50 % between 40 to 80 mesh

Identification

EP	First identification: B, C Second identification: A, C, D A: Ultraviolet and visible absorption spectrophotometry B: Infrared absorption spectrophotometry C: pH meets the requirements D: A grey precipitate is formed
----	--

USP

A: Infrared absorption
B: 20 mg/ml reduces alk. cupric tartrate test solution



Heavy metals	≤ 10 mg/kg
Iron	≤ 2,0 mg/kg
Copper	≤ 5,0 mg/kg
Arsenic (As)	≤ 1,0 mg/kg
Lead (Pb)	≤ 0,5 mg/kg
Mercury (Hg)	≤ 0,1 mg/kg
Cadmium (Cd)	≤ 0,5 mg/kg

Impurities

Impurity E (Oxalic acid)	≤ 0,2 %
Impurity C, D	≤ 0,15 %
Unspecified impurities (each)	≤ 0,1 %
Sum of impurities other than C, D	≤ 0,2 %
Residual solvents (as Methanol)	≤ 200 mg/kg

Microbiological specs

Total plate count	≤ 1000 CFU/g
Mould and Yeast	≤ 100 CFU/g
E. coli	negative in 10 g
Salmonella	negative in 25 g
Staphylococcus aureus	negative in 25 g

Handling

Usage for cosmetic and food industry

Storage in unopened tight, light-resistant containers

Product complies to EP9.8/USP42/FCC11.

NHU EUROPE GmbH