

# Lucarotin® 30 M

## Chemical names of active ingredient

Beta-carotene, provitamin A

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

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

**PRD-No.**  
30041157\*

\* The product is kosher and halal.

## Article

50508480	8 x 2 kg plastic pail
50508479	4 x 5 kg plastic pail
50562200	20 kg plastic pail

## Country of origin

Germany

## Description

Brick-red dispersions with a neutral flavor containing beta-carotene in microcrystalline form in corn oil.

## Composition

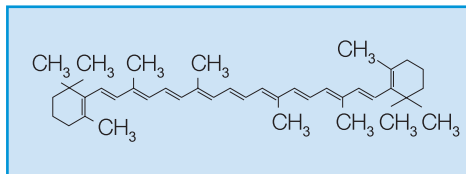
Ingredients in descending order of weight: corn oil, beta-carotene (E 160a).

## Specifications

Assay

Beta-Carotene min. 30.0 g/100g

For further information see separate document: "Standard Specification" (not for regulatory purposes) available via BASF's WorldAccount: <https://worldaccount.basf.com> (registered access).



$C_{40}H_{56}$

Molar mass 536.9 g/mol

## Monographs

The active ingredient of Lucarotin® 30 M meets the requirements of the current FCC (β-Carotene), Ph.Eur. (Betacarotene) and USP (Beta Carotene) monographs. The active ingredient also complies to the current JECFA monograph for β-CAROTENE, synthetic (**INS 160a(i)**) and the current specification for Beta-Carotene (**E 160a(ii)**) of the European Regulation (EU) No 231/2012.

## Regulations

Beta-carotene is approved for use as a food colorant and as a provitamin A source in most countries. However, specific regulations on the ingredients used in the respective countries and for the intended use have to be observed.

## Stability

The Lucarotin® 30 M does not contain any stabilizers. The product is packed under nitrogen. Stored in its unopened original packaging at room temperature (max. 25°C), it is stable for at least 48 months. As beta-carotene may sink to the bottom of the container, the dispersion should be stirred prior to use.

### Storage/Handling

The product is sensitive to atmospheric oxygen, light, heat, and moisture. Lucarotin® 30 M should therefore be stored under nitrogen in the tightly sealed, lightproof packaging in a cool place. Once opened, it is recommended to use the remaining contents as quickly as possible.

### Applications

#### Dietary supplements:

Lucarotin® dispersions used in soft capsules as provitamin A, as an active ingredient, and as a colorant.

#### Food products:

Used as both yellow-orange colorant and provitamin A. Even at low concentrations, beta-carotene dispersions have a high tinctorial strength. They are suitable for coloring as well as for standardizing the color of oils, fats, margarine, butter, processed cheese, cheese spreads, milk replacement products, ice cream, soups, sauces, fillings of baked goods, and egg products. They are added to the oily phase.

### **Important: Beta-carotene dispersions should be stirred briefly prior to use.**

The Lucarotin® dispersions are usually processed as stock solution in a suitable quantity of oil, prepared by careful heating to 40 °C. This stock solution is then added to the food product.

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

<sup>1</sup> 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**

Lucarotin® 30 M must be handled in accordance with the Safety Data Sheet.

---

This document, or 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:

- a) To the fullest extent not prohibited by the applicable laws, BASF EXPRESSLY DISCLAIMS ALL OTHER 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 to the extent caused by BASF's sole negligence, (ii) BASF's 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;
- b) 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 from any and all obligations you may have to undertake your own inspections and evaluations;
- c) BASF rejects any obligation to, and will not, automatically update this document and any information provided herein, unless required by applicable law; and
- d) This document or any information provided herein must not be used for purposes of pharmaceutical registrations.

If you have any further questions or need additional support, please contact your BASF sales representative.