

SPECIFICATION

Product name Beta carotene 10 % SD CWS/S Food grade
Product code SP06-07
Production unit Xinchang NHU Vitamins

Description

Ingredients Beta carotene (E160a(i)), modified starch, Ascorbic acid, sunflower seed oil and DL-alpha-Tocopherol (E307) as antioxidant, silicium dioxide (E551) as anti-caking agent

Synonym β , β -Carotene
Formula $C_{40}H_{56}$
Molecular weight 536,90 g/mol
CAS No 7235-40-7

Properties

Shelf life 30 months after production date, in unopened original packaging

Aspect free flowing red powder
Colour intensity in aqueous solution A (1 %, 1 cm) > 100
Assay (GC) ≥ 10 %
Loss on drying $\leq 5,0$ %
Solubility Dispersible in cool water forming an emulsion
Sieve analysis 100 % through Sieve No. 20 (US)
 ≥ 95 % through Sieve No. 40 (US)

Identification EP UV and visible absorption spectrophotometry
USP A: Absorbance ratio A455/A483 between 1.14 and 1.18
B: The retention time of the major peak of the sample solution corresponds to that of the standard solution, as obtained in the test for content of Beta carotene

Heavy metals ≤ 5 mg/kg
Arsenic (As) ≤ 1 mg/kg
Lead (Pb) $\leq 0,5$ mg/kg
Mercury (Hg) $\leq 0,1$ mg/kg
Cadmium (Cd) $\leq 0,5$ mg/kg

Microbiological specs

Total plate count	≤ 1000 CFU/g
Mould and Yeast	≤ 100 CFU/g
Coliforms	< 0,3 MPN/g
E. coli	negative in 10 g
Salmonella	negative in 25 g
Staph. aureus	negative in 25 g

Handling

Usage for food and cosmetics applications
Product can also be used as feed additive (3a160(a)).

Stability Sensitive to moisture, oxygen, heat and light

Storage Should be stored in original unopened containers at a temperature below 25 °C. Once opened, use contents quickly. Store in a cool, dry place.

The product complies to the current USP version for Beta carotene preparations. The included active ingredient Beta-Carotene (E160a(i)) complies to EU 231/2012 of 9th of March 2012, USP, EP9.6, FCC9 and JECFA.

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