

## SPECIFICATION

## Beta carotene 10 % SD CWS/S Food grade

### 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<sub>40</sub>H<sub>56</sub>

#### Product code

SP06-07

#### 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

≤ 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 A<sub>455</sub>/A<sub>483</sub> 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)

≤ 0,5 mg/kg

#### Mercury (Hg)

≤ 0,1 mg/Kg

#### Cadmium (Cd)

≤ 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

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 9<sup>th</sup> of March 2012, USP, EP9.6, FCC9 and JECFA.

## NHU EUROPE GmbH

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