

## SPECIFICATION

## Beta carotene 10 % SD CWS/S

### Production unit

### Description

#### Ingredients

Beta carotene (E160a(i)), modified starch, sucrose, L-ascorbyl palmitate (E304 (i)) and DL-alpha-Tocopherol (E307) as antioxidant, silicium dioxide (E551) as anti-caking agent

#### Synonym

$\beta$ ,  $\beta$ -Carotene

#### Formula

$C_{40}H_{56}$

#### Product code

SP06-07

#### CAS No

7235-40-7

### Properties

#### Shelf life

24 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)

$\geq 10$  %

#### Loss on drying

$\leq 5,0$  %

#### Solubility

Dispersible in cool water forming an emulsion

#### Sieve analysis

100 % through Sieve No. 20 (US)

$\geq 95$  % 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

$\leq 5$  mg/kg

#### Arsenic (As)

$\leq 1$  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 1 g
Salmonella	negative in 25 g
Staph. aureus	negative in 1 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 with the current USP version for Beta carotene preparations. The included active ingredient Beta-Carotene complies with the current version of USP, FCC, Ph. Eur and EU Regulation No. 231/2012 of 9. March 2012.

**NHU EUROPE GmbH**