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

1.1. Product identifier

Item No. 78355000

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

Use of the substance/preparation

dietary supplement, food industry

1.3. Details of the supplier of the safety data sheet

Address/Manufacturer

Hänseler AG
Industriestrasse 35
9100 Herisau

Telephone no.	0041 (0)71 353 58 58
E-mail address of person responsible for this SDS	sdb@haenseler.ch

1.4. Emergency telephone number

Switzerland :145 / Abroad +41 (0)44 251 51 51

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

This product is not classified hazardous in accordance with Regulation (EC) No 1272/2008.

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

EUH208 Contains 3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-ol May produce an allergic reaction.

Supplemental information

EUH210 Safety data sheet available on request.

2.3. Other hazards

The product contains no PBT substances. The product contains no vPvB substances. This product does not contain a substance that has endocrine disrupting properties with respect to human. The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms.

SECTION 3: Composition/information on ingredients

Chemical characterization

Mixture of the following listed substances with harmless admixtures.

Hazardous ingredients

3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-ol

CAS No.	10191-41-0
EINECS no.	233-466-0
Registration no.	01-2120086658-39

Concentration	>=	0.1	<	1	%

Classification (Regulation (EC) No. 1272/2008)

Skin Sens. 1B H317

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Take off contaminated clothing and shoes immediately.

After inhalation

Remove to fresh air, keep patient warm and at rest. Take medical treatment.

After skin contact

Wash off immediately with soap and water and rinse well.

After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.).

After ingestion

Rinse out mouth and give plenty of water to drink. Take medical treatment.

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

Hints for the physician / treatment

Symptomatic treatment (decontamination, vital functions), no specific antidote known.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water spray jet, Foam, Dry powder, Carbon dioxide

Non suitable extinguishing media

Full water jet

5.3. Advice for firefighters

Special protective equipment for fire-fighting

Use self-contained breathing apparatus.

Other information

Cool endangered containers with water spray jet. Fire residues and contaminated fire-fighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Use personal protective clothing. Ensure adequate ventilation.

6.2. Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

6.3. Methods and material for containment and cleaning up

For small amounts: take up with appropriate instrument and dispose. For tall amounts: Take up mechanically and collect in suitable container for disposal. Avoid raising dust.

6.4. Reference to other sections

Information regarding personal protective measures, see Section 8. Information regarding waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid the formation and deposition of dust. Provide exhaust ventilation if dust is formed.

Advice on protection against fire and explosion

The product is capable of dust explosions. Avoid dust formation. Take action to prevent static discharges. Keep away from sources of ignition. Procure extinguisher. Use only explosion-proof equipment.

7.2. Conditions for safe storage, including any incompatibilities

Storage classes

Storage class according to TRGS 510	11	Combustible solids
Storage category (Switzerland)	11/13	Other solid hazardous substances with classification/labelling hazardous

Further information on storage conditions

Keep only in the original container in a cool, well ventilated place. Protect from heat. Protect from light. Keep in a cool place. Keep container tightly closed and dry.

SECTION 8: Exposure controls/personal protection

8.2. Exposure controls

Respiratory protection

Breathing apparatus in the event of aerosol, mist or fume formation. Particle filter P1; EN 143; FFP1 (EN 149)

Hand protection

Chemical resistant gloves
Hand protection must comply with EN 374.

Eye protection

Safety glasses with side protection shield; Eye protection must comply with EN 166.

Body protection

protective overalls

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	solid
Colour	orange
Odour	not applicable
Physical state	Powder

Melting point

Remarks	not determined

Boiling point or initial boiling point and boiling range

Remarks	Not applicable

Flammability

evaluation	Not ignitable

Flash point

Remarks	Not applicable		

Decomposition temperature

Value	>=	155	°C
Method	DIN 51007		

pH value

Remarks	not determined

Vapour pressure

Remarks	Not relevant

Particle characteristics

Type	d50		
Particle size	>	100	µm
Method	ISO 13320-1		

9.2. Other information

Auto-ignition temperature

Remarks	Not applicable

Explosive properties

evaluation	The product is capable of dust explosions.

Oxidising properties

evaluation	Not oxidising

Bulk density

Value	600	to	700	kg/m³
Temperature	20	°C		

SECTION 10: Stability and reactivity

10.1. Reactivity

Water

10.2. Chemical stability

No decomposition if stored and applied as directed.

10.3. Possibility of hazardous reactions

The product is not a dust explosion risk as supplied; however the build-up of fine dust can lead to a risk of dust explosions.

10.4. Conditions to avoid

Dust can form explosive mixtures with air. Keep away from sources of heat and ignition. Protect from light and atmospheric moisture. Stable under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Air

10.6. Hazardous decomposition products

None under normal use.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute oral toxicity

Betatene 1 % CWD N

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

Acute oral toxicity (Components)

3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-ol

Species	rat		
LD50	>	4000	mg/kg

Acute dermal toxicity

Betatene 1 % CWD N

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

Acute dermal toxicity (Components)

3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-ol

Species	rat		
LD50	>	3000	mg/kg

Acute inhalational toxicity

Betatene 1 % CWD N

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

Skin corrosion/irritation

Betatene 1 % CWD N

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

Skin corrosion/irritation (Components)

3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-ol

Species	rabbit
evaluation	Moderately irritating

Serious eye damage/irritation

Betatene 1 % CWD N

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

Serious eye damage/irritation (Components)

3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-ol

Species	rabbit
evaluation	slightly irritant
Method	Draize method

Sensitization

Betatene 1 % CWD N

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

Sensitization (Components)

3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-ol

evaluation	sensitizing
Method	OECD 406

3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-ol

Species	mouse
evaluation	sensitizing
Method	OECD 406

Mutagenicity

Betatene 1 % CWD N

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

Mutagenicity (Components)

3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-ol

evaluation: No mutagenicity according to various in vitro tests.

Reproductive toxicity

Betatene 1 % CWD N

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

Reproduction toxicity (Components)

3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-ol

evaluation: No negative effects

Carcinogenicity

Betatene 1 % CWD N

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

Carcinogenicity (Components)

3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-ol

evaluation: No indications of carcinogenic effects are available from long-term trials.

Specific Target Organ Toxicity (STOT)

Betatene 1 % CWD N

Single exposure

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

Betatene 1 % CWD N

Repeated exposure

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

Aspiration hazard

Betatene 1 % CWD N

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

11.2. Information on other hazards

Endocrine disrupting properties with respect to humans

Betatene 1 % CWD N

The product does not contain a substance that has endocrine disrupting properties with respect to humans.

SECTION 12: Ecological information

12.1. Toxicity

Fish toxicity (Components)

3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-ol

Species	Salmo gairdneri			
LC0	>=	10		mg/l
Duration of exposure		96	h	

3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-ol

Species	golden orfe (Leuciscus idus)			
LC50	>	10000		mg/l
Method	DIN 38412 T.15			
Remarks	The details of the toxic effect relate to the nominal concentration.			

3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-ol

Species	rainbow trout (Oncorhynchus mykiss)			
LC50	>	100		mg/l
Duration of exposure		96	h	
Method	OECD 203			

Daphnia toxicity (Components)

3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-ol

Species	Daphnia magna			
EC50	>	500		mg/l
Duration of exposure		48	h	
Remarks	The details of the toxic effect relate to the nominal concentration.			

Algae toxicity (Components)

3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-ol

Species	Raphidocelis subcapitata			
ErC50	>	25.8		mg/l
Duration of exposure		72	h	
Method	OECD 201			

3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-ol

Species	Raphidocelis subcapitata			
NOEC		26		mg/l

Bacteria toxicity (Components)

3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-ol

Species	activated sludge			
EC10	>	10000		mg/l
Duration of exposure		30	min	
Method	DIN 38412 / Part 27			

3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-ol

Species	activated sludge			
EC20	>	900		mg/l
Duration of exposure		30	min	
Method	DIN EN ISO 8192			

12.2. Persistence and degradability

Biodegradability

Betatene 1 % CWD N

evaluation	Moderately/partially biodegradable

Biodegradability (Components)

3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-ol

Value		8		%
Duration of test		28	d	
evaluation	not readily degradable			
Method	OECD 301F			

3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-ol

Value		70	to	80	%
Duration of test		63	d		
evaluation	biodegradable				
Method	OECD 301F				
Source	öffentlich zugängliche Daten				

12.3. Bioaccumulative potential

General information

not determined

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment

Betatene 1 % CWD N

The product contains no PBT substances

Betatene 1 % CWD N

The product contains no vPvB substances.

12.6 Endocrine disrupting properties

Endocrine disrupting properties with respect to the envrionment

Betatene 1 % CWD N

The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms.

12.7. Other adverse effects

General information / ecology

The ecotoxic effect of the product has not been tested. The information on this was derived from products of similar structure or composition.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations for the product

Disposal in compliance with local and national regulations.

Disposal recommendations for packaging

Dispose of as unused product.

SECTION 14: Transport information

	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
14.1. UN number or ID number	The product does not constitute a hazardous substance in land transport.	The product does not constitute a hazardous substance in sea transport.	The product does not constitute a hazardous substance in air transport.
14.5. Environmental hazards	-		

SECTION 15: Regulatory information

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

Water Hazard Class (Germany)

Water Hazard Class (Germany)	WGK 1
Remarks	Self-assessment

Other information

The product does not contain substances according to Candidate List for inclusion in Annex XIV of Regulation (EC) No. 1907/2006 (REACH) with a content of >= 0.1% w/w.

SECTION 16: Other information

Hazard statements listed in Chapter 2/3

H317	May cause an allergic skin reaction.

CLP categories listed in Chapter 2/3

Skin Sens. 1B	Skin sensitization, Category 1B

Supplemental information

Relevant changes compared with the previous version of the safety data sheet are marked with: ***

This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.