



DE HEKSERIJ

FO Sun and flowers

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 6/26/2024 Version: 1.0

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

1.1. Product identifier

Product form : Mixture
Product name : FO Sun and flowers
UFI : FS4E-Y1WM-D003-8VUT
Product code : 21117
Product group : Trade product

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

Relevant identified uses

Intended for general public
Main use category : Professional use, Consumer use
Use of the substance/mixture : Fragrance raw material

1.3. Details of the supplier of the safety data sheet

De Hekserij
Sporstraat 57
8271 RG IJsselmuiden
Nederland
www.hekserij.nl

1.4. Emergency telephone number

No additional information available

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Serious eye damage/eye irritation, Category 2 H319
Skin sensitisation, Category 1 H317
Hazardous to the aquatic environment – Chronic Hazard, Category 2 H411

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

May cause an allergic skin reaction. Causes serious eye irritation. Toxic to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

GHS09

Signal word (CLP) :

Warning

Hazard statements (CLP) :

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) :

P261 - Avoid breathing vapours, spray, mist.

P264 - Wash hands thoroughly after handling.

P273 - Avoid release to the environment.

P280 - Wear protective gloves, protective clothing, eye protection.

P302+P352 - IF ON SKIN: Wash with plenty of water.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

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EUH-statements	<p>contact lenses, if present and easy to do. Continue rinsing.</p> <p>P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.</p> <p>P337+P313 - If eye irritation persists: Get medical advice/attention.</p> <p>P362+P364 - Take off contaminated clothing and wash it before reuse.</p> <p>P391 - Collect spillage.</p> <p>P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.</p> <p>: EUH208 - Contains Hexyl salicylate, Piperonal, Trimofix, Hexyl cinnamal, Veratraldehyde, cis-3-Hexenyl salicylate, Benzyl salicylate, Evernyl (Giv), Vertofix Coeur (IFF). May produce an allergic reaction.</p>
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2.3. Other hazards

Contains no PBT and/or vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Galaxolide	CAS-No.: 1222-05-5 EC-No.: 214-946-9 REACH-no: 01-2119488227-29	5 – 10	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Hexyl salicylate	CAS-No.: 6259-76-3 EC-No.: 228-408-6 REACH-no: 01-2119638275-36	5 – 10	Skin Sens. 1B, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Piperonal	CAS-No.: 120-57-0 EC-No.: 204-409-7 REACH-no: 01-2119983608-21	0 – 5	Skin Sens. 1, H317
Tonalid	CAS-No.: 1506-02-1 EC-No.: 216-133-4 REACH-no: 01-2119539433-40	0 – 5	Acute Tox. 4 (Oral), H302 STOT RE 1, H372 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Trimofix	CAS-No.: 144020-22-4 EC-No.: 482-330-9 REACH-no: 01-0000020172-83	0 – 5	Skin Sens. 1B, H317 Aquatic Chronic 1, H410
Hexyl cinnamal	CAS-No.: 101-86-0 EC-No.: 202-983-3 REACH-no: 01-2119533092-50	0 – 5	Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
Veratraldehyde	CAS-No.: 120-14-9 EC-No.: 204-373-2 REACH-no: 01-2120739621-56	0 – 5	Acute Tox. 4 (Oral), H302 Skin Sens. 1, H317

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Isobornylcyclohexanol	CAS-No.: 68877-29-2 EC-No.: 272-556-4 REACH-no: 01-2119979583-21	0 – 5	Aquatic Acute 1, H400 Aquatic Chronic 2, H411
Ethyl vanillin	CAS-No.: 121-32-4 EC-No.: 204-464-7	0 – 5	Eye Irrit. 2, H319
cis-3-Hexenyl salicylate	CAS-No.: 65405-77-8 EC-No.: 265-745-8 REACH-no: 01-2119987320-37	0 – 5	Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Benzyl salicylate	CAS-No.: 118-58-1 EC-No.: 204-262-9 EC Index-No.: 607-754-00-5 REACH-no: 01-2119969442-31	0 – 5	Eye Irrit. 2, H319 Skin Sens. 1B, H317 Aquatic Chronic 3, H412
Evernyl (Giv)	CAS-No.: 4707-47-5 EC-No.: 225-193-0 REACH-no: 01-2120762759-36	0 – 5	Skin Sens. 1, H317
Vertofix Coeur (IFF)	CAS-No.: 32388-55-9 EC-No.: 251-020-3 REACH-no: 01-2119969651-28	0 – 5	Skin Sens. 1B, H317 Aquatic Chronic 1, H410

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: If you feel unwell, seek medical advice.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.
First-aid measures for first aider	: First aid workers will be equipped with suitable personal protective equipment.

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

Symptoms/effects after inhalation	: Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.
Symptoms/effects after skin contact	: May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.
Symptoms/effects after ingestion	: None under normal conditions.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
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Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : No fire hazard.
Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.
Methods for cleaning up : Take up liquid spill into absorbent material.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.
Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Wear personal protective equipment.
Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Keep in a cool, well-ventilated place away from heat.
Storage conditions : Keep cool. Protect from sunlight.
Packaging materials : Store always product in container of same material as original container.

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7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protection equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Personal protective equipment symbol(s):



Eye and face protection

Eye protection:

Safety glasses

Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Pale yellow to yellow.
Odour	: Not available
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: > 80 °C
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not available

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Viscosity, kinematic	: Not available
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: 1.001 – 1.031
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Galaxolide (1222-05-5)	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 5.04 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
Hexyl salicylate (6259-76-3)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

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Piperonal (120-57-0)	
LD50 oral rat	2700 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 2350 - 3100
LD50 dermal rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: other., Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
Tonalid (1506-02-1)	
LD50 oral rat	920 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 795 - 1066
LD50 dermal rat	7940 mg/kg bodyweight Animal: rat, Animal sex: female, Remarks on results: other., 95% CL: 4890 - 12900
Trimofix (144020-22-4)	
LD50 oral	> 5000 mg/kg bodyweight Animal: other., Guideline: OECD Guideline 401 (Acute Oral Toxicity)
Veratraldehyde (120-14-9)	
LD50 oral rat	2000 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 1840 - 2160
Ethyl vanillin (121-32-4)	
LD50 oral rat	> 3160 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
cis-3-Hexenyl salicylate (65405-77-8)	
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: EU Method B.3 (Acute Toxicity (Dermal))
Benzyl salicylate (118-58-1)	
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: EU Method B.3 (Acute Toxicity (Dermal))
Evernyl (Giv) (4707-47-5)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
Vertofix Coeur (IFF) (32388-55-9)	
LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Ethyl vanillin (121-32-4)	
NOAEL (animal/female, F0/P)	500 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test)

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Benzyl salicylate (118-58-1)	
NOAEL (animal/female, F0/P)	158 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test)
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Galaxolide (1222-05-5)	
NOAEL (oral, rat, 90 days)	150 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
Hexyl salicylate (6259-76-3)	
NOAEL (oral, rat, 90 days)	46.9 mg/kg bodyweight Animal: rat
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	0.249 mg/l air Animal: rat, Guideline: OECD Guideline 412 (Subacute Inhalation Toxicity: 28-Day Study)
Piperonal (120-57-0)	
NOAEL (oral, rat, 90 days)	300 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test), Guideline: other:
Tonalid (1506-02-1)	
NOAEL (dermal, rat/rabbit, 90 days)	≥ 10 mg/kg bodyweight Animal: rat, Animal sex: female
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
Trimofix (144020-22-4)	
NOAEL (oral, rat, 90 days)	150 mg/kg bodyweight Animal: rat, Guideline: EU Method B.7 (Repeated Dose (28 Days) Toxicity (Oral))
cis-3-Hexenyl salicylate (65405-77-8)	
NOAEL (oral, rat, 90 days)	200 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Benzyl salicylate (118-58-1)	
NOAEL (oral, rat, 90 days)	177 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
Vertofix Coeur (IFF) (32388-55-9)	
NOAEL (oral, rat, 90 days)	80 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (dermal, rat/rabbit, 90 days)	300 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)
Aspiration hazard	: Not classified
Tonalid (1506-02-1)	
Viscosity, kinematic	Not applicable
Veratraldehyde (120-14-9)	
Viscosity, kinematic	Not applicable
Ethyl vanillin (121-32-4)	
Viscosity, kinematic	Not applicable
cis-3-Hexenyl salicylate (65405-77-8)	
Viscosity, kinematic	4.62 mm ² /s Temp.: 20 °C

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Benzyl salicylate (118-58-1)	
Viscosity, kinematic	17 mm ² /s at 20 °C
Evernyl (Giv) (4707-47-5)	
Viscosity, kinematic	Not applicable
Vertofix Coeur (IFF) (32388-55-9)	
Viscosity, kinematic	38.25 mm ² /s Temp.: '20°C' Parameter: 'kinematic viscosity (in mm ² /s)'

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Toxic to aquatic life with long lasting effects.

Galaxolide (1222-05-5)	
LC50 - Fish [1]	0.95 mg/l Test organisms (species): Oryzias latipes
EC50 - Crustacea [1]	0.194 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 0.854 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	0.723 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
LOEC (chronic)	0.075 mg/l Test organisms (species): other aquatic crustacea: Duration: '5,5 d'
NOEC (chronic)	0.111 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	0.068 mg/l Test organisms (species): Pimephales promelas Duration: '36 d'

Hexyl salicylate (6259-76-3)	
EC50 - Crustacea [1]	0.357 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	0.61 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	0.28 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

Piperonal (120-57-0)	
LC50 - Fish [1]	2.5 mg/l Test organisms (species): Cyprinus carpio
EC50 - Crustacea [1]	52 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	31 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	6.8 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)

Tonalid (1506-02-1)	
LC50 - Fish [1]	1.49 mg/l Test organisms (species): Lepomis macrochirus
LC50 - Fish [2]	0.314 mg/l

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Tonalid (1506-02-1)	
EC50 - Crustacea [1]	0.244 mg/l Daphnia magna
EC50 72h - Algae [1]	0.8 mg/l
NOEC chronic fish	0.089 mg/l
NOEC chronic crustacea	0.196 mg/l Daphnia magna
NOEC chronic algae	0.4 mg/l
Trimofix (144020-22-4)	
LC50 - Fish [1]	0.63 mg/l Test organisms (species): other:
EC50 - Other aquatic organisms [1]	1.82 mg/l Test organisms (species): other aquatic crustacea:
EC50 72h - Algae [1]	3.6 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	3.09 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
Hexyl cinnamal (101-86-0)	
LC50 - Fish [1]	1.7 mg/l Species: fish
EC50 - Other aquatic organisms [1]	< 0.59 mg/l Species: aquatic invertebrates
ErC50 algae	> 0.065 mg/l 72 h
Veratraldehyde (120-14-9)	
EC50 - Crustacea [1]	52 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	31 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
Ethyl vanillin (121-32-4)	
LC50 - Fish [1]	87.6 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	26.2 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
LOEC (chronic)	10 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	5.9 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
cis-3-Hexenyl salicylate (65405-77-8)	
LC50 - Fish [1]	> 0.65 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	0.6 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	0.61 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	0.28 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
Benzyl salicylate (118-58-1)	
LC50 - Fish [1]	1.03 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	1.16 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	0.691 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)

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Benzyl salicylate (118-58-1)	
EC50 72h - Algae [2]	1.29 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
Evernyl (Giv) (4707-47-5)	
LC50 - Fish [1]	5.2 mg/l Test organisms (species): not specified
EC50 - Crustacea [1]	9.3 mg/l Test organisms (species): Daphnia sp.
EC50 96h - Algae [1]	3.3 mg/l Test organisms (species): other:
Vertofix Coeur (IFF) (32388-55-9)	
LC50 - Fish [1]	2.3 mg/l Test organisms (species): Pimephales promelas
LC50 - Fish [2]	3 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	0.86 mg/l Test organisms (species): Daphnia magna
EC50 96h - Algae [1]	2.8 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [2]	> 4.3 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
LOEC (chronic)	0.23 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	0.087 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

12.2. Persistence and degradability

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Persistence and degradability	Not rapidly degradable
Galaxolide (1222-05-5)	
Persistence and degradability	Not rapidly degradable
Hexyl salicylate (6259-76-3)	
Persistence and degradability	Not rapidly degradable
Piperonal (120-57-0)	
Persistence and degradability	Not rapidly degradable
Tonalid (1506-02-1)	
Persistence and degradability	Not rapidly degradable
Trimofix (144020-22-4)	
Persistence and degradability	Not rapidly degradable
Hexyl cinnamal (101-86-0)	
Persistence and degradability	Not rapidly degradable
Veratraldehyde (120-14-9)	
Persistence and degradability	Not rapidly degradable
Isobornylcyclohexanol (68877-29-2)	
Persistence and degradability	Not rapidly degradable
Ethyl vanillin (121-32-4)	
Persistence and degradability	Not rapidly degradable

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cis-3-Hexenyl salicylate (65405-77-8)	
Persistence and degradability	Not rapidly degradable
Benzyl salicylate (118-58-1)	
Persistence and degradability	Not rapidly degradable
Evernyl (Giv) (4707-47-5)	
Persistence and degradability	Not rapidly degradable
Vertofix Coeur (IFF) (32388-55-9)	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

Hexyl cinnamal (101-86-0)	
Partition coefficient n-octanol/water (Log Kow)	5.3 at 24 °C
Ethyl vanillin (121-32-4)	
Partition coefficient n-octanol/water (Log Pow)	1.58
cis-3-Hexenyl salicylate (65405-77-8)	
Partition coefficient n-octanol/water (Log Pow)	4.8
Benzyl salicylate (118-58-1)	
Partition coefficient n-octanol/water (Log Pow)	4
Evernyl (Giv) (4707-47-5)	
Partition coefficient n-octanol/water (Log Pow)	2.1
Vertofix Coeur (IFF) (32388-55-9)	
Partition coefficient n-octanol/water (Log Pow)	5.655

12.4. Mobility in soil

Hexyl cinnamal (101-86-0)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	4.2

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations.

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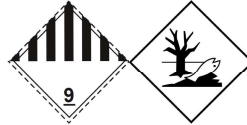
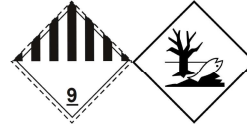
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Additional information : Do not re-use empty containers.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
UN 3082	UN 3082	UN 3082	UN 3082	UN 3082
14.2. UN proper shipping name				
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FO Sun and flowers)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FO Sun and flowers)	Environmentally hazardous substance, liquid, n.o.s. (FO Sun and flowers)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FO Sun and flowers)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FO Sun and flowers)
Transport document description				
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FO Sun and flowers), 9, III, (-)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FO Sun and flowers), 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (FO Sun and flowers), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FO Sun and flowers), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FO Sun and flowers), 9, III
14.3. Transport hazard class(es)				
9	9	9	9	9
				
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes EmS-No. (Fire): F-A EmS-No. (Spillage): S-F	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR)	: M6
Special provisions (ADR)	: 274, 335, 375, 601
Limited quantities (ADR)	: 5I
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Special packing provisions (ADR)	: PP1
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T4
Portable tank and bulk container special provisions (ADR)	: TP1, TP29
Tank code (ADR)	: LGBV
Vehicle for tank carriage	: AT

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Transport category (ADR) : 3
Special provisions for carriage - Packages (ADR) : V12
Special provisions for carriage - Loading, unloading and handling (ADR) : CV13
Hazard identification number (Kemler No.) : 90
Orange plates :



Tunnel restriction code (ADR) : -

Transport by sea

Special provisions (IMDG) : 274, 335, 969
Limited quantities (IMDG) : 5 L
Excepted quantities (IMDG) : E1
Packing instructions (IMDG) : LP01, P001
Special packing provisions (IMDG) : PP1
IBC packing instructions (IMDG) : IBC03
Tank instructions (IMDG) : T4
Tank special provisions (IMDG) : TP1, TP29
Stowage category (IMDG) : A

Air transport

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y964
PCA limited quantity max net quantity (IATA) : 30kgG
PCA packing instructions (IATA) : 964
PCA max net quantity (IATA) : 450L
CAO packing instructions (IATA) : 964
CAO max net quantity (IATA) : 450L
Special provisions (IATA) : A97, A158, A197, A215
ERG code (IATA) : 9L

Inland waterway transport

Classification code (ADN) : M6
Special provisions (ADN) : 274, 335, 375, 601
Limited quantities (ADN) : 5 L
Excepted quantities (ADN) : E1
Carriage permitted (ADN) : T
Equipment required (ADN) : PP
Number of blue cones/lights (ADN) : 0

Rail transport

Classification code (RID) : M6
Special provisions (RID) : 274, 335, 375, 601
Limited quantities (RID) : 5L
Excepted quantities (RID) : E1
Packing instructions (RID) : P001, IBC03, LP01, R001
Special packing provisions (RID) : PP1
Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T4
Portable tank and bulk container special provisions (RID) : TP1, TP29
Tank codes for RID tanks (RID) : LGBV
Transport category (RID) : 3
Special provisions for carriage – Packages (RID) : W12
Special provisions for carriage - Loading, unloading and handling (RID) : CW13, CW31
Colis express (express parcels) (RID) : CE8
Hazard identification number (RID) : 90

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14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
3(b)	FO Sun and flowers ; Hexyl salicylate ; Trimofix ; Hexyl cinnamal ; cis-3-Hexenyl salicylate ; Benzyl salicylate ; Vertofix Coeur (IFF)	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10
3(c)	FO Sun and flowers ; Galaxolide ; Hexyl salicylate ; Trimofix ; Hexyl cinnamal ; Isobornylcyclohexanol ; cis-3-Hexenyl salicylate ; Benzyl salicylate ; Vertofix Coeur (IFF)	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

Name	CN designation	CAS-No.	CN code	Category, Subcategory	Threshold	Annex
Piperonal		120-57-0	2932 93 00	Category 1		Annex I

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National regulations

Netherlands

SZW-lijst van kankerverwekkende stoffen	: Isobornylcyclohexanol,cis-3-Hexenyl salicylate are listed
SZW-lijst van mutagene stoffen	: Isobornylcyclohexanol,cis-3-Hexenyl salicylate are listed
SZW-lijst van reprotoxische stoffen – Borstvoeding	: None of the components are listed
SZW-lijst van reprotoxische stoffen – Vruchtbaarheid	: None of the components are listed
SZW-lijst van reprotoxische stoffen – Ontwikkeling	: None of the components are listed

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant

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Abbreviations and acronyms:	
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disruptor

Full text of H- and EUH-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
EUH208	Contains Hexyl salicylate, Piperonal, Trimofix, Hexyl cinnamal, Veratraldehyde, cis-3-Hexenyl salicylate, Benzyl salicylate, Evernyl (Giv), Vertofix Coeur (IFF). May produce an allergic reaction.
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
STOT RE 1	Specific target organ toxicity – Repeated exposure, Category 1

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.