

Safety Data Sheet

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

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 12/6/2023 Version: 1.0

1.1. Product identifier

Product form : Mixture
Product name : FO May bells

UFI : DUUX-U01M-8000-NQJY

Product code : 21104
Product group : Trade product

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

1.2.1. Relevant identified uses

Intended for general public

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

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

De Hekserij Spoorstraat 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]

Skin corrosion/irritation, Category 2 H315
Serious eye damage/eye irritation, Category 2 H319
Skin sensitisation, Category 1 H317
Hazardous to the aquatic environment – Chronic Hazard, H412

Category 3

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

Adverse physicochemical, human health and environmental effects

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

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) : Warning

Contains : Hexyl cinnamal; Hydroxycitronellal; Citronellol; [(3,7-dimethyl-6-octenyl)oxy]acetaldehyde;

Linalool; Citral; Cyclamen aldehyde; Cinnamic alcohol; Lyral (IFF)

Hazard statements (CLP) : H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

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H319 - Causes serious eye irritation.

H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP) : P102 - Keep out of reach of children.

P261 - Avoid breathing dust, fume, gas, mist, spray, vapours. P264 - Wash hands, forearms and face thoroughly after handling.

P272 - Contaminated work clothing should not be allowed out of the workplace.

P273 - Avoid release to the environment.

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

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

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

contact lenses, if present and easy to do. Continue rinsing.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P337+P313 - If eye irritation persists: Get medical advice/attention.

P501 - Dispose of contents and container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation.

EUH-statements : EUH208 - Contains Hexyl cinnamal, Hydroxycitronellal, Citronellol, [(3,7-dimethyl-6-

octenyl)oxy]acetaldehyde, Linalool, Citral, Cyclamen aldehyde, Cinnamic alcohol, Lyral

(IFF). May produce an allergic reaction.

2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 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 is 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

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Hexyl cinnamal	CAS-No.: 101-86-0 EC-No.: 202-983-3 REACH-no: 01-2119533092- 50	20 – 25	Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
Phenyl ethyl alcohol	CAS-No.: 60-12-8 EC-No.: 200-456-2	15 – 20	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319
Hydroxycitronellal	CAS-No.: 107-75-5 EC-No.: 203-518-7 REACH-no: 01-2119973482- 31	10 – 15	Eye Irrit. 2, H319 Skin Sens. 1, H317
Citronellol	CAS-No.: 106-22-9 EC-No.: 203-375-0 REACH-no: 01-2119453995- 23	5 – 10	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317
[(3,7-dimethyl-6-octenyl)oxy]acetaldehyde	CAS-No.: 7492-67-3 EC-No.: 231-324-2	0 – 5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317 Aquatic Chronic 2, H411

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Benzeneacetaldehyde, cyclic acetal with glycerol	CAS-No.: 29895-73-6 EC-No.: 249-934-2 REACH-no: 01-2120735658- 43	0 – 5	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319
Linalool	CAS-No.: 78-70-6 EC-No.: 201-134-4 EC Index-No.: 603-235-00-2 REACH-no: 01-2119474016-	0 – 5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317
Citral	CAS-No.: 5392-40-5 EC-No.: 226-394-6 EC Index-No.: 605-019-00-3 REACH-no: 01-2119462829- 23	0 – 5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
Cyclamen aldehyde	CAS-No.: 103-95-7 EC-No.: 203-161-7 REACH-no: 01-2119970582- 32	0 – 5	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 3, H412
Cinnamic alcohol	CAS-No.: 104-54-1 EC-No.: 203-212-3 REACH-no: 01-2119934496- 29	0 – 5	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Skin Sens. 1B, H317
Lyral (IFF)	CAS-No.: 31906-04-4 EC-No.: 250-863-4; 915-617-9 REACH-no: 01-2119971802- 21	0 – 5	Skin Sens. 1B, H317
Florosa (Giv)	CAS-No.: 63500-71-0 EC-No.: 405-040-6 REACH-no: 01-0000015458-	0 – 5	Eye Irrit. 2, H319
Benzyl acetate	CAS-No.: 140-11-4 EC-No.: 205-399-7 REACH-no: 01-2119638272- 42	0 – 5	Aquatic Chronic 3, H412
benzyl alcohol	CAS-No.: 100-51-6 EC-No.: 202-859-9 EC Index-No.: 603-057-00-5 REACH-no: 01-2119492630- 38	0 – 5	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Eye Irrit. 2, H319

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 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.

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

Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Eye irritation.

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.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

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

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing

dust/fume/gas/mist/vapours/spray.

6.1.2. 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".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

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

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapours/spray.

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Alway

allowed out of the workplace. 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

Storage conditions : Store in a well-ventilated place. Keep cool.

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7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):







8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Colour : Pale yellow to yellow.

: characteristic. Odour Odour threshold : Not available Not applicable Melting point Freezing point Not available Boiling point Not available Flammability : Non flammable. Lower explosion limit : Not available Upper explosion limit : Not available : > 80 °C Flash point : Not available Auto-ignition temperature : Not available Decomposition temperature рΗ Not available 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 : 0.964 - 0.994

9.2. Other information

Particle characteristics

Relative vapour density at 20°C

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

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.

: Not available

: Not applicable

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SECTION 11: Toxicological information

11.1. Information on hazard classes as defined	d in Regulation (EC) No 1272/2008	
Acute toxicity (oral)	Not classified	
Acute toxicity (dermal) : Acute toxicity (inhalation) :	Not classified Not classified	
Phenyl ethyl alcohol (60-12-8)		
LD50 dermal rabbit	2535 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), 95% CL: 1769 - 3634	
LC50 Inhalation - Rat	> 4.63 mg/l air Animal: rat	
Hydroxycitronellal (107-75-5)		
LD50 oral rat	> 6400 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)	
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit	
[(3,7-dimethyl-6-octenyl)oxy]acetaldehyde (74	92-67-3)	
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)	
Benzeneacetaldehyde, cyclic acetal with glyc	erol (29895-73-6)	
LD50 oral rat	1993 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 1819 - 2167	
Linalool (78-70-6)		
LD50 oral rat	2790 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Remarks on results: other:, 95% CL: 2440 - 3180	
LD50 dermal rabbit	5610 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), 95% CL: 3578 - 8374	
Citral (5392-40-5)		
LD50 oral rat	≈ 6800 mg/kg bodyweight Animal: rat	
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat	
Cyclamen aldehyde (103-95-7)		
LD50 oral rat	> 2000 mg/kg	
LD50 dermal rat	> 5000 mg/kg	
Cinnamic alcohol (104-54-1)		
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, Animal sex: female, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)	
Lyral (IFF) (31906-04-4)		
LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)	
Florosa (Giv) (63500-71-0)		
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: EU Method B.1 (Acute Toxicity (Oral)), Guideline: OECD Guideline 401 (Acute Oral Toxicity)	

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Florosa (Giv) (63500-71-0)	
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
Benzyl acetate (140-11-4)	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rabbit	> 5000 mg/kg
benzyl alcohol (100-51-6)	
LD50 oral rat	1620 mg/kg Species: rat
LD50 oral	1580 mg/kg bodyweight Animal: mouse, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 1410 - 1770
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: EPA OTS 798.1100 (Acute Dermal Toxicity), Remarks on results: other:
LC50 Inhalation - Rat	> 4178 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Remarks on results: other:
Skin corrosion/irritation	: Causes skin irritation.
Cinnamic alcohol (104-54-1)	
рН	4.71 Temp.: 26,5 °C Concentration: 1 vol%
Serious eye damage/irritation	: Causes serious eye irritation.
Cinnamic alcohol (104-54-1)	
рН	4.71 Temp.: 26,5 °C Concentration: 1 vol%
	: May cause an allergic skin reaction.
Germ cell mutagenicity Carcinogenicity	: Not classified : Not classified
Hydroxycitronellal (107-75-5)	. Not diagonica
NOAEL (chronic, oral, animal/male, 2 years)	60 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
Citral (5392-40-5)	
NOAEL (chronic, oral, animal/male, 2 years)	60 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Phenyl ethyl alcohol (60-12-8)	T
NOAEL (dermal, rat/rabbit, 90 days)	510 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)
Hydroxycitronellal (107-75-5)	
NOAEL (oral, rat, 90 days)	100 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
NOAEL (subchronic, oral, animal/male, 90 days)	60 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
Citronellol (106-22-9)	
NOAEL (oral, rat, 90 days)	2000 mg/kg bodyweight Animal: rat, Guideline: other:
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	0.063 mg/l air Animal: rat, Guideline: OECD Guideline 412 (Subacute Inhalation Toxicity: 28-Day Study)

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Linalool (78-70-6)		
NOAEL (dermal, rat/rabbit, 90 days)	250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)	
Citral (5392-40-5)		
LOAEC (inhalation, rat, gas, 90 days)	68 ppm Animal: rat, Animal sex: female	
NOAEL (oral, rat, 90 days)	100 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)	
NOAEC (inhalation, rat, gas, 90 days)	34 ppm Animal: rat, Animal sex: female	
NOAEL (subchronic, oral, animal/male, 90 days)	60 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)	
Cinnamic alcohol (104-54-1)		
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents), Remarks on results: not determinable due to absence of adverse toxic effects	
Lyral (IFF) (31906-04-4)		
NOAEL (oral, rat, 90 days)	150 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28- Day Oral Toxicity Study in Rodents), Guideline: EU Method B.7 (Repeated Dose (28 Days) Toxicity (Oral))	
Florosa (Giv) (63500-71-0)		
NOAEL (oral, rat, 90 days)	125 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)	
NOAEL (dermal, rat/rabbit, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study), Guideline: EU Method B.28 (Sub-Chronic Dermal Toxicity Test: 90-Day Repeated Dermal Dose Study Using Rodent Species)	
benzyl alcohol (100-51-6)		
NOAEL (oral, rat, 90 days)	400 mg/kg bodyweight Animal: rat, Guideline: other:	
Aspiration hazard :	Not classified	
Linalool (78-70-6)		
Viscosity, kinematic	5191.86 mm²/s	
Citral (5392-40-5)		
Viscosity, kinematic	2.42 mm²/s at 20 °C	
Cyclamen aldehyde (103-95-7)		
Viscosity, kinematic	7.1 mm²/s at 20 °C	
Cinnamic alcohol (104-54-1)		
Viscosity, kinematic	Not applicable	
benzyl alcohol (100-51-6)		
Viscosity, kinematic	0.005 mm²/s	
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11.2. Information on other hazards

No additional information available

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short-term : Not classified.

(acute)

Hazardous to the aquatic environment, long-term

(chronic)

Not rapidly degradable

: Harmful to aquatic life with long lasting effects.

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	
Phenyl ethyl alcohol (60-12-8)		
LC50 - Fish [1]	215 – 464 mg/l Test organisms (species): Leuciscus idus	
EC50 - Crustacea [1]	287.17 mg/l Test organisms (species): Daphnia magna	
Hydroxycitronellal (107-75-5)		
LC50 - Fish [1]	31.6 mg/l Test organisms (species): Leuciscus idus	
EC50 - Crustacea [1]	410 mg/l Test organisms (species): Daphnia magna	
EC50 72h - Algae [1]	123.32 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)	
Citronellol (106-22-9)		
LC50 - Fish [1]	14.66 mg/l Test organisms (species): Leuciscus idus	
EC50 - Crustacea [1]	17.48 mg/l Test organisms (species): Daphnia magna	
EC50 72h - Algae [1]	2.4 mg/l Test organisms (species):	
[(3,7-dimethyl-6-octenyl)oxy]acetaldehyde (74	92-67-3)	
EC50 - Crustacea [1]	8.9 mg/l Test organisms (species): Daphnia magna	
EC50 72h - Algae [1]	22 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)	
Benzeneacetaldehyde, cyclic acetal with glycerol (29895-73-6)		
EC50 - Crustacea [1]	191.6 mg/l Test organisms (species): Daphnia sp.	
EC50 96h - Algae [1]	123.49 mg/l Test organisms (species): other:	
Linalool (78-70-6)		
LC50 - Fish [1]	27.8 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)	
EC50 - Crustacea [1]	59 mg/l Test organisms (species): Daphnia magna	
EC50 96h - Algae [1]	88.3 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)	
EC50 96h - Algae [2]	156.7 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)	
Citral (5392-40-5)		
LC50 - Fish [1]	6.78 mg/l Test organisms (species): Leuciscus idus	
EC50 - Crustacea [1]	6.8 mg/l Test organisms (species): Daphnia magna	

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Citral (5392-40-5)			
EC50 72h - Algae [1]	103.8 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)		
Cinnamic alcohol (104-54-1)	Cinnamic alcohol (104-54-1)		
LC50 - Fish [1]	9 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)		
EC50 - Crustacea [1]	7.7 mg/l Test organisms (species): Daphnia magna		
EC50 72h - Algae [1]	19.7 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)		
Lyral (IFF) (31906-04-4)			
LC50 - Fish [1]	11.8 mg/l Test organisms (species): Pimephales promelas		
EC50 - Crustacea [1]	15 mg/l Test organisms (species): Daphnia magna		
EC50 72h - Algae [1]	25.4 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)		
Florosa (Giv) (63500-71-0)			
EC50 - Crustacea [1]	≈ 320 mg/l Test organisms (species): Daphnia magna		
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)		
Benzyl acetate (140-11-4)			
LC50 - Fish [1]	4 mg/l Test organisms (species): Oryzias latipes		
LC50 - Fish [2]	7.9 mg/l Test organism (species): Brachydanio rerio OECD 203		
EC50 - Crustacea [1]	17 mg/l Test organisms (species): Daphnia magna		
EC50 72h - Algae [1]	110 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)		
EC50 72h - Algae [2]	92 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)		
NOEC chronic fish	0.92 mg/l Test organisms (species): Oryzias latipes Duration: '28 d'		
benzyl alcohol (100-51-6)			
LC50 - Fish [1]	460 mg/l Test organisms (species): Pimephales promelas		
EC50 - Crustacea [1]	230 mg/l Test organisms (species): Daphnia magna		
EC50 72h - Algae [1]	770 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)		
EC50 72h - Algae [2]	500 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)		
EC50 96h - Algae [1]	76828 mg/l Test organisms (species): other:		
NOEC chronic fish	48897 mg/l Test organisms (species): other: Duration: '30 d'		
NOEC chronic crustacea	51 mg/l Species: Daphnia magna, duration: 21 days		

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Hexyl cinnamal (101-86-0)	
Partition coefficient n-octanol/water (Log Kow) 5.3 at 24 °C	

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Phenyl ethyl alcohol (60-12-8)		
Partition coefficient n-octanol/water (Log Pow)	0.8 pH value : 7, 20 °C	
Citronellol (106-22-9)		
BCF - Fish [1]	82.59	
Partition coefficient n-octanol/water (Log Pow)	3.3	
Linalool (78-70-6)		
Partition coefficient n-octanol/water (Log Pow)	≥ 2.84	
Citral (5392-40-5)		
Partition coefficient n-octanol/water (Log Kow)	2.76 at 25 °C	
Cyclamen aldehyde (103-95-7)		
Partition coefficient n-octanol/water (Log Pow)	3.4	
Cinnamic alcohol (104-54-1)		
Partition coefficient n-octanol/water (Log Kow)	1.636 pH value: 3.52, 27 °C	
Lyral (IFF) (31906-04-4)		
Partition coefficient n-octanol/water (Log Pow)	2.08	
Florosa (Giv) (63500-71-0)		
Partition coefficient n-octanol/water (Log Pow)	1.6	
Benzyl acetate (140-11-4)		
Partition coefficient n-octanol/water (Log Pow)	2	
benzyl alcohol (100-51-6)		
Bioconcentration factor (BCF REACH)	1.37	
Partition coefficient n-octanol/water (Log Pow)	1.1	
40.4 88-5356-1		

12.4. Mobility in soil

Hexyl cinnamal (101-86-0)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	4.2
Citral (5392-40-5)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.169

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

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID n	umber			
Not regulated for transport				
14.2. UN proper shippin	14.2. UN proper shipping name			
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard o	14.3. Transport hazard class(es)			
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group	14.4. Packing group			
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

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SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (F	EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description	
3(b)	FO May bells; Hexyl cinnamal; Phenyl ethyl alcohol; Hydroxycitronellal; Citronellol; [(3,7-dimethyl-6-octenyl)oxy]acetaldehyde; Benzeneacetaldehyde, cyclic acetal with glycerol; Linalool; Citral; Cyclamen aldehyde; Lyral (IFF); Florosa (Giv); benzyl alcohol	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 May bells; Hexyl cinnamal; [(3,7-dimethyl-6-octenyl)oxy]acetaldehyde; Cyclamen aldehyde; Benzyl acetate	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)

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 no 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)

15.1.2. National regulations

Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed SZW-lijst van mutagene stoffen : None of the components are listed SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed SZW-lijst van reprotoxische stoffen – STW-lijst van reprotoxische stoffen – Ontwikkeling : None of the components are listed : None : None

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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
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 disrupting properties

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Full text of H- and EUH-statements:		
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Aquatic Acute 1	Hazardous to the aquatic environment – Acute 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 cinnamal, Hydroxycitronellal, Citronellol, [(3,7-dimethyl-6-octenyl)oxy]acetaldehyde, Linalool, Citral, Cyclamen aldehyde, Cinnamic alcohol, Lyral (IFF). May produce an allergic reaction.	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
H302	Harmful if swallowed.	
H315	Causes skin irritation.	
H317	May cause an allergic skin reaction.	
H319	Causes serious eye irritation.	
H332	Harmful if inhaled.	
H400	Very toxic to aquatic life.	
H411	Toxic to aquatic life with long lasting effects.	
H412	Harmful to aquatic life with long lasting effects.	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
Skin Sens. 1	Skin sensitisation, Category 1	
Skin Sens. 1B	Skin sensitisation, category 1B	

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.