



SPECIFICATION

Product name	Vitamin C 99 %
Product code	SPVC05
Production unit	Heilongjiang NHU Biotechnologies
Description	
Ingredients	Ascorbic acid (E300)
Synonym	Vitamin C; L-Ascorbic acid, 3-Oxo-L-gulofuranolactone
Formula	C ₆ H ₈ O ₆
Molecular weight	176.13
CAS No	50-81-7
Properties	
Shelf life	48 months
Aspect	White or almost white crystals or crystalline powder
Assay (GC)	99,0 – 100,5 %
Melting point	190 – 192 °C
Loss on drying	≤ 0,2 %
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 °
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

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 food and cosmetics applications
Storage	Preserve in tight, light-resistant original containers.
Transport	See latest safety data sheet

This product complies with EU 231/2012 of 9th March of 2012, EP, USP and FCC.

NHU Life Science GmbH