

# Safety data sheet

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BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. It does not replace the safety data sheet provided in accordance with Regulation No. 29204 (Official Gazette 13/12/2014).

Date / Revised: 08.04.2022

Version: 1.0

Product: **Lucantin® Yellow**

(ID no. 30041147/SDS\_GEN\_TR/EN)

Date of print 20.10.2025

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

## Lucantin® Yellow

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: feed additive(s)

### 1.3. Details of the supplier of the safety data sheet

Company:

BASF SE  
67056 Ludwigshafen  
GERMANY

Contact address:

BASF Tuerk Kimya San. ve Tic. Ltd. Sti.  
Barbaros Mah. Begonya Sok.  
Nidakule Ataşehir Batı  
No:1 D:48, 34746 Ataşehir/İstanbul  
Türkiye

Telephone: +90 216 570 3862

E-mail address: zeynep.cakir@basf.com

### 1.4. Emergency telephone number

Health Poison Control Center: 114

Fire Brigade number: 110

Emergency first aid number :112

International emergency number:

Telephone: +49 180 2273-112

Telefax number: +90 216 570 3779

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## SECTION 2: Hazards Identification

### 2.1. Classification of the substance or mixture

According to Regulation No. 28848 (Official Gazette, 11/12/2013)

No need for classification according to GHS criteria for this product.

### 2.2. Label elements

Globally Harmonized System, EU (GHS)

The product does not require a hazard warning label in accordance with GHS criteria.

### 2.3. Other hazards

According to Regulation No. 28848 (Official Gazette, 11/12/2013)

The product is under certain conditions capable of dust explosion. The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

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## SECTION 3: Composition/Information on Ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Chemical nature

Preparation based on: Ethyl 8'-apo- $\beta$ -caroten-8'-oate (Content (W/W): 10 %)

in a matrix of: carbohydrates, Gelatins

stabilized with: ethoxyquin (ISO)

Hazardous ingredients (GHS)

According to Regulation No. 28848 (Official Gazette, 11/12/2013)

ethoxyquin (ISO)

Content (W/W):  $\geq 3\%$  -  $< 5\%$

CAS Number: 91-53-2

EC-Number: 202-075-7

INDEX-Number: 613-014-00-2

Acute Tox. 4 (oral)

Aquatic Chronic 2

H302, H411

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For the classifications not written out in full in this section, including the hazard classes and the hazard statements, the full text is listed in section 16.

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## SECTION 4: First-Aid Measures

### 4.1. Description of first aid measures

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air.

On skin contact:

Wash thoroughly with soap and water

On contact with eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:

Rinse mouth and then drink 200-300 ml of water.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms: (Further) symptoms and / or effects are not known so far

### 4.3. Indication of any immediate medical attention and special treatment needed

Treatment: Symptomatic treatment (decontamination, vital functions).

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## SECTION 5: Fire-Fighting Measures

### 5.1. Extinguishing media

Suitable extinguishing media:

water spray, carbon dioxide, foam, dry powder

Unsuitable extinguishing media for safety reasons:

water jet

### 5.2. Special hazards arising from the substance or mixture

carbon oxides, harmful vapours

The substances/groups of substances mentioned can be released in case of fire. Evolution of fumes/fog. Dust explosion hazard.

### 5.3. Advice for fire-fighters

Special protective equipment:

Wear a self-contained breathing apparatus.

Further information:

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Cool endangered containers with water-spray.

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## SECTION 6: Accidental Release Measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Information regarding personal protective measures, see section 8. Avoid dust formation.

### 6.2. Environmental precautions

Do not discharge into drains/surface waters/groundwater.

### 6.3. Methods and material for containment and cleaning up

For small amounts: Contain with dust binding material and dispose of.

For large amounts: Sweep/shovel up.

Dispose of absorbed material in accordance with regulations. Avoid raising dust.

### 6.4. Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

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## SECTION 7: Handling and Storage

### 7.1. Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice.

Protection against fire and explosion:

The product is capable of dust explosion. Avoid dust formation. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy. Use explosion-proof apparatus and fittings.

### 7.2. Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Protect contents from the effects of light. Keep container tightly closed and in a cool place.

### 7.3. Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

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## SECTION 8: Exposure Controls/Personal Protection

### 8.1. Control parameters

Components with occupational exposure limits

No occupational exposure limits known.

### 8.2. Exposure controls

Personal protective equipment

Respiratory protection:

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Breathing protection if breathable aerosols/dust are formed. Particle filter with low efficiency for solid particles (e.g. EN 143 or 149, Type P1 or FFP1)

Hand protection:

Suitable chemical resistant safety gloves (EN ISO 374-1) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN ISO 374-1): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc. Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:

chemical protection overall (f.e. according to EN 13982) if dust is formed.

#### General safety and hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is recommended. No eating, drinking, smoking or tobacco use at the place of work. Hands and/or face should be washed before breaks and at the end of the shift. Store work clothing separately.

## SECTION 9: Physical and Chemical Properties

### 9.1. Information on basic physical and chemical properties

Form:	powder	
Colour:	brick-red	
Odour:	faint specific odour	
Odour threshold:	not determined	
pH value:	not determined	
Melting point:	not determined	
Boiling point:	not applicable	
Flash point:	not applicable, the product is a solid	
Evaporation rate:	not applicable	
Flammability:	not highly flammable	(VDI 2263, sheet 1, 1.1)
Lower explosion limit:	For solids not relevant for classification and labelling.	
Upper explosion limit:	For solids not relevant for classification and labelling.	
Vapour pressure:	not applicable	

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Relative vapour density (air):

not applicable

Solubility in water:

dispersible

(> 35 °C)

Partitioning coefficient n-octanol/water (log Kow):

not applicable for mixtures

Information on: *Ethyl 8'-apo-β-caroten-8'-oate*

Partitioning coefficient n-octanol/water (log Kow): 12,79 (calculated)

(25 °C)

Information on: *ethoxyquin (ISO)*

Partitioning coefficient n-octanol/water (log Kow): 3,39 (Regulation 440/2008/EC, A.8)

(pH value: 7)

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Thermal decomposition: >= 145 °C

Viscosity, dynamic:

not applicable, the product is a solid

Explosion hazard:

Based on the chemical structure there is no indication of explosive properties.

Fire promoting properties:

Based on its structural properties the product is not classified as oxidizing.

## 9.2. Other information

Self heating ability:

It is a substance capable of spontaneous heating according to UN transport regulations class 4.2. Based on test results packaging < 3m³ are exempted from the classification.

(UN Test N.4 (self heating substances))

Minimum ignition energy: > 1 J

The product is capable of dust explosion.

(DIN EN 13821)

Bulk density:

approx. 600 kg/m³

## SECTION 10: Stability and Reactivity

### 10.1. Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals: Corrosive effects to metal are not anticipated.

### 10.2. Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Peroxides:

The product does not contain peroxides.

### 10.3. Possibility of hazardous reactions

Dust explosion hazard.

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#### **10.4. Conditions to avoid**

Avoid dust formation. See SDS section 7 - Handling and storage.

#### **10.5. Incompatible materials**

Substances to avoid:

None known during use and storage if used according to instructions.

#### **10.6. Hazardous decomposition products**

Hazardous decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated.

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### **SECTION 11: Toxicological Information**

#### **11.1. Information on toxicological effects**

##### Acute toxicity

Assessment of acute toxicity:

Virtually nontoxic after a single ingestion.

*Information on: ethoxyquin (ISO)*

*Experimental/calculated data:*

*LD50 rat (oral): 1.726 mg/kg (similar to OECD guideline 401)*

*Information on: Ethyl 8'-apo- $\beta$ -caroten-8'-oate*

*Experimental/calculated data:*

*LD50 rat (oral): > 10.000 mg/kg*

##### Irritation

Assessment of irritating effects:

Not irritating to eyes and skin.

*Information on: Ethyl 8'-apo- $\beta$ -caroten-8'-oate*

*Assessment of irritating effects:*

*Not irritating to the skin. Not irritating to the eyes.*

*Information on: ethoxyquin (ISO)*

*Assessment of irritating effects:*

*Not irritating to eyes and skin.*

##### Respiratory/Skin sensitization

Assessment of sensitization:

There is no evidence of a skin-sensitizing potential.

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*Information on: ethoxyquin (ISO)*

*Assessment of sensitization:*

*No sensitizing effect.*

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#### Germ cell mutagenicity

Assessment of mutagenicity:

Based on available data, the classification criteria are not met.

*Information on: Ethyl 8'-apo- $\beta$ -caroten-8'-oate*

*Assessment of mutagenicity:*

*The substance was not mutagenic in bacteria. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. Literature data.*

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#### Carcinogenicity

Assessment of carcinogenicity:

Not classified, due to lack of data.

#### Reproductive toxicity

Assessment of reproduction toxicity:

Based on available data, the classification criteria are not met.

*Information on: Ethyl 8'-apo- $\beta$ -caroten-8'-oate*

*Assessment of reproduction toxicity:*

*The results of animal studies gave no indication of a fertility impairing effect. Literature data.*

*Information on: ethoxyquin (ISO)*

*Assessment of reproduction toxicity:*

*Based on available data, the classification criteria are not met.*

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#### Specific target organ toxicity (single exposure)

Assessment of STOT single:

Based on available data, the classification criteria are not met.

#### Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

Not classified, due to lack of data.

#### Aspiration hazard

No data available.

#### Other relevant toxicity information



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The product has not been tested. The statements on toxicology have been derived from the properties of the individual components.

## SECTION 12: Ecological Information

### 12.1. Toxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

*Information on: Ethyl 8'-apo- $\beta$ -caroten-8'-oate*

*Toxicity to fish:*

*LC50 (96 h) approx. 5.300 mg/l, Leuciscus idus (DIN 38412 Part 15, static)*

*The details of the toxic effect relate to the nominal concentration. No toxic effects occur within the range of solubility.*

*Information on: ethoxyquin (ISO)*

*Toxicity to fish:*

*LC50 (96 h) 18 mg/l, Oncorhynchus mykiss (OPP 72-1 (EPA-Guideline), Flow through.)*

*Information on: Ethyl 8'-apo- $\beta$ -caroten-8'-oate*

*Microorganisms/Effect on activated sludge:*

*EC10 (30 min) > 10.000 mg/l, Pseudomonas putida (DIN 38412 Part 27 (draft), aquatic)*

*The details of the toxic effect relate to the nominal concentration. The product has low solubility in the test medium. An aqueous solution prepared with solubilizers has been tested.*

*EC20 (30 min) > 1.000 mg/l, activated sludge (DIN EN ISO 8192, aerobic)*

*Information on: ethoxyquin (ISO)*

*Microorganisms/Effect on activated sludge:*

*EC20 (30 min) approx. 60 mg/l, activated sludge, domestic (DIN EN ISO 8192, aerobic)*

### 12.2. Persistence and degradability

Assessment biodegradation and elimination (H<sub>2</sub>O):

The product has not been tested.

*Information on: Ethyl 8'-apo- $\beta$ -caroten-8'-oate*

*Elimination information:*

*10 - 20 % BOD of the ThOD (28 d) (OECD Guideline 301 F) (aerobic, activated sludge, domestic)*

*Information on: ethoxyquin (ISO)*

*Elimination information:*

*< 20 % BOD of the ThOD (25 d) (OECD Guideline 301 F) (aerobic, activated sludge, industrial)*

### 12.3. Bioaccumulative potential

Assessment bioaccumulation potential:

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The product has not been tested.

*Information on: ethoxyquin (ISO)*

*Assessment bioaccumulation potential:*

*Accumulation in organisms is expected.*

*Information on: Ethyl 8'-apo- $\beta$ -caroten-8'-oate*

*Assessment bioaccumulation potential:*

*The product will not be readily bioavailable due to its consistency and insolubility in water. No significant accumulation in organisms is expected as a result of the distribution coefficient of n-octanol/water (log Pow).*

#### **12.4. Mobility in soil**

Assessment transport between environmental compartments:

Adsorption in soil: not determined

*Information on: Ethyl 8'-apo- $\beta$ -caroten-8'-oate*

*Assessment transport between environmental compartments:*

*Volatility: The substance will rapidly evaporate into the atmosphere from the water surface.*

*Adsorption in soil: Adsorption to solid soil phase is expected.*

#### **12.5. Results of PBT and vPvB assessment**

The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria. Self classification

#### **12.6. Other adverse effects**

The product does not contain substances that are listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

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### **SECTION 13: Disposal Considerations**

#### **13.1. Waste treatment methods**

Observe national and local legal requirements.

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### **SECTION 14: Transport Information**

#### **Land transport**

ADR

UN number or ID number: UN3088

UN proper shipping name: SELF-HEATING SOLID, ORGANIC, N.O.S. (contains ETHYL-8'-APO- $\beta$ -CAROTEN-8'-OATE)

Transport hazard class(es): 4.2

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Packing group:	III
Environmental hazards:	no
Special precautions for user:	Tunnel code: E Not dangerous goods of class 4.2 in packages up to 3000 litres capacity.

#### RID

UN number or ID number:	UN3088
UN proper shipping name:	SELF-HEATING SOLID, ORGANIC, N.O.S. (contains ETHYL-8'-APO- $\beta$ -CAROTEN-8'-OATE)
Transport hazard class(es):	4.2
Packing group:	III
Environmental hazards:	no
Special precautions for user:	Not dangerous goods of class 4.2 in packages up to 3000 litres capacity.

#### **Inland waterway transport**

##### ADN

UN number or ID number:	UN3088
UN proper shipping name:	SELF-HEATING SOLID, ORGANIC, N.O.S. (contains ETHYL-8'-APO- $\beta$ -CAROTEN-8'-OATE)
Transport hazard class(es):	4.2
Packing group:	III
Environmental hazards:	no
Special precautions for user:	Not dangerous goods of class 4.2 in packages up to 3000 litres capacity.

#### Transport in inland waterway vessel

Not evaluated

#### **Sea transport**

##### IMDG

UN number or ID number:	UN 3088
UN proper shipping name:	SELF-HEATING SOLID, ORGANIC, N.O.S. (contains ETHYL-8'-APO- $\beta$ -CAROTEN-8'-OATE)
Transport hazard class(es):	4.2
Packing group:	III
Environmental hazards:	no
	Marine pollutant: NO
Special precautions for user:	Not dangerous goods of class 4.2 in packages up to 3000 litres capacity.

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### **Air transport**

IATA/ICAO

UN number or ID number:	UN 3088
UN proper shipping name:	SELF-HEATING SOLID, ORGANIC, N.O.S. (contains ETHYL-8'-APO- $\beta$ -CAROTEN-8'-OATE)
Transport hazard class(es):	4.2
Packing group:	III
Environmental hazards:	No Mark as dangerous for the environment is needed
Special precautions for user:	Not dangerous goods of class 4.2 in packages up to 3000 litres capacity.

#### **14.1. UN number or ID number**

See corresponding entries for "UN number or ID number" for the respective regulations in the tables above.

#### **14.2. UN proper shipping name**

See corresponding entries for "UN proper shipping name" for the respective regulations in the tables above.

#### **14.3. Transport hazard class(es)**

See corresponding entries for "Transport hazard class(es)" for the respective regulations in the tables above.

#### **14.4. Packing group**

See corresponding entries for "Packing group" for the respective regulations in the tables above.

#### **14.5. Environmental hazards**

See corresponding entries for "Environmental hazards" for the respective regulations in the tables above.

#### **14.6. Special precautions for user**

See corresponding entries for "Special precautions for user" for the respective regulations in the tables above.

#### **14.7. Maritime transport in bulk according to IMO instruments**

Maritime transport in bulk is not intended.

### **Further information**

Not dangerous goods of class 4.2 in packages up to 3000 litres capacity.

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## **SECTION 15: Regulatory Information**

### **15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

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If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

## SECTION 16: Other Information

Any other intended applications should be discussed with the manufacturer. Corresponding occupational protection measurements must be followed.

Full text of the classifications, including the hazard classes and the hazard statements, if mentioned in section 2 or 3:

Acute Tox.	Acute toxicity
Aquatic Chronic	Hazardous to the aquatic environment - chronic
H302	Harmful if swallowed.
H411	Toxic to aquatic life with long lasting effects.

Safety data sheet prepared by:

Name: Zeynep Cakir

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Certificate Number: KDU-A-0-0040

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The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

Vertical lines in the left hand margin indicate an amendment from the previous version.