

## SPECIFICATION

## Calcium ascorbate E302 (EP/USP)

### Production unit

Heilongjiang NHU Biotechnology co., Ltd.

### Description

Ingredients  
Synonym

Calcium ascorbate dihydrate  
Calcium diascorbate, Calcium di[R]-2-[(S)-1,2-dihydroxyethyl]-4-hydroxy-5-oxo-2H-furan-3-olate] dihydrate

Formula  
Molecular weight  
Product code  
CAS No.

$C_{12}H_{14}CaO_{12} \cdot 2 H_2O$   
426,34  
SPCG01  
5743-28-2

### Properties

Shelf life  
Aspect  
Assay ( $C_{12}H_{14}CaO_{12}$ ) (EP)  
Assay (USP) Titration  
Solubility  
Clarity of solution  
Colour of solution  
Specific Optical rotation  
Loss on drying (EP/USP)  
pH value  
Fluoride

24 months in unopened original container  
White or slightly yellowish, crystalline powder  
99 – 100,5 %  
98 – 101 %  
freely soluble in water, practically insoluble in ethanol  
clear  
<  $Y_6$   
+ 95° and + 97° (5 % w/v aqueous solution)  
max. 0,1 %  
6,8 to 7,4 (10 % aqueous solution)  
max. 10 mg/kg

### Identification

EP

A: Specific optical rotation  
B: Infrared absorption spectrophotometry  
E: Substance gives reaction of calcium

USP

A: Solution meets requirements  
B: 100 mg/ml solution decolorizes a 100 mg/mL solution of dichlorophenol–indophenol  
C: Infrared absorption spectrophotometry

### Heavy metals

Copper (Cu)	max. 5 mg/kg
Iron (Fe)	max. 2 mg/kg
Arsenic (As)	max. 1 mg/kg
Lead (Pb)	max. 0,5 mg/kg
Mercury (Hg)	max. 0,1 mg/kg
Cadmium (Cd)	max. 0,5 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
Staph. aureus	negative in 25 g

Residual solvents max. 200 mg/kg (Methanol)

### Handling

Usage	for food and cosmetic industry
Storage	in tight, light resistant original containers
Transport instructions	please see our latest MSDS.

## NHU EUROPE GmbH

*Calcium ascorbate/SPCG01/üaufgg: 021221/av*

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