

SPECIFICATION

Product name Vitamin C 99 % (Ascorbic acid E300)
Product code SPVC05
Production unit Heilongjiang NHU Biotechnologies

Description

Ingredients Ascorbic acid
Synonym Vitamin C; L-Ascorbic acid, 3-Oxo-L-gulofuranolactone
Formula C₆H₈O₆
Molecular weight 176.13
CAS No 50-81-7

Properties

Shelf life 36 months *
Aspect White or almost white crystals or crystalline powder
Assay (GC) 99,0 – 100,5 %
Melting point 190 – 192 °C
Loss on drying ≤ 0,4 %
pH (5 % water solution) 2,1 – 2,6
pH (2 % water solution) 2,4 – 2,8
Colour of solution ≤ BY₇
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	≤ 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
product can also be used as feed additive (3a300), dosage
in feed: as per latest version of European feedstuff law

Storage in unopened tight, light-resistant containers

* Shelf life can be extended to 48 months on request after quality check of product batch.

Product complies to EP/USP/FCC.

NHU EUROPE GmbH