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

1.1. Product identifier

Vitamin E 500 FG

Item No. 78111002

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

Voluntary product information following the Safety Data Sheet format
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

The product does not require a hazard warning label in accordance with Regulation (EC) No 1272/2008.

2.3. Other hazards

No special hazards have to be mentioned.
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

Further ingredients

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

CAS No. 7695-91-2
EINECS no. 231-710-0
Concentration >= 50 %
Advice: [4]

Silicon dioxide, chemically prepared, amorphous

CAS No. 7631-86-9
EINECS no. 231-545-4
Registration no. 01-2119379499-16-0000 (TPR)
Concentration >= 50 %
Advice: [4]

Name of set of nanoform Nanoaggregate

Particle size distribution	d10	7-15	nm		
Shape and aspect ratio of particles	amorphous				
	50	to	450	m²/g	
	Nanoaggregate				
Particle size distribution	d50	2-30	nm		
Shape and aspect ratio of particles	amorphous				
	50	to	450	m²/g	
	Nanoaggregate				
Particle size distribution	d90	10-35	nm		
Shape and aspect ratio of particles	amorphous				
	50	to	450	m²/g	

Note

[4] Voluntary information

Other information

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of persistent symptoms consult doctor.

After inhalation

Ensure supply of fresh air. In the event of symptoms take medical treatment.

After skin contact

In case of contact with skin wash off with warm water. Consult a doctor if skin irritation persists.

After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.). In case of irritation consult an oculist.

After ingestion

Rinse out mouth and give plenty of water to drink.

Adhere to personal protective measures when giving first aid

First aider: Pay attention to self-protection!

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

Until now no symptoms known so far.

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

Hints for the physician / hazards

In the case of swallowing with subsequent vomiting, aspiration of the lungs can occur which can lead to chemical pneumonia or asphyxiation.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Foam, Carbon dioxide, Dry powder, Water spray jet

5.3. Advice for firefighters

Special protective equipment for fire-fighting

In case of combustion use a suitable breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid dust formation.

6.2. Environmental precautions

Do not allow to enter drains or waterways.

6.3. Methods and material for containment and cleaning up

Pick up mechanically. Clean contaminated floors and objects thoroughly, observing environmental regulations.

6.4. Reference to other sections

Information regarding Safe handling, see Section 7. Information regarding personal protective measures, see Section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Observe the usual precautions for handling chemicals.

Advice on protection against fire and explosion

No special measures required.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed and dry.

Hints on storage assembly

Do not store together with foodstuffs.

Storage classes

Storage class according to TRGS 510	13	Non- combustible solids
Storage category (Switzerland)	NG	Other solid hazardous substances without classification/labelling hazardous

Further information on storage conditions

Keep container tightly closed and dry.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit values

Silicon dioxide, chemically prepared, amorphous

List	SUVA	
Type	MAK	
Value	4	mg/m³

Pregnancy group: S; Remarks: SSc; LungenfibKT AN

Other information

Contains no substances with occupational exposure limit values.

Derived No/Minimal Effect Levels (DNEL/DMEL)

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

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	73.5	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	416.6	mg/kg

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	21.7	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	250	mg/kg

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	oral	
Mode of action	Systemic effects	
Concentration	12.5	mg/kg

Predicted No Effect Concentration (PNEC)

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

Type of value	PNEC	
Type	Freshwater	
Concentration	0.27	mg/l

Type of value	PNEC	
Type	Saltwater	
Concentration	0.027	mg/l

Type of value	PNEC	
Conditions	Intermittend	
Concentration	0.27	mg/l

Type of value	PNEC	
Type	Freshwater sediment	
Concentration	212000	mg/kg

Type of value	PNEC	
Type	Marine sediment	
Concentration	21200	mg/kg

Type of value	PNEC	
Type	Soil	
Concentration	74800	mg/kg

Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	100	mg/l

8.2. Exposure controls

General protective and hygiene measures

Observe the usual precautions for handling chemicals.

Respiratory protection

If workplace limits are exceeded, a respiratory protection approved for this particular job must be worn.
Dust mask

Hand protection

In case of intensive contact wear protective gloves.
Appropriate Material neoprene

Eye protection

Safety glasses

Body protection

Clothing as usual in the chemical industry.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state solid
Colour white to cream colour
Odour almost odourless

Melting point

Remarks not determined

Freezing point

Remarks not determined

Boiling point or initial boiling point and boiling range

Remarks Not applicable

Flammability

Not ignitable
Method UN Test N.1 (ready combustible solids)

Upper and lower explosive limits

Remarks Not relevant

Flash point

Value °C
Remarks Not applicable

Ignition temperature

Remarks not determined

Decomposition temperature

Remarks not determined

pH value

Value 4

Viscosity

Remarks not determined

Solubility(ies)

Remarks not determined

Partition coefficient n-octanol/water (log value)

Remarks not determined

Vapour pressure

Remarks Not applicable

Density and/or relative density

Remarks not determined

Relative vapour density

Remarks not determined

9.2. Other information

Odour threshold

Remarks not determined

Evaporation rate (ether = 1) :

Remarks not determined

Solubility in water

Remarks slightly soluble

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

No decomposition if stored and applied as directed.

10.3. Possibility of hazardous reactions

No hazardous reactions known.

10.4. Conditions to avoid

No decomposition if stored and applied as directed.

10.5. Incompatible materials

None known

10.6. Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information

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

Acute oral toxicity

Remarks not determined

Acute oral toxicity (Components)

Silicon dioxide, chemically prepared, amorphous

Species	rat	
LD50	3160	mg/kg

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

Species	rat	
LD50	> 10000	mg/kg
Method	BASF-test	

Acute dermal toxicity

Remarks not determined

Acute dermal toxicity (Components)

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

Species	rat	
LD50	> 3000	mg/kg
Method	OECD 402	

Acute inhalational toxicity

Remarks not determined

Skin corrosion/irritation

Remarks not determined

Skin corrosion/irritation (Components)

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

evaluation	non-irritant
Method	OECD 404

Serious eye damage/irritation

Remarks not determined

Serious eye damage/irritation (Components)

Silicon dioxide, chemically prepared, amorphous

evaluation irritant effect possible

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

evaluation	non-irritant
Method	OECD 405

Sensitization

Remarks not determined

Sensitization (Components)

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

evaluation non-sensitizing

Subacute, subchronic, chronic toxicity

Remarks not determined

Mutagenicity

Remarks not determined

Reproductive toxicity

Remarks not determined

Reproduction toxicity (Components)

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

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

Carcinogenicity

Remarks not determined

Carcinogenicity (Components)

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

Remarks None

11.2 Information on other hazards

Endocrine disrupting properties with respect to humans

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

Other information

No toxicological data are available.

SECTION 12: Ecological information

12.1. Toxicity

General information

not determined

Fish toxicity (Components)

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

Species	rainbow trout (Oncorhynchus mykiss)		
LC50	>	11	mg/l
Method	OECD 203		

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

Species	rainbow trout (Oncorhynchus mykiss)		
NOEC	>	100	mg/l
Duration of exposure		28 d	
Method	OECD 215		

Daphnia toxicity (Components)

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

Species	Daphnia magna		
EC50	>	20.6	mg/l
Method	OECD 202		

Algae toxicity (Components)

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

Species	Raphidocelis subcapitata	
EC50	>	27.8
Method	OECD 201	

Bacteria toxicity (Components)

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

Species	activated sludge		
EC20	>	927	mg/l
Duration of exposure		30 min	

12.2. Persistence and degradability

General information

not determined

Biodegradability (Components)

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

evaluation Moderately/partially biodegradable

12.3. Bioaccumulative potential

General information

not determined

Partition coefficient n-octanol/water (log value)

Remarks not determined

12.4. Mobility in soil

General information

not determined

Mobility in soil (Components)

3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-yl acetate
Adsorbs on soil.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment

The product contains no PBT substances
The product contains no vPvB substances.

12.6 Endocrine disrupting properties

Endocrine disrupting properties with respect to the envrionment

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

not determined

General information / ecology

Do not discharge product unmonitored into the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations for the product

Disposal in compliance with local and national regulations.
Allocation of a waste code number, according to the European Waste Catalogue (EWC), should be carried out in agreement with the regional waste disposal company.

Disposal recommendations for packaging

Packaging that cannot be cleaned should be disposed off as product waste.

SECTION 14: Transport information

	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
14.1. UN 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.

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	Derivation of WGK according to Annex 1 No. 5.2 AwSV

15.2. Chemical safety assessment

For this preparation a chemical safety assessment has not been carried out.

SECTION 16: Other information

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.