

# Lucarotin® 30 SUN

Beta-carotene dispersion in sunflower oil

## Chemical name(s) of active ingredient

Beta-carotene

**CAS-No.** 7235-40-7

**EINECS-No.** 230-636-6

## PRD

30085626

## Articles

50507851	8 x 2 kg plastic pail
50507836	4 x 5 kg plastic pail
50562306	20 kg plastic pail
56125130	0.1 kg aluminum drums

## Description

Brick-red dispersion of microcrystalline beta-carotene in sunflower oil. The product is packed under inert gas.

## Benefits

Vegetarian, kosher, halal, allergen-free, gluten-free

## Composition

Ingredients in descending order of weight: sunflower oil, beta-carotene

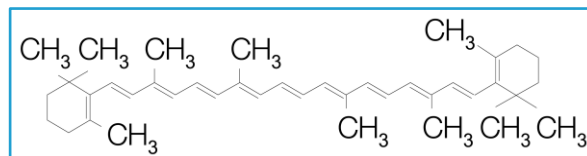
## Solubility

Soluble in benzene and chloroform; partially soluble in hexane and ethanol; moderately soluble in oils and fats. Insoluble in water.

## Specification

Beta-Carotene min. 30.0 g/100g

For further information see "Product Specification" (not for regulatory purposes) available in BASF's Human Nutrition Virtual Assistants (<https://nutritionvirtualassistants.basf.com>).



**C<sub>40</sub>H<sub>56</sub>**

**536.9 g/mol**

## Regulations

For quality documentation please see „Quality and Regulatory Product Information“ (QRPI, Quality Documentation). The active ingredient used in this product complies with the acceptance criteria specified in the current individual Ph. Eur. monograph of "Betacarotene" and current individual USP monograph of "Beta Carotene". The active ingredient also complies with the current FCC monograph "β-Carotene", the current JECFA specification "β-CAROTENE, synthetic", INS 160a(i) and the current specification "beta-carotene", E 160a(i) of the European Regulation (EU) No 231/2012. It is the obligation of the user to check the regulations on the ingredients used in the respective countries and for the intended use.

## Stability and storage

Beta-carotene is sensitive to light, heat and oxygen and needs to be stored in a light-proof and airtight container. Stored in its unopened, original packaging at temperatures not above 25 °C, in a dry place, the product is stable for at least 48 months.

## Handling

The product is a suspension, therefore settling of beta-carotene crystals may occur after prolonged storage. It is strongly recommended that the suspension in the container is warmed and mixed thoroughly prior to sampling or use. Once opened, it is recommended to flush the packaging with an inert gas and to use the remaining contents as quickly as possible.

## Applications

For use in soft gel capsules and for oils, margarine, spreads and cheese preparations. The product is added to the oily phase after preparing a stock solution at max. 40°C. When used in beverages, emulsification is required.

Beta-carotene can be used as provitamin A source and as a colorant. Suitability of these applications is presented based solely on technical feasibility. Local prevailing legal or regulatory requirements are not considered and should be observed separately. This product is not intended and recommended by BASF for use in medical nutrition or infant nutrition. BASF disclaims any representations, warranties and guarantees of fitness for such particular uses.

The table below provides approximate of 100% beta-carotene, which are added to 1 kg of various food products. The quantity is dependent on the required shade and should be determined in small scale tests.

Butter*	14 - 16 mg/kg
Cream fillings*	1 - 10 mg/kg
Egg products*	2 - 5 mg/kg
Fats, oils	7 - 10 mg/kg
Replacement products based on vegetable oils*	2 - 5 mg/kg
Cheese preparations*	1 - 2 mg/kg
Margarine	6 - 12 mg/kg
Salad dressings*	3 - 9 mg/kg
Processed cheese*	10 - 25 mg/kg
Sauces*	4 - 20 mg/kg
Ice cream*	2 - 6 mg/kg
Soups*	0.2 - 1 mg/kg

\*The Lucarotin® dry powders can also be used to color these food products.

**Butter:**

The stock solution is heated to 45 °C and added to the cream.

**Pasta products containing egg:**

A stock solution containing about 0.5% beta-carotene in oil is evenly mixed with a defined quantity of flour; the colored premix is added to the flour prior to production.

**Imitation cheese:**

The beta-carotene stock solution in vegetable oil is heated to 50 – 60 °C and added during production.

**Margarine:**

The beta-carotene dispersion is completely dissolved in the oily phase prior to emulsification.

**Salad dressings:**

The vegetable oil is heated to 45 – 50 °C before adding the beta-carotene dispersion.

**Processed cheese:**

A beta-carotene stock solution is prepared in melted butter and added to the cheese mixture prior to the melting process.

**Ice cream:**

The required quantity of beta-carotene is stirred into fat or oil until it is completely dissolved; the temperature of the oil should be at least 20 °C, preferably 37 – 50 °C.

**Soups:**

The oil for the soup is heated and the beta-carotene dispersion dissolved in it.

**Note**

The product must be handled in accordance with the Safety Data Sheet.

This document and any information provided herein does not constitute a legally binding obligation of BASF and has been prepared in good faith and is believed to be accurate as of the date of issuance. Unless expressly agreed otherwise in writing in a supply contract or other written agreement between you and BASF:

- To the fullest extent not prohibited by the applicable laws, BASF EXPRESSLY DISCLAIMS ALL REPRESENTATIONS, WARRANTIES, CONDITIONS OR GUARANTEES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, WRITTEN OR ORAL, BY FACT OR LAW, INCLUDING ANY IMPLIED WARRANTIES, REPRESENTATIONS OR CONDITIONS OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, SATISFACTORY QUALITY, NON-INFRINGEMENT, AND ANY REPRESENTATIONS, WARRANTIES, CONDITIONS OR GUARANTEES, ARISING FROM STATUTE, COURSE OF DEALING OR USAGE OF TRADE AND BASF HEREBY EXPRESSLY EXCLUDES AND DISCLAIMS ANY LIABILITY RESULTING FROM OR IN CONNECTION WITH THIS DOCUMENT OR ANY INFORMATION PROVIDED HEREIN, including, without limitation, any liability for any direct, consequential, special, or punitive damages relating to or arising therefrom, except in cases of (i) death or personal injury, (ii) BASF's or its agents and assistants willful misconduct, fraud or fraudulent misrepresentation or (iii) any matter in respect of which it would be unlawful for BASF to exclude or restrict liability under the applicable laws;
- Any information provided herein can be changed at BASF's sole discretion anytime and neither this document nor the information provided herein may be relied upon to satisfy any obligations you may have to undertake your own inspections and evaluation;
- BASF rejects any obligation to, and will not, automatically update this document and any information provided herein, unless required by applicable law; and
- You are responsible for confirming that you have retrieved the most current version of this document from BASF.
- This document or any information provided herein must not be used for purposes of pharmaceutical registrations.