



DairyMax™ Warm Orange 422 WSS

Product Data Sheet

Version: 1 DS EU EN 02-21-2022

Description:

DairyMax™ Warm Orange 422 WSS is a natural beta-carotene suspension, obtained by fermentation by strains of the fungus *Blakeslea trispora*. The major coloring principle is natural beta-carotene.

Material no:

717840

Ingredients:

Sucrose, Water, Sodium chloride, Calcium caseinate, Sunflower oil, Beta-Carotene from *Blakeslea trispora* (E 160a(iii)), DL-alpha tocopherol (E 307), Lecithin (E 322).

Raw Material; Source; Origin; Function

Sucrose; Sugar beet; EU; Carrier

Water; Water; EU; Carrier

Sodium chloride; Mineral; EU/North America; Preservative

Calcium caseinate; Bovine milk; EU; Emulsifier

Sunflower oil; Sunflower seed; EU/South America/Asia;

Beta-Carotene from *Blakeslea trispora* (E 160a(iii)); *Blakeslea trispora*; Asia; Color

DL-alpha tocopherol (E 307); Soya bean/Synthetic; Europe/Asia; Antioxidant

Lecithin (E 322); Sunflower; EU; Emulsifier

Composition

Details on our ingredient breakdown are confidential. For further purposes rough ranges can be provided after signing a Confidentiality Agreement.

Palm Oil

The ingredients used for this product are not derived from palm oil.

Ethanol

Ethanol is not used as ingredient in this product.

Solvents

In compliance with EU Regulation 231/2012/EU and later amendments.

Contaminants

This product is in compliance with EU Regulation 231/2012/EU with later amendments.

Enzymes

No enzymes used in the production of this product.



DairyMax™ Warm Orange 422 WSS

Product Data Sheet

Version: 1 DS EU EN 02-21-2022

GMO and Identity Preserved

This product is free of GM and LM labeling according to the European Union (EU) Regulation; 1829/2003 and 1830/2003. Oterra has identified raw materials containing soy, maize, sugar beet and rapeseed, and based on a risk assessment for each raw material including evaluation of the traceability system at our vendors, we have decided that the existing procedures and systems in place are sufficient to ensure that Oterra complies with the above mentioned legislation.

Based on the above we do not require certified IP-systems (Identity Preserved) at our vendors.

Natural status

According to existing EU food regulations there is no definition of the naturalness of colors. Therefore Oterra has established a position on naturalness of colors based on NATCOL (Position on the Definition of the term “Natural color”) and CODEX positions.

Product Status: Natural Color (N1)

This is a color substance that is derived from plant, animal, mineral or microbiological source. The color substance is derived through traditional processing and/or appropriate physical processing (including distillation and solvent extraction).

The process does not modify the chemical nature of the coloring substance.

(Above refers to the NATCOL Position on the Definition of the term ‘Natural color’)

Microbiological method references

Total viable count = ISO 4833-2:2013

Total Yeast and Moulds = ISO 21527-1,2:2008

Total Enterobacteriaceae = ISO 21528-2:2004

Aerobic sporeforming bacteria = ISO 4833-2:2013 mod (Heat treated 10-12 minutes at 80°C)

Sulphite reducing clostridia = ISO 15213:2003

Salmonella = ISO 6579:2002, A1:2007

Listeria monocytogenes = Bio 12/2-06-94 VIDAS

E. coli = ISO 16649-2:2001

S. aureus = ISO 6888-3:2003

Tested according to monitoring plan.

Nano labelling

Regulation 1169/2011/EU on the provision of food information to consumers requires that all ingredients present in the form of engineered nanomaterials need to be clearly indicated in the list of ingredients as from 13th December 2014. EU Regulation 2015/2283 provides a definition of engineered nanomaterial and in France, a ‘substance in a nanoparticulate state’ is defined in article R523-12 of the French Environmental code.

We acknowledge that there is an ongoing discussion in France about nanotechnology in food. Oterra relies solely on official food authorities to give guidance and regulation.

Based on above, we – to the best of our knowledge – confirm that this product will not require nano labeling.

Non-irradiation / Non-ionization

Oterra hereby declares that our color products, flavor products, coloring foodstuff products, food ingredients and NutriPhy® products have not been exposed to any irradiation in the manufacturing process.

This material complies with the Commission Directive 1999/2 and later amendments.

Country of Processing



DairyMax™ Warm Orange 422 WSS

Product Data Sheet

Version: 1 DS EU EN 02-21-2022

Denmark

Production site

Manufactured by Oterra A/S, Denmark

Supplier's certifications

Certifying body Bureau Veritas (BVC): ISO 14001 and FSSC 22000

Pasteurization

This product has not been pasteurized. Please refer to the Flow Sheet document for further information of the process.

Foreign bodies

Filter: Max 0.5 mm

Packaging

Size: 10 kg

Type: Jerrycan

Characteristics:

Material used for can: HDPE

Empty can weight: app. 429 g

Dimensions can: 310 mm x 190 mm x 236 mm

Height pallet: Stable height is 3 cans which corresponds to 1258 mm without pallet height.

Number of cans/pallet: 20 cans in one layer and max. 60 per pallet

Pallet: Wood, 1200x800x150 mm + plastic wrapping.

DairyMax™ Warm Orange 422 WSS

Product Data Sheet

Version: 1 DS EU EN 02-21-2022



Batch number information

5-10 digit code produced by ERP (SAP) system. No intelligence attribute to the code. We have defined a global procedure for batch tracing and it will be conducted within 8 hours.

Remaining shelf life

Total shelf life less than 8 months: 50 % left of shelf life upon delivery is guaranteed.

Total shelf life more than 8 months: At least 4 months left at the time of delivery

Shelf life after opening the containers

If products are opened or kept at other temperatures than recommended, Oterra cannot guarantee full shelf life and quality of the product.

However, to the best of our knowledge and based on our expertise, products containing preservatives, acetic acid or our OS-products can normally be kept at ambient temperature for a couple of days. All other products should be kept cold and used within 1-2 days. Please contact your Oterra representative for such requests.

Delivery Leadtime

Please contact the relevant Oterra representative if you need further information.



DairyMax™ Warm Orange 422 WSS

Product Data Sheet

Version: 1 DS EU EN 02-21-2022

Headquarters:

Oterra A/S

Agern Allé 24

DK-2970 Horsholm

Tel. +45 35 15 56 00

Emergency number

24/7 number is +45 35 15 56 00.

The recipient of this document acknowledges that any information contained herein is proprietary to Oterra and confidential in nature and shall be treated as such. Recipient may only use information herein for the purposes for which this document is provided and shall not disclose to any third party any of its content without the prior written consent of Oterra.



DairyMax™ Warm Orange 422 WSS

Product Information

Version: 1 PI US EN 10-02-2020

Description DairyMax™ Warm Orange 422 WSS is a natural beta-carotene, obtained by fermentation by strains of the fungus *Blakeslea trispora*. The major coloring principle is beta-carotene.

Packaging: **Material no:** 717840 **Size:** 10 kg **Type:** Jerrycan

Physical Properties **Color:** Orange to red
Form: Liquid
Solubility: Water soluble suspension

Application **Usage**
Foods generally.

Please consult Chapter 21 of the CFR for current legislation, as restrictions within specific food applications may apply. Legislations are not globally harmonized, therefore it is advised to consult regulations for the intended market against final application.

Orange hue in final product depending on processing and quantity used.

Directions for use
Shake the product before use, as components may settle during storage. Can be added directly to the food product while stirring.

Storage and handling **Temperature:** 4 - 8 °C / 39 - 46 °F
Conditions: Cool, Dry, Protect from light

Refrigerated transport required.

Shelf life 365 days in unopened containers at the recommended storage temperature.

Technical Data **Color strength:** Beta-carotene: 1.9 - 2.1%
pH: 6.00 - 8.00 (direct in liquid)



DairyMax™ Warm Orange 422 WSS

Product Information

Version: 1 PI US EN 10-02-2020

Relative density: 1.05 - 1.35

Odor: No characteristic odor

Microbiological quality	
Total Viable Count:	≤ 1000 cfu/g
Total Yeasts and Moulds:	≤ 100 cfu/g
Total Enterobacteriaceae:	≤ 10 cfu/g
Aerobic Sporeforming Bacteria:	≤ 100 cfu/g
Sulphite reducing clostridia:	≤ 10 cfu/g

Pathogens	
<i>Salmonella sp.:</i>	Absent in 25g
<i>Listeria monocytogenes:</i>	Absent in 25g
<i>E. coli:</i>	Absent in 1 g
<i>S. aureus:</i>	Absent in 1 g

Legislation

This color is in full compliance with 21 CFR Part 73.95 and is approved for use in food. It is exempt from certification.

Ingredients

Sugar, Water, Sodium chloride, Calcium caseinate, Sunflower oil, Natural beta-carotene, Tocopherol, Lecithin (sunflower).

Labeling

Labeling of this product for the ingredient statement should be according to the FDA regulations, 21CFR 101.22. For example: beta-carotene (color); colored with beta-carotene; color added.

California Proposition 65

Oterra colors comply with the State of California's Safe Drinking Water and Toxic Enforcement Act of 1986 known as Proposition 65. This product does not contain levels of contaminants or by-products that require a warning label.

Trademarks

Product names, names of concepts, logos, brands and other trademarks referred to in this document, whether or not appearing in large print, bold or with the ® or TM symbol are the property of Oterra A/S or an affiliate thereof or used under license. Trademarks appearing in this document may not be registered in your country, even if they are marked with an ®.

Dietary status

Kosher: Kosher Dairy Excl. Passover
Halal: Certified
Vegetarian: Yes

Technical support

Oterra's Application and Product Development Laboratories and personnel are available if you need further information.