



Safety Data Sheet

revision n° 3/2022 drawn up on 24/3/2023 update on Reg.2020/878 & Reg.2022/692/CE - ATP 18

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING
1.1. Product identifier

Trade code:	FO41883
INCI:	parfum / fragrance (USA INCI: fragrance)
Product's type:	Blend of essential oils, natural and synthetic fragrances. Content of natural substances <90%. Natural Index is <0.5 (ISO 16128).
Flow chart:	production process made by cold mixing.
Origin:	Italy (EC)
CAS n°:	Exempt, it is a mixture.
EC n°:	Exempt, it is a mixture.
REACH n°:	Exempt, it is a mixture.
Tariff n°:	3302 9090
VAT n°:	IT03397030960
UFI n°	H720-30KS-P004-VFK6 (associated to a group of blends)

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





Identified use:	for use into cosmetic products; for use into environmental deodorants; for use into detergency; for use into technical materials (leather, paper, plastic, rubber, fabrics, gasolines, paints, inks, glues).
Uses advised against:	use into repellents and attractive animals; use into products used in the food field; use into supplements; use into feeds.

ESTONIA 16662 or 112
FINLAND +358 09 471 977
FRANCE +33 (0)1 45 42 59 59
GERMANY +49 30 450 653565
GREECE +30 10 779 3777 HUNGARY +36 80 20 11 99
ICELAND 543 2222
IRELAND +353 01 8092566 or 01 8379964
ITALY +39 06 305 4343
LATVIA +371 67042473
LITHUANIA +370 5 236 20 52 or +370 687 53378
MALTA (+356) 2545 0000
NORWAY 22 59 13 00
NETHERLANDS +31 30 274 88 88
POLAND +48 22 619 66 54 or +48 22 619 08 97
PORTUGAL 808 250 143
ROMANIA +40 021.318.36.06
SLOVAKIA +421 2 5477 4166
SLOVENIA +386 41 650 500
SPAIN +34 91 562 04 20
SWEDEN 112
UNITED KINGDOM 0870 243 2241 or +44 (0)20 7771 5310

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

-  Warning, Skin Irrit. 2, Causes skin irritation.
-  Warning, Eye Irrit. 2, Causes serious eye irritation.
-  Warning, Skin Sens. 1B, May cause an allergic skin reaction.
-  Aquatic Chronic 2, Toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Warning

Hazard statements:

- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H317 May cause an allergic skin reaction.
- H411 Toxic to aquatic life with long lasting effects.

Precautionary statements:

- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P264 Wash your hands thoroughly after handling.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P391 Collect spillage.

Special Provisions:

None

Contains

4-tert-Butylcyclohexyl acetate, NNI

Tetramethyl acetyloctahydronaphthalenes (OTNE), NNI: May produce an allergic reaction.

Allyl cyclohexylpropionate, NNI: May produce an allergic reaction.

Hexyl salicylate, NNI: May produce an allergic reaction.

Citrus Sinensis peel oil expressed (Brasil), PPAI: May produce an allergic reaction.

Methylundecanal, NNI: May produce an allergic reaction.

Lauraldehyde, NNI: May produce an allergic reaction.

2,4-Dimethyl-3-cyclohexene carboxaldehyde, NNI: May produce an allergic reaction.

Cyclamen aldehyde, NNI: May produce an allergic reaction.

Pentadecalactone, NNI: May produce an allergic reaction.

trans-Rose ketone-2, NNI: May produce an allergic reaction.

Reaction mass of cis-4-(Isopropyl) cyclohexanemethanol and trans-4-(Isopropyl) cyclohexanemethanol, NNI: May produce an allergic reaction.

Coumarin*: May produce an allergic reaction.

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.1. Substances**

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

PPAI – Physical processed agroingredients or natural raw materials and solvents

CPAI – Chemically processed agroingredients or natural molecules

NNI – Non natural ingredients (chemical origin)

* - allergenic substances of synthetic origin (NNI) according to Reg. 1223/2009

N° of REACH registration:

yy-yyyyyyyyyy-yy->xxxx – registered substance

00-0000000000-00->1ty – exempt from registration (manufactured/imported <1ton/year)

00-0000000000-00-mixt - exempt from registration (blending product)











00-0000000000-00-food - exempt from registration (food additive/flavor)

00-0000000000-00-NCS* - exempt from registration (substance content in low concentration in Natural complex product, essential oils, resins, absolute...)

Qty	Name	Ident. Number	Classification
>= 15% - < 20%	Dipropylene glycol, NNI	CAS: 25265-71-8 EC: 246-770-3 REACH No.: 01-2119456811-38-xxxx	The product is not classified as hazardous according to Regulation EC 1272/2008 (CLP).
>= 15% - < 20%	4-tert-Butylcyclohexyl acetate, NNI	CAS: 32210-23-4 EC: 250-954-9 REACH No.: 01-2119976286-24-xxxx	⚠ 3.4.2/1B Skin Sens. 1B H317
>= 10% - < 12,5%	Tricyclodecyl propionate, NNI	CAS: 68912-13-0 EC: 272-805-7 REACH No.: 01-2119969447-21-xxxx	⚠ 4.1/C2 Aquatic Chronic 2 H411
>= 7% - < 10%	2-tert-Butylcyclohexyl acetate, NNI	CAS: 20298-69-5 EC: 243-718-1 REACH No.: 01-2119970713-33-	⚠ 4.1/C2 Aquatic Chronic 2 H411

			xxxx	
>= 5% - < 7%	Tetramethyl acetyloctahydronaphthalenes (OTNE), NNI	CAS: EC: REACH No.:	54464-57-2 915-730-3 01-2119489989-04-xxxx	<ul style="list-style-type: none"> ⚠ 3.2/2 Skin Irrit. 2 H315 ⚠ 3.4.2/1B Skin Sens. 1B H317 ⚠ 4.1/C2 Aquatic Chronic 2 H411
>= 3% - < 5%	Methyl beta-naphthyl ether, NNI	CAS: EC: REACH No.:	93-04-9 202-213-6 01-2119937828-21-xxxx	<ul style="list-style-type: none"> ⚠ 3.3/2 Eye Irrit. 2 H319 ⚠ 4.1/C2 Aquatic Chronic 2 H411
>= 3% - < 5%	Diethyl phthalate, NNI	CAS: EC: REACH No.:	84-66-2 201-550-6 01-2119486682-27-xxxx	The product is not classified as hazardous according to Regulation EC 1272/2008 (CLP).
>= 1% - < 3%	Decanal, NNI	CAS: EC: REACH No.:	112-31-2 203-957-4 01-2119967771-26-xxxx	<ul style="list-style-type: none"> ⚠ 3.3/2 Eye Irrit. 2 H319 4.1/C3 Aquatic Chronic 3 H412
>= 1% - < 3%	Allyl cyclohexylpropionate, NNI	CAS: EC: REACH No.:	2705-87-5 220-292-5 01-2119976355-27-xxxx	<ul style="list-style-type: none"> ⚠ 3.1/4/Oral Acute Tox. 4 H302 ⚠ 3.1/4/Dermal Acute Tox. 4 H312 ⚠ 3.4.2/1B Skin Sens. 1B H317 ⚠ 4.1/A1 Aquatic Acute 1 H400 ⚠ 4.1/C1 Aquatic Chronic 1 H410 M=1.
>= 1% - < 3%	Hexyl salicylate, NNI	CAS: EC: REACH No.:	6259-76-3 228-408-6 01-2119638275-36-xxxx	<ul style="list-style-type: none"> ⚠ 3.4.2/1B Skin Sens. 1B H317 ⚠ 4.1/C1 Aquatic Chronic 1 H410 M=1.
>= 1% - < 3%	gamma-Undecalactone, NNI	CAS: EC: REACH No.:	104-67-6 203-225-4 01-2119959333-34-xxxx	4.1/C3 Aquatic Chronic 3 H412
>= 1% - < 3%	Citrus Sinensis peel oil expressed (Brasil), PPAI	CAS: EC: REACH No.:	8028-48-6 232-433-8 01-2119493353-35-xxxx	<ul style="list-style-type: none"> ⚠ 2.6/3 Flam. Liq. 3 H226 ⚠ 3.10/1 Asp. Tox. 1 H304 ⚠ 3.2/2 Skin Irrit. 2 H315 ⚠ 3.4.2/1 Skin Sens. 1 H317 ⚠ 4.1/C2 Aquatic Chronic 2 H411
>= 1% - < 3%	2,6-Dimethyl-7-octen-2-ol, NNI	CAS: EC: REACH No.:	18479-58-8 242-362-4 01-2119457274-37-xxxx	<ul style="list-style-type: none"> ⚠ 3.8/3 STOT SE 3 H336 ⚠ 3.2/2 Skin Irrit. 2 H315 ⚠ 3.3/2 Eye Irrit. 2 H319
>= 1% - < 3%	Methylundecanal, NNI	CAS: EC: REACH No.:	110-41-8 203-765-0 01-2119969443-29-xxxx	<ul style="list-style-type: none"> ⚠ 3.2/2 Skin Irrit. 2 H315 ⚠ 3.4.2/1B Skin Sens. 1B H317 ⚠ 4.1/A1 Aquatic Acute 1 H400 M=1. ⚠ 4.1/C1 Aquatic Chronic 1 H410 M=1.
>= 1% - < 3%	Lauraldehyde, NNI	CAS: EC:	112-54-9 203-983-6	<ul style="list-style-type: none"> ⚠ 3.2/2 Skin Irrit. 2 H315 ⚠ 3.3/2 Eye Irrit. 2 H319

		REACH No.:	01-2119969441-33-xxxx	⚠ 3.4.2/1 Skin Sens. 1 H317
>= 1% - < 3%	Dimethyl benzyl carbonyl acetate, NNI	CAS: EC: REACH No.:	151-05-3 205-781-3 01-2120258394-51-xxxx	⚠ 3.2/2 Skin Irrit. 2 H315 4.1/C3 Aquatic Chronic 3 H412
>= 1% - < 3%	Benzyl acetate	CAS: EC: REACH No.:	140-11-4 205-399-7 01-2119638272-42-xxxx	4.1/C3 Aquatic Chronic 3 H412
>= 0,5% - < 1%	Triethyl citrate (E1505), CPAI	CAS: EC: REACH No.:	77-93-0 201-070-7 01-2119955435-32-xxxx	The product is not classified as hazardous according to Regulation EC 1272/2008 (CLP).
>= 0,5% - < 1%	Allyl caproate, NNI	CAS: EC: REACH No.:	123-68-2 204-642-4 01-2119983573-26-xxxx	⚠ 3.1/3/Oral Acute Tox. 3 H301 ⚠ 3.1/3/Dermal Acute Tox. 3 H311 ⚠ 3.1/3/Inhal Acute Tox. 3 H331 ⚠ 4.1/A1 Aquatic Acute 1 H400 M=1. 4.1/C3 Aquatic Chronic 3 H412
>= 0,25% - < 0,5%	2,4-Dimethyl-3-cyclohexene carboxaldehyde, NNI	CAS: EC: REACH No.:	68039-49-6 943-728-2 01-2119982384-28-xxxx	⚠ 3.2/2 Skin Irrit. 2 H315 ⚠ 3.4.2/1B Skin Sens. 1B H317 ⚠ 4.1/C2 Aquatic Chronic 2 H411
>= 0,25% - < 0,5%	Cyclamen aldehyde, NNI	CAS: EC: REACH No.:	103-95-7 203-161-7 01-2119970582-32-xxxx	⚠ 3.2/2 Skin Irrit. 2 H315 ⚠ 3.4.2/1B Skin Sens. 1B H317 4.1/C3 Aquatic Chronic 3 H412
>= 0,25% - < 0,5%	trans-Rose ketone-2, NNI	CAS: EC: REACH No.:	23726-91-2 245-842-1 01-2120094433-55-xxxx	⚠ 3.2/2 Skin Irrit. 2 H315 ⚠ 3.4.2/1B Skin Sens. 1B H317 ⚠ 4.1/C2 Aquatic Chronic 2 H411
>= 0,25% - < 0,5%	Pentadecalactone, NNI	CAS: EC: REACH No.:	106-02-5 203-354-6 01-2119987323-31-xxxx	⚠ 3.4.2/1B Skin Sens. 1B H317 ⚠ 4.1/C2 Aquatic Chronic 2 H411 M=1.
>= 0,25% - < 0,5%	Terpineol, CPAI	CAS: EC: REACH No.:	8000-41-7 701-188-3 01-2119553062-49-xxxx	⚠ 3.2/2 Skin Irrit. 2 H315 ⚠ 3.3/2 Eye Irrit. 2 H319
>= 0,1% - < 0,25%	Methyl decenol, NNI	CAS: EC: REACH No.:	81782-77-6 279-815-0 01-2119983528-21-xxxx	⚠ 4.1/A1 Aquatic Acute 1 H400 M=1. ⚠ 4.1/C2 Aquatic Chronic 2 H411
>= 0,1% - < 0,25%	Reaction mass of cis-4-(Isopropyl)cyclohexanemethanol and trans-4-(Isopropyl)cyclohexanemethanol, NNI	CAS: EC: REACH No.:	5502-75-0 939-719-8 01-2119983532-32-xxxx	⚠ 3.2/2 Skin Irrit. 2 H315 ⚠ 3.4.2/1B Skin Sens. 1B H317

>= 0,1% - < 0,25%	Coumarin*	CAS: EC: REACH No.:	91-64-5 202-086-7 01-2119949300-45-xxxx	 3.1/4/Oral Acute Tox. 4 H302  3.4.2/1 Skin Sens. 1 H317  4.1/C3 Aquatic Chronic 3 H412
>= 0,1% - < 0,25%	BHT (Butyl hydroxytoluene), NNI	CAS: EC: REACH No.:	128-37-0 204-881-4 01-2119565113-46-xxxx	 4.1/A1 Aquatic Acute 1 H400 M=1.  4.1/C1 Aquatic Chronic 1 H410 M=1.
700 ppm	Mentha arvensis leaf oil (India), PPAI	CAS: EC: REACH No.:	90063-97-1 290-058-5 01-2119973492-30-xxxx	 3.1/4/Oral Acute Tox. 4 H302  3.2/2 Skin Irrit. 2 H315  3.4.2/1 Skin Sens. 1 H317  3.3/2 Eye Irrit. 2 H319  4.1/C2 Aquatic Chronic 2 H411

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, remove contact lenses, if present and easy to do. Rinse with water with the eyelids open for a sufficient length of time. Following this, protect the eyes with sterile gauze or a clean, dry, handkerchief. Do not use eyewash or ointment of any kind before consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

None

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media:

Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Daily individual protection:

Safety glasses (EN 166:2001) and gloves.
Respiratory mask with filter ABEK (EN14387), if adoperate the product in powder form.
Remove all sources of ignition.
Wear breathing apparatus if exposed to vapours/dusts/aerosols.
Provide adequate ventilation.

6.2. Personal precautions, protective equipment and emergency procedures

For non emergency personnel:
Wear personal protection equipment.
Remove persons to safety.
See protective measures under point 7 and 8.
For emergency responders:
Wear personal protection equipment.

6.3. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Retain contaminated washing water and dispose it.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
Suitable material for taking up: absorbing material, organic, sand

6.4. Methods and material for containment and cleaning up

Wash with plenty of water.

6.5. Reference to other sections

See also section 8 and 13

SECTION 7: HANDLING AND STORAGE

7.2. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
Contaminated clothing should be changed before entering eating areas.
Do not eat or drink while working.
See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

INSTRUCTIONS AS REGARDS STORAGE PERMISES:

Dry, cool and well ventilated areas, not exposed to direct sunlight. Safety electric system.

CONSERVATION:

Keep this product not more than 12 months, in the containers tightly closed and full, from 4°C to 20°C. Avoid direct exposure to sunlight, in a well ventilated, dry place, away from unguarded flame and heat sources.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

Concentrated product only for industrial use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

- OEL Type: ACGIH - TWA(8h): 5 mg/m³ - Notes: A4 - URT irr

Benzyl acetate - CAS: 140-11-4

- OEL Type: ACGIH - TWA(8h): 10 ppm - Notes: A4 - URT irr

BHT (Butyl hydroxytoluene), NNI - CAS: 128-37-0

- OEL Type: ACGIH - TWA(8h): 2 mg/m³ - Notes: (IFV), A4 - URT irr

DNEL Exposure Limit Values

Dipropylene glycol, NNI - CAS: 25265-71-8

Worker Industry: 238 mg/m³ - Consumer: 70 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects - Notes: ECHA

Worker Industry: 84 mg/kg - Consumer: 51 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: ECHA

Consumer: 24 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects - Notes: ECHA

Diethyl phthalate, NNI - CAS: 84-66-2

Worker Industry: 10.56 mg/m³ - Consumer: 2.6 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects - Notes: ECHA

Worker Industry: 15 mg/kg - Consumer: 7.5 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: ECHA

Consumer: 0.75 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects - Notes: ECHA

Decanal, NNI - CAS: 112-31-2

Worker Industry: 24.86 mg/m³ - Consumer: 6.13 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects - Notes: ECHA

Worker Industry: 7.05 mg/kg - Consumer: 3.52 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: ECHA

Consumer: 3.52 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects - Notes: ECHA

Allyl cyclohexylpropionate, NNI - CAS: 2705-87-5

Worker Industry: 15 mg/m³ - Consumer: 3.7 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects - Notes: ECHA

Worker Industry: 4.3 mg/kg - Consumer: 2.1 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: ECHA

Consumer: 2.1 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects - Notes: ECHA

Hexyl salicylate, NNI - CAS: 6259-76-3

Worker Industry: 1.7 mg/m³ - Consumer: 0.4 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects - Notes: ECHA

Worker Industry: 6.4 mg/kg - Consumer: 3.2 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: ECHA

Consumer: 0.3 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects - Notes: ECHA

gamma-Undecalactone, NNI - CAS: 104-67-6

Worker Industry: 19 mg/m³ - Consumer: 4.68 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects - Notes: ECHA

Worker Industry: 5.38 mg/kg - Consumer: 2.7 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: ECHA

Consumer: 2.7 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects - Notes: ECHA

Citrus Sinensis peel oil expressed (Brasil), PPAI - CAS: 8028-48-6

Worker Industry: 31.1 mg/m³ - Consumer: 7.78 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects - Notes: ECHA

Worker Industry: 8.89 mg/kg - Consumer: 4.44 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: ECHA

Consumer: 4.44 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects - Notes: ECHA

2,6-Dimethyl-7-octen-2-ol, NNI - CAS: 18479-58-8

Worker Industry: 73.5 mg/m³ - Consumer: 21.7 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects - Notes: ECHA

Worker Industry: 20.8 mg/kg - Consumer: 12.5 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: ECHA

Consumer: 12.5 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects - Notes: ECHA

Methylundecanal, NNI - CAS: 110-41-8

Worker Industry: 36.89 mg/m³ - Consumer: 9.1 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects - Notes: ECHA

Worker Industry: 10.46 mg/kg - Consumer: 5.23 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: ECHA

Consumer: 5.23 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects - Notes: ECHA

Lauraldehyde, NNI - CAS: 112-54-9

Worker Industry: 49.7 mg/m³ - Consumer: 12.3 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects - Notes: ECHA

Worker Industry: 14.1 mg/kg - Consumer: 7 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: ECHA

Consumer: 7 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects - Notes: ECHA

Dimethyl benzyl carbonyl acetate, NNI - CAS: 151-05-3

Worker Industry: 12.695 mg/m³ - Consumer: 3.13 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects - Notes: ECHA

Worker Industry: 3.6 mg/kg - Consumer: 1.8 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: ECHA

Consumer: 1.8 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects - Notes: ECHA

Benzyl acetate - CAS: 140-11-4

Worker Industry: 9 mg/m³ - Consumer: 2.2 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects - Notes: ECHA

Worker Industry: 2.5 mg/kg - Consumer: 1.3 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: ECHA

Consumer: 1.3 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects - Notes: ECHA

Triethyl citrate (E1505), CPAI - CAS: 77-93-0

Worker Industry: 73.5 mg/m³ - Consumer: 28.8 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects - Notes: ECHA

Worker Industry: 20.8 mg/kg - Consumer: 12.5 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: ECHA

Consumer: 12.5 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects - Notes: ECHA

2,4-Dimethyl-3-cyclohexene carboxaldehyde, NNI - CAS: 68039-49-6

Worker Industry: 1.837 mg/m³ - Consumer: 0.543 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects - Notes: ECHA

Worker Industry: 0.521 mg/kg - Consumer: 0.3125 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: ECHA
 Consumer: 0.3125 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects - Notes: ECHA

Cyclamen aldehyde, NNI - CAS: 103-95-7
 Worker Industry: 5.83 mg/m³ - Consumer: 1.45 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects - Notes: ECHA
 Worker Industry: 1.67 mg/kg - Consumer: 0.83 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: ECHA
 Consumer: 0.83 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects - Notes: ECHA

Terpineol, CPAI - CAS: 8000-41-7
 Worker Industry: 44.8 mg/m³ - Consumer: 7.96 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects - Notes: ECHA
 Worker Industry: 6.36 mg/kg - Consumer: 2.69 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: ECHA
 Consumer: 2.69 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects - Notes: ECHA

Methyl decenol, NNI - CAS: 81782-77-6
 mg/m³ mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects - Notes: ECHA
 mg/kg mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: ECHA
 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects - Notes: ECHA

Reaction mass of cis-4-(Isopropyl) cyclohexanemethanol and trans-4-(Isopropyl) cyclohexanemethanol, NNI - CAS: 5502-75-0
 Worker Industry: 6.63 mg/m³ - Consumer: 1.63 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects - Notes: ECHA
 Worker Industry: 1.88 mg/kg - Consumer: 0.940 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: ECHA
 Consumer: 0.940 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects - Notes: ECHA

Coumarin* - CAS: 91-64-5
 Worker Industry: 6.78 mg/m³ - Consumer: 1.69 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects - Notes: ECHA
 Worker Industry: 0.79 mg/kg - Consumer: 0.39 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: ECHA
 Consumer: 0.30 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects - Notes: ECHA

Mentha arvensis leaf oil (India), PPAI - CAS: 90063-97-1
 Worker Industry: 35.3 mg/m³ - Consumer: 8.7 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects - Notes: ECHA
 Worker Industry: 5 mg/kg - Consumer: 2.5 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: ECHA
 Consumer: 2.5 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects - Notes: ECHA

PNEC Exposure Limit Values

Dipropylene glycol, NNI - CAS: 25265-71-8
 Target: Fresh Water - Value: 100 ug/l - Notes: ECHA
 Target: Marine water - Value: 10 ug/l - Notes: ECHA
 Target: Microorganisms in sewage treatments - Value: 1000 mg/l - Notes: ECHA
 Target: Freshwater sediments - Value: 238 ug/l - Notes: ECHA
 Target: Marine water sediments - Value: 23 ug/l - Notes: ECHA
 Target: Soil (agricultural) - Value: 25.3 ug/l - Notes: ECHA
 Target: Predators - Value: 313 mg/kg - Notes: ECHA

4-tert-Butylcyclohexyl acetate, NNI - CAS: 32210-23-4
 Target: Fresh Water - Value: 5.3 ug/l - Notes: ECHA
 Target: Marine water - Value: 0.53 ug/l - Notes: ECHA
 Target: Microorganisms in sewage treatments - Value: 12.2 mg/l - Notes: ECHA
 Target: Freshwater sediments - Value: 2010 ug/kg - Notes: ECHA
 Target: Marine water sediments - Value: 201 ug/kg - Notes: ECHA
 Target: Soil (agricultural) - Value: 420 ug/kg - Notes: ECHA
 Target: Predators - Value: 66.67 mg/kg - Notes: ECHA

Tricyclodecyl propionate, NNI - CAS: 68912-13-0
 Target: Fresh Water - Value: 91 ug/l - Notes: ECHA
 Target: Marine water - Value: 9.1 ug/l - Notes: ECHA
 Target: Microorganisms in sewage treatments - Value: 4.8 mg/l - Notes: ECHA
 Target: Freshwater sediments - Value: 12.2 ug/l - Notes: ECHA
 Target: Marine water sediments - Value: 1.22 ug/l - Notes: ECHA
 Target: Soil (agricultural) - Value: 4400 ug/l - Notes: ECHA

2-tert-Butylcyclohexyl acetate, NNI - CAS: 20298-69-5
 Target: Fresh Water - Value: 57 ug/l - Notes: ECHA
 Target: Marine water - Value: 5.7 ug/l - Notes: ECHA
 Target: Microorganisms in sewage treatments - Value: 10 mg/l - Notes: ECHA
 Target: Freshwater sediments - Value: 7620 ug/l - Notes: ECHA
 Target: Marine water sediments - Value: 760 ug/l - Notes: ECHA
 Target: Soil (agricultural) - Value: 4400 ug/l - Notes: ECHA

Diethyl phthalate, NNI - CAS: 84-66-2
 Target: Fresh Water - Value: 12 ug/l - Notes: ECHA

Target: Marine water - Value: 1.2 ug/l - Notes: ECHA
Target: Microorganisms in sewage treatments - Value: 2 mg/l - Notes: ECHA
Target: Freshwater sediments - Value: 137 ug/l - Notes: ECHA
Target: Marine water sediments - Value: 13.7 ug/l - Notes: ECHA
Target: Soil (agricultural) - Value: 137 ug/l - Notes: ECHA
Target: Predators - Value: 33 mg/kg - Notes: ECHA

Decanal, NNI - CAS: 112-31-2
Target: Fresh Water - Value: 1.17 ug/l - Notes: ECHA
Target: Marine water - Value: 0.117 ug/l - Notes: ECHA
Target: Microorganisms in sewage treatments - Value: 3.16 mg/l - Notes: ECHA
Target: Freshwater sediments - Value: 97.2 ug/l - Notes: ECHA
Target: Marine water sediments - Value: 9.72 ug/l - Notes: ECHA
Target: Soil (agricultural) - Value: 18.7 ug/l - Notes: ECHA
Target: Predators - Value: 313 mg/kg - Notes: ECHA

Allyl cyclohexylpropionate, NNI - CAS: 2705-87-5
Target: Fresh Water - Value: 0.13 ug/l - Notes: ECHA
Target: Marine water - Value: 0.013 ug/l - Notes: ECHA
Target: Microorganisms in sewage treatments - Value: 0.200 mg/l - Notes: ECHA
Target: Freshwater sediments - Value: 24.13 ug/l - Notes: ECHA
Target: Marine water sediments - Value: 2.413 ug/l - Notes: ECHA
Target: Soil (agricultural) - Value: 4.75 ug/l - Notes: ECHA
Target: Predators - Value: 143 mg/kg - Notes: ECHA

Hexyl salicylate, NNI - CAS: 6259-76-3
Target: Fresh Water - Value: 357 ug/l - Notes: ECHA
Target: Marine water - Value: 35.7 ug/l - Notes: ECHA
Target: Microorganisms in sewage treatments - Value: 10 mg/l - Notes: ECHA
Target: Freshwater sediments - Value: 272 ug/l - Notes: ECHA
Target: Marine water sediments - Value: 27.2 ug/l - Notes: ECHA
Target: Soil (agricultural) - Value: 54.2 ug/l - Notes: ECHA

gamma-Undecalactone, NNI - CAS: 104-67-6
Target: Fresh Water - Value: 84 ug/l - Notes: ECHA
Target: Marine water - Value: 8.4 ug/l - Notes: ECHA
Target: Microorganisms in sewage treatments - Value: 80 mg/l - Notes: ECHA
Target: Freshwater sediments - Value: 5341 ug/l - Notes: ECHA
Target: Marine water sediments - Value: 534 ug/l - Notes: ECHA
Target: Soil (agricultural) - Value: 1019 ug/l - Notes: ECHA
Target: Predators - Value: 66.7 mg/kg - Notes: ECHA

Citrus Sinensis peel oil expressed (Brasil), PPAI - CAS: 8028-48-6
Target: Fresh Water - Value: 5.4 ug/l - Notes: ECHA
Target: Marine water - Value: 0.540 ug/l - Notes: ECHA
Target: Microorganisms in sewage treatments - Value: 2.1 mg/l - Notes: ECHA
Target: Freshwater sediments - Value: 1300 ug/l - Notes: ECHA
Target: Marine water sediments - Value: 130 ug/l - Notes: ECHA
Target: Soil (agricultural) - Value: 261 ug/l - Notes: ECHA

2,6-Dimethyl-7-octen-2-ol, NNI - CAS: 18479-58-8
Target: Fresh Water - Value: 27.8 ug/l - Notes: ECHA
Target: Marine water - Value: 2.78 ug/l - Notes: ECHA
Target: Microorganisms in sewage treatments - Value: 10 mg/l - Notes: ECHA
Target: Freshwater sediments - Value: 594 ug/l - Notes: ECHA
Target: Marine water sediments - Value: 59.4 ug/l - Notes: ECHA
Target: Soil (agricultural) - Value: 103 ug/l - Notes: ECHA
Target: Predators - Value: 111 mg/kg - Notes: ECHA

Methylundecanal, NNI - CAS: 110-41-8
Target: Fresh Water - Value: 0.660 ug/l - Notes: ECHA
Target: Marine water - Value: 0.066 ug/l - Notes: ECHA
Target: Microorganisms in sewage treatments - Value: 10 mg/l - Notes: ECHA
Target: Freshwater sediments - Value: 265 ug/l - Notes: ECHA
Target: Marine water sediments - Value: 26.5 ug/l - Notes: ECHA
Target: Soil (agricultural) - Value: 52.6 ug/l - Notes: ECHA
Target: Predators - Value: 116 mg/kg - Notes: ECHA

Lauraldehyde, NNI - CAS: 112-54-9

Target: Fresh Water - Value: 3.5 ug/l - Notes: ECHA
Target: Marine water - Value: 0.35 ug/l - Notes: ECHA
Target: Microorganisms in sewage treatments - Value: 10 mg/l - Notes: ECHA
Target: Freshwater sediments - Value: 1410 ug/l - Notes: ECHA
Target: Marine water sediments - Value: 141 ug/l - Notes: ECHA
Target: Soil (agricultural) - Value: 278 ug/l - Notes: ECHA
Target: Predators - Value: 313 mg/kg - Notes: ECHA

Dimethyl benzyl carbonyl acetate, NNI - CAS: 151-05-3
Target: Fresh Water - Value: 4.766 ug/l - Notes: ECHA
Target: Marine water - Value: 0.4766 ug/l - Notes: ECHA
Target: Microorganisms in sewage treatments - Value: 31.25 mg/l - Notes: ECHA
Target: Freshwater sediments - Value: 189 ug/l - Notes: ECHA
Target: Soil (agricultural) - Value: 103 ug/l - Notes: ECHA

Benzyl acetate - CAS: 140-11-4
Target: Fresh Water - Value: 18.4 ug/l - Notes: ECHA
Target: Marine water - Value: 1.84 ug/l - Notes: ECHA
Target: Microorganisms in sewage treatments - Value: 8.55 mg/l - Notes: ECHA
Target: Freshwater sediments - Value: 0.526 mg/kg - Notes: ECHA
Target: Marine water sediments - Value: 0.0526 mg/kg - Notes: ECHA
Target: Soil (agricultural) - Value: 0.09443 mg/kg - Notes: ECHA

Triethyl citrate (E1505), CPAI - CAS: 77-93-0
Target: Fresh Water ug/l - Notes: ECHA
Target: Marine water ug/l - Notes: ECHA
Target: Microorganisms in sewage treatments mg/l - Notes: ECHA
Target: Freshwater sediments - Value: 124 ug/l - Notes: ECHA
Target: Marine water sediments - Value: 18 ug/l - Notes: ECHA
Target: Soil (agricultural) - Value: 490 ug/l - Notes: ECHA
Target: Predators - Value: 222.22 mg/kg - Notes: ECHA

2,4-Dimethyl-3-cyclohexene carboxaldehyde, NNI - CAS: 68039-49-6
Target: Fresh Water - Value: 7.5 ug/l - Notes: ECHA
Target: Marine water - Value: 0.75 ug/l - Notes: ECHA
Target: Microorganisms in sewage treatments - Value: 10 mg/l - Notes: ECHA
Target: Freshwater sediments - Value: 10226 ug/l - Notes: ECHA
Target: Marine water sediments - Value: 22.6 ug/l - Notes: ECHA
Target: Soil (agricultural) - Value: 40.8 ug/l - Notes: ECHA

Cyclamen aldehyde, NNI - CAS: 103-95-7
Target: Fresh Water - Value: 1.09 ug/l - Notes: ECHA
Target: Marine water - Value: 0.109 ug/l - Notes: ECHA
Target: Microorganisms in sewage treatments - Value: 1 mg/l - Notes: ECHA
Target: Freshwater sediments - Value: 126 ug/l - Notes: ECHA
Target: Marine water sediments - Value: 12.6 ug/l - Notes: ECHA
Target: Soil (agricultural) - Value: 24.5 ug/l - Notes: ECHA
Target: Predators - Value: 33.3 mg/l - Notes: ECHA

Pentadecalactone, NNI - CAS: 106-02-5
Target: Fresh Water - Value: 2.7 ug/l - Notes: ECHA
Target: Marine water - Value: 0.270 ug/l - Notes: ECHA
Target: Microorganisms in sewage treatments - Value: 10 mg/l - Notes: ECHA
Target: Freshwater sediments - Value: 21000 ug/kg - Notes: ECHA
Target: Marine water sediments - Value: 4200 ug/kg - Notes: ECHA
Target: Soil (agricultural) - Value: 5440 ug/kg - Notes: ECHA

Terpineol, CPAI - CAS: 8000-41-7
Target: Fresh Water - Value: 12 ug/l - Notes: ECHA
Target: Marine water - Value: 1.2 ug/l - Notes: ECHA
Target: Microorganisms in sewage treatments - Value: 2.57 mg/l - Notes: ECHA
Target: Freshwater sediments - Value: 263 ug/l - Notes: ECHA
Target: Marine water sediments - Value: 26.3 ug/l - Notes: ECHA
Target: Soil (agricultural) - Value: 45.5 ug/l - Notes: ECHA
Target: Predators - Value: 16.6 mg/kg - Notes: ECHA

Methyl decenol, NNI - CAS: 81782-77-6
Target: Fresh Water ug/l - Notes: ECHA
Target: Marine water ug/l - Notes: ECHA

Target: Microorganisms in sewage treatments mg/l - Notes: ECHA

Target: Freshwater sediments ug/kg - Notes: ECHA

Target: Marine water sediments ug/kg - Notes: ECHA

Target: Soil (agricultural) ug/kg - Notes: ECHA

Reaction mass of cis-4-(Isopropyl) cyclohexanemethanol and trans-4-(Isopropyl) cyclohexanemethanol, NNI - CAS: 5502-75-0

Target: Fresh Water - Value: 4.4 ug/l - Notes: ECHA

Target: Marine water - Value: 0.44 ug/l - Notes: ECHA

Target: Microorganisms in sewage treatments - Value: 1.9 mg/l - Notes: ECHA

Target: Freshwater sediments - Value: 266 ug/l - Notes: ECHA

Target: Marine water sediments - Value: 26.6 ug/l - Notes: ECHA

Target: Soil (agricultural) - Value: 51 ug/l - Notes: ECHA

Coumarin* - CAS: 91-64-5

Target: Fresh Water - Value: 19 ug/l - Notes: ECHA

Target: Marine water - Value: 1.9 ug/l - Notes: ECHA

Target: Microorganisms in sewage treatments - Value: 6.4 mg/l - Notes: ECHA

Target: Freshwater sediments - Value: 150 ug/kg - Notes: ECHA

Target: Marine water sediments - Value: 15 ug/kg - Notes: ECHA

Target: Soil (agricultural) - Value: 18 ug/kg - Notes: ECHA

Target: Predators - Value: 30.7 mg/kg - Notes: ECHA

Mentha arvensis leaf oil (India), PPAI - CAS: 90063-97-1

Target: Fresh Water - Value: 5.4 ug/l - Notes: ECHA

Target: Marine water - Value: 0.54 ug/l - Notes: ECHA

Target: Microorganisms in sewage treatments - Value: 1.8 mg/l - Notes: ECHA

Target: Freshwater sediments - Value: 1300 ug/l - Notes: ECHA

Target: Marine water sediments - Value: 130 ug/l - Notes: ECHA

Target: Soil (agricultural) - Value: 290 ug/l - Notes: ECHA

8.2. Exposure controls

Eye protection:

Use close fitting safety visor or safety glasses (EN 166:2001).

Protection for skin:

Use normal clothing that provides protection to the skin, e.g. cotton.

Protection for hands:

Use clothing that provides comprehensive protection to the skin, e.g. lactice, nitrilic and ect.

Respiratory protection:

Not needed for normal use.

Use multi-purpose combination respirator cartridge (US), type ABEK (EN14387) respirator filter when use powder or cristals substances.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance:	clear liquid
Colour:	yellow
Odour:	flowery, fresh, aromatic, woody, , , , , , , ,
Relative density:	0.962 - 0.982 g/ml (25°C)
Refractive Index:	1.455 - 1.475 nD (25°C)
Solubility:	liposoluble (ethanol, oils and fats)
Flash point:	>61 °C
Melting point / freezing point:	N.A.
Initial boiling point and boiling range:	N.A.
Autoignition temperature:	N.A.

Solid/gas flammability:	N.A.
Explosive properties:	N.A.
Oxidizing properties:	N.A.
Vapour pressure:	N.A.
Partition coefficient (n-octanol/water):	N.A.
Vapour density:	N.A.
Viscosity:	N.A.
pH:	7.0 (+/- 0.5)
Alcoholic grade:	N.A.
Optical rotation:	N.A.

9.2. Other information

Nutritional values

Energy value:	37 kJ/g = 9 kcal/g		
Amino acids	0g	Monounsaturated fats	0g
Ash:	0g	Polyunsaturated fats	0g
Carbohydrates:	0g	Protein:	0g
Fats:	0g	Saturated fat:	0g
Fibers:	0g	Sugars:	0g
Lipids:	0g	Vitamins:	0mg
Minerals:	0mg	Water:	0g

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information of the product:

The toxicological data calculate based on the total formulation, taking into account the actual concentrations of the individual substances in order to assess toxicological effects resulting from exposure of human skin to the mix.

NOEL dermal (no observed effect level, human dermal): 1652 µg/cm²

Conversion info:

mg/kg=µg/cm² x 10/37 or 1µg/cm²=10mg/m²;

human: mg/kg x 37=mg/m²;

child: <20kg: mg/kg x 25=mg/m²

*Date based on HED (human equivalent dose) U.S. Food & Drug Administration. Estimating the Safe Starting Dose in Clinical Trials for Therapeutics in Adult Healthy Volunteers.

Toxicological information of the main substances found in the product:

4-tert-Butylcyclohexyl acetate, NNI - CAS: 32210-23-4

Oral toxicity acute (OECD Test Guideline 401) - LD50: 3370 mg/kg
 Repeated dose toxicity (OECD Test Guideline 407) - NOAEL: 980 mg/kg; LOAEL: n/a mg/kg
 Dermal toxicity - human (RIFM-Research Institute for Fragrance Materials or OECD Test Guideline 402):
 NOEL (no observed effect level): 5541 µg/cm²
 LOEL (lowest observed effect level): n/a µg/cm²
 NESIL (no expected sensitization induction level): n/a µg/cm²
 Skin corrosion/irritation (dermal)(HRIPT): not irritating
 Skin sensitization (HRIPT): sensitizing
 Eye: Irritation (ocular)(FHSA): non irritating
 Inhalation toxicity (OECD Test Guideline 403): n/a mg/m³
 Developmental NOAEL maternal: 160 mg/kg; NOAEL foetal: 160 mg/kg
 Reproductive Toxicity NOAEL: n/a mg/kg
 Genotoxicity (in vivo): negative. Genotoxicity (in vitro): negative

Tricyclodecyl propionate, NNI - CAS: 68912-13-0
 Oral toxicity acute (OECD Test Guideline 401) - LD50: >5000 mg/kg
 Repeated dose toxicity (OECD Test Guideline 407) - NOAEL: n.a. mg/kg; LOAEL: n.a. mg/kg
 Dermal toxicity - human (RIFM-Research Institute for Fragrance Materials or OECD Test Guideline 402):
 NOEL (no observed effect level): 10000 µg/cm²
 LOEL (lowest observed effect level): n.a. µg/cm²
 NESIL (no expected sensitization induction level): n.a. µg/cm²
 Skin corrosion/irritation (dermal)(HRIPT): irritating
 Skin sensitization (HRIPT): non sensitizing
 Eye: Irritation (ocular)(FHSA): non irritating
 Inhalation toxicity (OECD Test Guideline 403): LC50 n/a mg/m³
 Developmental NOAEL maternal: n.a. mg/kg; NOAEL foetal: n.a. mg/kg
 Reproductive Toxicity NOAEL: n.a. mg/kg
 Genotoxicity (in vivo): negative. Genotoxicity (in vitro): negative

2-tert-Butylcyclohexyl acetate, NNI - CAS: 20298-69-5
 Oral toxicity acute (OECD Test Guideline 401) - LD50: 4600 mg/kg
 Repeated dose toxicity (OECD Test Guideline 407) - NOAEL: 437 mg/kg; LOAEL: n.a. mg/kg
 Dermal toxicity - human (RIFM-Research Institute for Fragrance Materials or OECD Test Guideline 402):
 NOEL (no observed effect level): >6000 µg/cm²
 LOEL (lowest observed effect level): n.a. µg/cm²
 NESIL (no expected sensitization induction level): n.a. µg/cm²
 Skin corrosion/irritation (dermal)(HRIPT): not irritating
 Skin sensitization (HRIPT): non sensitizing
 Eye: Irritation (ocular)(FHSA): non irritating
 Inhalation toxicity (OECD Test Guideline 403): LC50 n/a mg/m³
 Developmental NOAEL maternal: 500 mg/kg; NOAEL foetal: 500 mg/kg
 Reproductive Toxicity NOAEL: 500 mg/kg
 Genotoxicity (in vivo): negative. Genotoxicity (in vitro): negative

Tetramethyl acetyloctahydronaphthalenes (OTNE), NNI - CAS: 54464-57-2
 Oral toxicity acute (OECD Test Guideline 401) - LD50: >5000. mg/kg
 Repeated dose toxicity (OECD Test Guideline 407) - NOAEL: 120 mg/kg; LOAEL: n.a. mg/kg
 Dermal toxicity - human (RIFM-Research Institute for Fragrance Materials or OECD Test Guideline 402):
 NOEL (no observed effect level): >6000 µg/cm²
 LOEL (lowest observed effect level): n.a. µg/cm²
 NESIL (no expected sensitization induction level): 47200 µg/cm²
 Skin corrosion/irritation (dermal)(HRIPT): irritating @45%
 Skin sensitization (HRIPT): sensitizing >6%
 Eye: Irritation (ocular)(FHSA): non irritating
 Inhalation toxicity (OECD Test Guideline 403): n.a. mg/m³
 Developmental NOAEL maternal: 240 mg/kg; NOAEL foetal: 480 mg/kg
 Reproductive Toxicity NOAEL: n.a. mg/kg
 Genotoxicity (in vivo): negative. Genotoxicity (in vitro): negative

Methyl beta-naphthyl ether, NNI - CAS: 93-04-9
 Oral toxicity acute (OECD Test Guideline 401) - LD50: >2000 mg/kg
 Repeated dose toxicity (OECD Test Guideline 407) - NOAEL: n.a. mg/kg; LOAEL: 250 mg/kg
 Dermal toxicity - human (RIFM-Research Institute for Fragrance Materials or OECD Test Guideline 407):
 NOEL (no observed effect level): 2960 µg/cm²
 LOEL (lowest observed effect level): n.a. µg/cm²

NESIL (no expected sensitization induction level): n.a. $\mu\text{g}/\text{cm}^2$
 Skin corrosion/irritation (dermal)(HRIPT): not irritating
 Skin sensitization (HRIPT): non sensitizing
 Eye: Irritation (ocular)(FHSA): irritating (cat. 2A)
 Inhalation toxicity (OECD Test Guideline 403): LC50 2.873 mg/m³
 Developmental NOAEL maternal: 10 mg/kg; NOAEL foetal: 50 mg/kg
 Reproductive Toxicity NOAEL: 500 mg/kg
 Genotoxicity (in vivo): negative. Genotoxicity (in vitro): negative

Diethyl phthalate, NNI - CAS: 84-66-2

Oral toxicity acute (OECD Test Guideline 401) - LD50: 8600 mg/kg
 Repeated dose toxicity (OECD Test Guideline 407) - NOAEL: 150 mg/kg; LOAEL: n/a mg/kg
 Dermal toxicity - human (RIFM-Research Institute for Fragrance Materials or OECD Test Guideline 407):
 NOEL (no observed effect level): 12434 $\mu\text{g}/\text{cm}^2$
 LOEL (lowest observed effect level): n/a $\mu\text{g}/\text{cm}^2$
 NESIL (no expected sensitization induction level): 1000 $\mu\text{g}/\text{cm}^2$
 Skin corrosion/irritation (dermal)(HRIPT): not irritating
 Skin sensitization (HRIPT): non sensitizing
 Eye: Irritation (ocular)(FHSA): irritating
 Inhalation toxicity (OECD Test Guideline 403): 511 mg/m³
 Developmental NOAEL maternal: <500 mg/kg; NOAEL foetal: 1600 mg/kg
 Reproductive Toxicity NOAEL: 15000 mg/kg
 Genotoxicity (in vivo): negative. Genotoxicity (in vitro): negative

Hexyl acetate, NNI - CAS: 142-92-7

Oral toxicity acute (OECD Test Guideline 401) - LD50: 41500 mg/kg
 Repeated dose toxicity (OECD Test Guideline 407) - NOAEL: n/a mg/kg; LOAEL: n/a mg/kg
 Dermal toxicity - human (RIFM-Research Institute for Fragrance Materials or OECD Test Guideline 402):
 NOEL (no observed effect level): >6000 $\mu\text{g}/\text{cm}^2$
 LOEL (lowest observed effect level): n/a $\mu\text{g}/\text{cm}^2$
 NESIL (no expected sensitization induction level): n/a $\mu\text{g}/\text{cm}^2$
 Skin corrosion/irritation (dermal)(HRIPT): not irritating
 Skin sensitization (HRIPT): non sensitizing
 Eye: Irritation (ocular)(FHSA): non irritating
 Inhalation toxicity (OECD Test Guideline 403): LC50 0.83 mg/m³
 Developmental NOAEL maternal: n/a mg/kg; NOAEL foetal: n/a mg/kg
 Reproductive Toxicity NOAEL: n/a mg/kg
 Genotoxicity (in vivo): negative. Genotoxicity (in vitro): negative

Decanal, NNI - CAS: 112-31-2

Oral toxicity acute (OECD Test Guideline 401) - LD50: 33320 mg/kg
 Repeated dose toxicity (OECD Test Guideline 407) - NOAEL: n.a. mg/kg; LOAEL: n.a. mg/kg
 Dermal toxicity - human (RIFM-Research Institute for Fragrance Materials or OECD Test Guideline 407):
 NOEL (no observed effect level): >6000 $\mu\text{g}/\text{cm}^2$
 LOEL (lowest observed effect level): n.a. $\mu\text{g}/\text{cm}^2$
 NESIL (no expected sensitization induction level): n.a. $\mu\text{g}/\text{cm}^2$
 Skin corrosion/irritation (dermal)(HRIPT): not irritating
 Skin sensitization (HRIPT): non sensitizing
 Eye: Irritation (ocular)(FHSA): irritating
 Inhalation toxicity (OECD Test Guideline 403): LC50 n/a mg/m³
 Developmental NOAEL maternal: n.a. mg/kg; NOAEL foetal: n.a. mg/kg
 Reproductive Toxicity NOAEL: 300. mg/kg
 Genotoxicity (in vivo): negative. Genotoxicity (in vitro): negative

Allyl cyclohexylpropionate, NNI - CAS: 2705-87-5

Oral Toxicity(LD50): Oral-Rat 585.00 mg/kg; Oral-Guineapig 380.00 mg/kg (Food and Cosmetics Toxicology. Vol. 2, Pg. 327, 1964).
 Dermal Toxicity(LD50): N.D.
 Inhalation Toxicity(LC50): N.D.

Hexyl salicylate, NNI - CAS: 6259-76-3

Oral toxicity acute (OECD Test Guideline 401) - LD50: >5000 mg/kg
 Repeated dose toxicity (OECD Test Guideline 407) - NOAEL: 50 mg/kg; LOAEL: n.a. mg/kg
 Dermal toxicity - human (RIFM-Research Institute for Fragrance Materials or OECD Test Guideline 402):
 NOEL (no observed effect level): 35433 $\mu\text{g}/\text{cm}^2$
 LOEL (lowest observed effect level): n.a. $\mu\text{g}/\text{cm}^2$
 NESIL (no expected sensitization induction level): 35400 $\mu\text{g}/\text{cm}^2$

Skin corrosion/irritation (dermal)(HRIPT): non irritant
 Skin sensitization (HRIPT): non sensitizing @ 30%
 Eye: Irritation (ocular)(FHSA): non irritant
 Inhalation toxicity (OECD Test Guideline 403): n.a. mg/m³
 Developmental NOAEL maternal: n.a. mg/kg; NOAEL foetal: n.a. mg/kg
 Reproductive Toxicity NOAEL: 250 mg/kg
 Genotoxicity (in vivo): negative. Genotoxicity (in vitro): negative

gamma-Undecalactone, NNI - CAS: 104-67-6
 Oral toxicity acute (OECD Test Guideline 401) - LD50: >2000 mg/kg
 Repeated dose toxicity (OECD Test Guideline 407) - NOAEL: 1000 mg/kg; LOAEL: n.a. mg/kg
 Dermal toxicity - human (RIFM-Research Institute for Fragrance Materials or OECD Test Guideline 402):
 NOEL (no observed effect level): 2400 µg/cm²
 LOEL (lowest observed effect level): n.a. µg/cm²
 NESIL (no expected sensitization induction level): n.a. µg/cm²
 Skin corrosion/irritation (dermal)(HRIPT): not irritating
 Skin sensitization (HRIPT): non sensitizing
 Eye: Irritation (ocular)(FHSA): non irritating
 Inhalation toxicity (OECD Test Guideline 403): LC50 n/a mg/m³
 Developmental NOAEL maternal: 1000 mg/kg; NOAEL foetal: 1000 mg/kg
 Reproductive Toxicity NOAEL: n.a. mg/kg
 Genotoxicity (in vivo): negative. Genotoxicity (in vitro): negative

Citrus Sinensis peel oil expressed (Brasil), PPAI - CAS: 8028-48-6
 Oral toxicity acute (OECD Test Guideline 401) - LD50: >5000 mg/kg
 Repeated dose toxicity (OECD Test Guideline 407) - NOAEL: 5 mg/kg; LOAEL: 30 mg/kg
 Dermal toxicity - human (RIFM-Research Institute for Fragrance Materials or OECD Test Guideline 402):
 NOEL (no observed effect level): 10600 µg/cm²
 LOEL (lowest observed effect level): n/a µg/cm²
 NESIL (no expected sensitization induction level): 10600 µg/cm²
 Skin corrosion/irritation (dermal)(HRIPT): irritating
 Skin sensitization (HRIPT): sensitizing @4%
 Eye: Irritation (ocular)(FHSA): not irritating
 Inhalation toxicity (OECD Test Guideline 403): LC50 n/a mg/m³
 Developmental NOAEL maternal: 591 mg/kg; NOAEL foetal: 591 mg/kg
 Reproductive Toxicity NOAEL: 1500 mg/kg
 Genotoxicity (in vivo): negative. Genotoxicity (in vitro): negative

2,6-Dimethyl-7-octen-2-ol, NNI - CAS: 18479-58-8
 Oral toxicity acute (OECD Test Guideline 401) - LD50: 3600 mg/kg
 Repeated dose toxicity (OECD Test Guideline 407) - NOAEL: 50 mg/kg; LOAEL: n.a. mg/kg
 Dermal toxicity - human (RIFM-Research Institute for Fragrance Materials or OECD Test Guideline 402):
 NOEL (no observed effect level): >6000 µg/cm²
 LOEL (lowest observed effect level): n.a. µg/cm²
 NESIL (no expected sensitization induction level): n.a. µg/cm²
 Skin corrosion/irritation (dermal)(HRIPT): irritating
 Skin sensitization (HRIPT): non sensitizing
 Eye: Irritation (ocular)(FHSA): moderately irritating
 Inhalation toxicity (OECD Test Guideline 403): n.a. mg/m³
 Developmental NOAEL maternal: 1000 mg/kg; NOAEL foetal: 1000 mg/kg
 Reproductive Toxicity NOAEL: n.a. mg/kg
 Genotoxicity (in vivo): negative. Genotoxicity (in vitro): negative

Methylundecanal, NNI - CAS: 110-41-8
 Oral toxicity acute (OECD Test Guideline 401) - LD50: >5000 mg/kg
 Repeated dose toxicity (OECD Test Guideline 407) - NOAEL: 2.0 mg/kg; LOAEL: n/a mg/kg
 Dermal toxicity - human (RIFM-Research Institute for Fragrance Materials or OECD Test Guideline 402):
 NOEL (no observed effect level): 10000 µg/cm²
 LOEL (lowest observed effect level): n/a µg/cm²
 NESIL (no expected sensitization induction level): n/a µg/cm²
 Skin corrosion/irritation (dermal)(HRIPT): irritating
 Skin sensitization (HRIPT): sensitizing
 Eye: Irritation (ocular)(FHSA): non irritating
 Inhalation toxicity (OECD Test Guideline 403): LC50 n/a mg/m³
 Developmental NOAEL maternal: n/a mg/kg; NOAEL foetal: n/a mg/kg

Reproductive Toxicity NOAEL: 300 mg/kg
 Genotoxicity (in vivo): negative. Genotoxicity (in vitro): negative

Dimethyl benzyl carbinyl acetate, NNI - CAS: 151-05-3
 Oral toxicity acute (OECD Test Guideline 401) - LD50: 3300 mg/kg
 Repeated dose toxicity (OECD Test Guideline 407) - NOAEL: 500 mg/kg; LOAEL: n/a mg/kg
 Dermal toxicity - human (RIFM-Research Institute for Fragrance Materials or OECD Test Guideline 402):
 NOEL (no observed effect level): >6000 µg/cm²
 LOEL (lowest observed effect level): n/a µg/cm²
 NESIL (no expected sensitization induction level): n/a µg/cm²
 Skin corrosion/irritation (dermal)(HRIPT): irritating
 Skin sensitization (HRIPT): non sensitizing
 Eye: Irritation (ocular)(FHSA): non irritating
 Inhalation toxicity (OECD Test Guideline 403): LC50 n/a mg/m³
 Developmental NOAEL maternal: n/a mg/kg; NOAEL foetal: n/a mg/kg
 Reproductive Toxicity NOAEL: n/a mg/kg
 Genotoxicity (in vivo): negative. Genotoxicity (in vitro): negative

Benzyl acetate - CAS: 140-11-4
 Oral toxicity acute (OECD Test Guideline 401) - LD50: 2000 mg/kg
 Repeated dose toxicity (OECD Test Guideline 407) - NOAEL: 250 mg/kg; LOAEL: n.a. mg/kg
 Dermal toxicity - human (RIFM-Research Institute for Fragrance Materials or OECD Test Guideline 407):
 NOEL (no observed effect level): >6000 µg/cm²
 LOEL (lowest observed effect level): n.a. µg/cm²
 NESIL (no expected sensitization induction level): n.a. µg/cm²
 Skin corrosion/irritation (dermal)(HRIPT): not irritating
 Skin sensitization (HRIPT): non sensitizing
 Eye: Irritation (ocular)(FHSA): non irritating
 Inhalation toxicity (OECD Test Guideline 403): LC50 766 mg/m³
 Developmental NOAEL maternal: 1000 mg/kg; NOAEL foetal: 500 mg/kg
 Reproductive Toxicity NOAEL: n.a. mg/kg
 Genotoxicity (in vivo): negative. Genotoxicity (in vitro): negative

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Dipropylene glycol, NNI - CAS: 25265-71-8

- a) Aquatic acute toxicity - Endpoint: LC50 - Species: Fish (Daphnia sp. Acute Immobilisation Test: OECD 202) 46.5 mg/l - Duration h: 96 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Daphnia (Daphnia sp. Acute Immobilisation Test: OECD 202) 100 mg/l - Duration h: 48 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Algae (Freshwater Alga&Cyanobacteria, Grow. Inhib.Test: OECD 201) 100 mg/l - Duration h: 72 - Notes: ECHA
- c) Bacteria toxicity - Endpoint: EC50 - Species: Microorganisms (Bacterial Reverse Mutation Test: OECD 471) 1000 mg/l - Duration h: 3 - Notes: ECHA

4-tert-Butylcyclohexyl acetate, NNI - CAS: 32210-23-4

- a) Aquatic acute toxicity - Endpoint: LC50 - Species: Fish (Daphnia sp. Acute Immobilisation Test: OECD 202) 8.6 mg/l - Duration h: 96 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Daphnia (Daphnia sp. Acute Immobilisation Test: OECD 202) 5.3 mg/l - Duration h: 48 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Algae (Freshwater Alga&Cyanobacteria, Grow. Inhib.Test: OECD 201) 22 mg/l - Duration h: 72 - Notes: ECHA
- c) Bacteria toxicity - Endpoint: EC50 - Species: Microorganisms (Bacterial Reverse Mutation Test: OECD 471) 302 mg/l - Duration h: 3 - Notes: ECHA

Tricyclodecyl propionate, NNI - CAS: 68912-13-0

- a) Aquatic acute toxicity - Endpoint: LC50 - Species: Fish (Daphnia sp. Acute Immobilisation Test: OECD 202) 6.7 mg/l - Duration h: 96 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Daphnia (Daphnia sp. Acute Immobilisation Test: OECD 202) 14 mg/l - Duration h: 48 - Notes: ECHA

- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Algae (Freshwater Alga&Cyanobacteria, Grow. Inhib.Test: OECD 201) 2.5 mg/l - Duration h: 72 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Microorganisms (Bacterial Reverse Mutation Test: OECD 471) 245 mg/l - Duration h: 3 - Notes: ECHA
- 2-tert-Butylcyclohexyl acetate, NNI - CAS: 20298-69-5
- a) Aquatic acute toxicity - Endpoint: LC50 - Species: Fish (Daphnia sp. Acute Immobilisation Test: OECD 202) 5.6 mg/l - Duration h: 96 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Daphnia (Daphnia sp. Acute Immobilisation Test: OECD 202) 17 mg/l - Duration h: 48 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Algae (Freshwater Alga&Cyanobacteria, Grow. Inhib.Test: OECD 201) 4.2 mg/l - Duration h: 72 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Microorganisms (Bacterial Reverse Mutation Test: OECD 471) 100 mg/l - Duration h: 3 - Notes: ECHA
- Diethyl phthalate, NNI - CAS: 84-66-2
- a) Aquatic acute toxicity - Endpoint: LC50 - Species: Fish (Daphnia sp. Acute Immobilisation Test: OECD 202) 12 mg/l - Duration h: 96 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Daphnia (Daphnia sp. Acute Immobilisation Test: OECD 202) 90 mg/l - Duration h: 42 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Algae (Freshwater Alga&Cyanobacteria, Grow. Inhib.Test: OECD 201) 45 mg/l - Duration h: 72 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Microorganisms (Bacterial Reverse Mutation Test: OECD 471) 20 mg/l - Duration h: 3 - Notes: ECHA
- Decanal, NNI - CAS: 112-31-2
- a) Aquatic acute toxicity - Endpoint: LC50 - Species: Fish (Daphnia sp. Acute Immobilisation Test: OECD 202) 1.45 mg/l - Duration h: 96 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Algae (Freshwater Alga&Cyanobacteria, Grow. Inhib.Test: OECD 201) 1.17 mg/l - Duration h: 72 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Daphnia (Daphnia sp. Acute Immobilisation Test: OECD 202) 4.5 mg/l - Duration h: 48 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Microorganisms (Bacterial Reverse Mutation Test: OECD 471) 70 mg/l - Duration h: 3 - Notes: ECHA
- Allyl cyclohexylpropionate, NNI - CAS: 2705-87-5
- a) Aquatic acute toxicity - Endpoint: LC50 - Species: Fish (Daphnia sp. Acute Immobilisation Test: OECD 202) 0.130 mg/l - Duration h: 96 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Daphnia (Daphnia sp. Acute Immobilisation Test: OECD 202) 3.8 mg/l - Duration h: 48 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Algae (Freshwater Alga&Cyanobacteria, Grow. Inhib.Test: OECD 201) 3 mg/l - Duration h: 72 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Microorganisms (Bacterial Reverse Mutation Test: OECD 471) 2 mg/l - Duration h: 3 - Notes: ECHA
- Hexyl salicylate, NNI - CAS: 6259-76-3
- a) Aquatic acute toxicity - Endpoint: LC50 - Species: Fish (Daphnia sp. Acute Immobilisation Test: OECD 202) 1.34 mg/l - Duration h: 96 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Daphnia (Daphnia sp. Acute Immobilisation Test: OECD 202) 0.357 mg/l - Duration h: 48 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Algae (Freshwater Alga&Cyanobacteria, Grow. Inhib.Test: OECD 201) 0.610 mg/l - Duration h: 72 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Microorganisms (Bacterial Reverse Mutation Test: OECD 471) 100 mg/l - Duration h: 3 - Notes: ECHA
- gamma-Undecalactone, NNI - CAS: 104-67-6
- a) Aquatic acute toxicity - Endpoint: LC50 - Species: Fish (Daphnia sp. Acute Immobilisation Test: OECD 202) 6.13 mg/l - Duration h: 96 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Algae (Freshwater Alga&Cyanobacteria, Grow. Inhib.Test: OECD 201) 5.85 mg/l - Duration h: 72 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Daphnia (Daphnia sp. Acute Immobilisation Test: OECD 202) 7.218 mg/l - Duration h: 48 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Microorganisms (Bacterial Reverse Mutation Test: OECD 471) 800 mg/l - Duration h: 3 - Notes: ECHA
- Citrus Sinensis peel oil expressed (Brasil), PPAI - CAS: 8028-48-6
- a) Aquatic acute toxicity - Endpoint: LC50 - Species: Fish (Daphnia sp. Acute Immobilisation Test: OECD 202) 5.61 mg/l - Duration h: 96 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Daphnia (Daphnia sp. Acute Immobilisation Test: OECD 202) 1.1 mg/l - Duration h: 48 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Algae (Freshwater Alga&Cyanobacteria, Grow. Inhib.Test: OECD 201) 4.3 mg/l - Duration h: 72 - Notes: ECHA
- 2,6-Dimethyl-7-octen-2-ol, NNI - CAS: 18479-58-8
- a) Aquatic acute toxicity - Endpoint: LC50 - Species: Fish (Daphnia sp. Acute Immobilisation Test: OECD 202) 27.8 mg/l - Duration h: 96 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Daphnia (Daphnia sp. Acute Immobilisation Test: OECD 202) 38 mg/l - Duration h: 48 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Algae (Freshwater Alga&Cyanobacteria, Grow. Inhib.Test: OECD 201) 80 mg/l - Duration h: 72 - Notes: ECHA
- c) Bacteria toxicity - Endpoint: EC50 - Species: Microorganisms (Bacterial Reverse Mutation Test: OECD 471) 100 mg/l - Duration h: 3 - Notes: ECHA
- Methylundecanal, NNI - CAS: 110-41-8
- a) Aquatic acute toxicity - Endpoint: LC50 - Species: Fish (Daphnia sp. Acute Immobilisation Test: OECD 202) 0.350 mg/l - Duration h: 96 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Daphnia (Daphnia sp. Acute Immobilisation Test: OECD 202) 0.210 mg/l - Duration h: 48 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Algae (Freshwater Alga&Cyanobacteria, Grow. Inhib.Test: OECD 201) 0.180 mg/l - Duration h: 72 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Microorganisms (Bacterial Reverse Mutation Test: OECD 471) 100 mg/l - Duration h: 3 - Notes: ECHA
- Lauraldehyde, NNI - CAS: 112-54-9
- a) Aquatic acute toxicity - Endpoint: LC50 - Species: Fish (Daphnia sp. Acute Immobilisation Test: OECD 202) 2.6 mg/l - Duration h: 96 - Notes: ECHA

- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Algae (Freshwater Alga&Cyanobacteria, Grow. Inhib.Test: OECD 201) 270 mg/l - Duration h: 72 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Daphnia (Daphnia sp. Acute Immobilisation Test: OECD 202) 48 mg/l - Duration h: 48 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Microorganisms (Bacterial Reverse Mutation Test: OECD 471) 16 mg/l - Duration h: 3 - Notes: ECHA
- Dimethyl benzyl carbinyl acetate, NNI - CAS: 151-05-3
- a) Aquatic acute toxicity - Endpoint: LC50 - Species: Fish (Daphnia sp. Acute Immobilisation Test: OECD 202) 8.901 mg/l - Duration h: 96 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Daphnia (Daphnia sp. Acute Immobilisation Test: OECD 202) 15.4 mg/l - Duration h: 48 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Microorganisms (Bacterial Reverse Mutation Test: OECD 471) 637 mg/l - Duration h: 3 - Notes: ECHA
- Benzyl acetate - CAS: 140-11-4
- a) Aquatic acute toxicity - Endpoint: LC50 - Species: Fish (Daphnia sp. Acute Immobilisation Test: OECD 202) 4 mg/l - Duration h: 96 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Daphnia (Daphnia sp. Acute Immobilisation Test: OECD 202) 17 mg/l - Duration h: 48 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Algae (Freshwater Alga&Cyanobacteria, Grow. Inhib.Test: OECD 201) 92 mg/l - Duration h: 72 - Notes: ECHA
- c) Bacteria toxicity - Endpoint: EC50 - Species: Microorganisms (Bacterial Reverse Mutation Test: OECD 471) 855 mg/l - Duration h: 3 - Notes: ECHA
- Triethyl citrate (E1505), CPAI - CAS: 77-93-0
- a) Aquatic acute toxicity - Endpoint: LC50 - Species: Fish (Daphnia sp. Acute Immobilisation Test: OECD 202) 112.02 mg/l - Duration h: 96 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Daphnia (Daphnia sp. Acute Immobilisation Test: OECD 202) 100 mg/l - Duration h: 48 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Algae (Freshwater Alga&Cyanobacteria, Grow. Inhib.Test: OECD 201) 100 mg/l - Duration h: 72 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Microorganisms (Bacterial Reverse Mutation Test: OECD 471) 5.48 mg/l - Duration h: 3 - Notes: ECHA
- 2,4-Dimethyl-3-cyclohexene carboxaldehyde, NNI - CAS: 68039-49-6
- a) Aquatic acute toxicity - Endpoint: LC50 - Species: Fish (Daphnia sp. Acute Immobilisation Test: OECD 202) 7.5 mg/l - Duration h: 96 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Daphnia (Daphnia sp. Acute Immobilisation Test: OECD 202) 22.4 mg/l - Duration h: 48 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Algae (Freshwater Alga&Cyanobacteria, Grow. Inhib.Test: OECD 201) 28 mg/l - Duration h: 72 - Notes: ECHA
- Cyclamen aldehyde, NNI - CAS: 103-95-7
- a) Aquatic acute toxicity - Endpoint: LC50 - Species: Fish (Daphnia sp. Acute Immobilisation Test: OECD 202) 1.092 mg/l - Duration h: 96 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Daphnia (Daphnia sp. Acute Immobilisation Test: OECD 202) 1.4 mg/l - Duration h: 48 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Algae (Freshwater Alga&Cyanobacteria, Grow. Inhib.Test: OECD 201) 3.8 mg/l - Duration h: 72 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Algae (Freshwater Alga&Cyanobacteria, Grow. Inhib.Test: OECD 201) 100 mg/l - Duration h: 3 - Notes: ECHA
- trans-Rose ketone-2, NNI - CAS: 23726-91-2
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Daphnia (Daphnia sp. Acute Immobilisation Test: OECD 202) 9.5 mg/l - Duration h: 48 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Algae (Freshwater Alga&Cyanobacteria, Grow. Inhib.Test: OECD 201) 8.8 mg/l - Duration h: 72 - Notes: ECHA
- Pentadecalactone, NNI - CAS: 106-02-5
- a) Aquatic acute toxicity - Endpoint: LC50 - Species: Fish (Daphnia sp. Acute Immobilisation Test: OECD 202) 797 mg/l - Duration h: 96 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Daphnia (Daphnia sp. Acute Immobilisation Test: OECD 202) 170 mg/l - Duration h: 48 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Algae (Freshwater Alga&Cyanobacteria, Grow. Inhib.Test: OECD 201) 400 mg/l - Duration h: 72 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Microorganisms (Bacterial Reverse Mutation Test: OECD 471) 100 mg/l - Duration h: 3 - Notes: ECHA
- Terpineol, CPAI - CAS: 8000-41-7
- a) Aquatic acute toxicity - Endpoint: LC50 - Species: Fish (Daphnia sp. Acute Immobilisation Test: OECD 202) 12 mg/l - Duration h: 96 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Daphnia (Daphnia sp. Acute Immobilisation Test: OECD 202) 12 mg/l - Duration h: 42 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Algae (Freshwater Alga&Cyanobacteria, Grow. Inhib.Test: OECD 201) 17 mg/l - Duration h: 72 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Microorganisms (Bacterial Reverse Mutation Test: OECD 471) 499 mg/l - Duration h: 3 - Notes: ECHA
- Methyl decenol, NNI - CAS: 81782-77-6
- a) Aquatic acute toxicity - Endpoint: LC50 - Species: Fish (Daphnia sp. Acute Immobilisation Test: OECD 202) N.A. mg/l - Duration h: 96 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Daphnia (Daphnia sp. Acute Immobilisation Test: OECD 202) N.A. mg/l - Duration h: 48 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Algae (Freshwater Alga&Cyanobacteria, Grow. Inhib.Test: OECD 201) N.A. mg/l - Duration h: 72 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Microorganisms (Bacterial Reverse Mutation Test: OECD 471) N.A. mg/l - Duration h: 3 - Notes: ECHA
- Reaction mass of cis-4-(Isopropyl) cyclohexanemethanol and trans-4-(Isopropyl) cyclohexanemethanol, NNI - CAS: 5502-75-0
- a) Aquatic acute toxicity - Endpoint: LC50 - Species: Fish (Daphnia sp. Acute Immobilisation Test: OECD 202) 4.2 mg/l - Duration h: 96 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Daphnia (Daphnia sp. Acute Immobilisation Test: OECD 202) 13 mg/l - Duration h: 48 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Algae (Freshwater Alga&Cyanobacteria, Grow. Inhib.Test: OECD 201) 10 mg/l - Duration h: 72 - Notes: ECHA
- a) Aquatic acute toxicity - Endpoint: EC50 - Species: Microorganisms (Bacterial Reverse Mutation Test: OECD 471) 190 mg/l - Duration h: 3 - Notes: ECHA
- Coumarin* - CAS: 91-64-5

- a) Aquatic acute toxicity - Endpoint: LC50 - Species: Fish (Daphnia sp. Acute Immobilisation Test: OECD 202) 1.329 mg/l - Duration h: 96 - Notes: ECHA
 - a) Aquatic acute toxicity - Endpoint: EC50 - Species: Daphnia (Daphnia sp. Acute Immobilisation Test: OECD 202) 24.3 mg/l - Duration h: 48 - Notes: ECHA
 - a) Aquatic acute toxicity - Endpoint: EC50 - Species: Algae (Freshwater Alga&Cyanobacteria, Grow. Inhib.Test: OECD 201) 1.452 mg/l - Duration h: 72 - Notes: ECHA
 - c) Bacteria toxicity - Endpoint: EC50 - Species: Microorganisms (Bacterial Reverse Mutation Test: OECD 471) 640 mg/l - Duration h: 3 - Notes: ECHA
- Mentha arvensis leaf oil (India), PPAI - CAS: 90063-97-1
- a) Aquatic acute toxicity - Endpoint: LC50 - Species: Fish (Daphnia sp. Acute Immobilisation Test: OECD 202) 3.01 mg/l - Duration h: 96 - Notes: ECHA
 - a) Aquatic acute toxicity - Endpoint: EC50 - Species: Daphnia (Daphnia sp. Acute Immobilisation Test: OECD 202) 2.43 mg/l - Duration h: 48 - Notes: ECHA
 - a) Aquatic acute toxicity - Endpoint: EC50 - Species: Algae (Freshwater Alga&Cyanobacteria, Grow. Inhib.Test: OECD 201) 2.63 mg/l - Duration h: 72 - Notes: ECHA

12.2. Persistence and degradability

According to theoretical calculations based on QSAR (Quantitative Structure Assessment Relationships) the biodegradability of concentrate products is >60% / 28d. The products is INHERENTLY BIODEGRADABLE. The biodegradability increases if the product is diluted.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

12.7. German Water Hazard Class.

WGK 2: hazard to waters

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

Avoid release to the environment.

CER code:

- 070608 - "other still bottoms and reaction residues"

Properties of wastes of wastes which render them hazardous:

- HP4 - "Irritant" non-corrosive substances and preparations which, through immediate, prolonged or | | repeated contact with the skin or mucous membrane, can cause inflammation.
 - HP5 "Harmful": substances and preparations which, if they are inhaled or ingested or if they penetrate | | the skin, may involve limited health risks.
-

14. TRANSPORT INFORMATION

14.1 UN Number:

N° ONU: UN3082 - Environmentally hazardous substance, liquid, n.o.s.

14.2 UN proper shipping name:

Name ONU: Tetramethyl acetyloctahydronapthalenes

14.3 Indications for ADR transport:

ADR - Classe:	9-M6
ADR - Label:	9
ADR - Packing Group:	III
ADR - Gallery code:	(-)

14.4 Indications for IATA transport:

IATA - Class:	9-M6
IATA - Passenger Aircraft:	914
IATA - Cargo Aircraft:	914
IATA - Label:	9
IATA - Packing group:	III

14.5 Indications for IMO transport:

IMO - Class:	9-M6
IMO - EmS:	F-A, S-F
IMO - Label:	9
IMO - Packing group:	III

14.6 Special pre-orders for users

None

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

The substance / mixture is not intended to be transported in bulk, IBC code not required.

SECTION 15: REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) 2020/878

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Regulation (EU) n. 2020/217 (ATP 14 CLP)

Regulation (EU) n. 2020/1182 (ATP 15 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3

Restriction 40

Restrictions related to the substances contained:

Restriction 75

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

Product belongs to category: E2

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: OTHER INFORMATION

Full text of phrases referred to in Section 3:

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H336 May cause drowsiness or dizziness.

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H331 Toxic if inhaled.

Hazard class and hazard category	Code	Description
Flam. Liq. 3	2.6/3	Flammable liquid, Category 3
Acute Tox. 3	3.1/3/Dermal	Acute toxicity (dermal), Category 3
Acute Tox. 3	3.1/3/Inhal	Acute toxicity (inhalation), Category 3
Acute Tox. 3	3.1/3/Oral	Acute toxicity (oral), Category 3
Acute Tox. 4	3.1/4/Dermal	Acute toxicity (dermal), Category 4
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Asp. Tox. 1	3.10/1	Aspiration hazard, Category 1
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Irrit. 2	3.3/2	Eye irritation, Category 2

Skin Sens. 1	3.4.2/1	Skin Sensitisation, Category 1
Skin Sens. 1B	3.4.2/1B	Skin Sensitisation, Category 1B
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2
Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3

Paragraphs modified from the previous revision: 1; 2; 3;14

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
Skin Sens. 1B, H317	Calculation method
Aquatic Chronic 2, H411	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ACRONIMEX

ADN: Accord européen relative au transport international des marchandises dangereuses par voies de navigation intérieures (accordo europeo relativo al trasporto internazionale delle merci pericolose per vie navigabili interne)

ADR: Accord européen relative au transport international des marchandises dangereuses par route (accordo europeo relativo al trasporto internazionale delle merci pericolose su strada)

BCF: BioConcentration Factor (Fattore di BioConcentrazione)

C&L: Classification and Labelling (Classificazione ed Etichettatura)

CAS- EINECS: European CAS number only for vegetal products

CAS: Chemical Abstracts Service

Chemicals Agency (Agenzia Europea delle Sostanze Chimiche)

CITES: The Convention on International Trade in Endangered Species of Wild Fauna and Flora

CLP: Classification, Labelling and Packaging (Classificazione, Etichettatura e Imballaggio) CMR: Carcinogenic, Mutagenic Reprotoxic (Cancerogenico–Mutagenico–Reprotossico)

COSING: European Commission database for information on cosmetic substances and ingredients

CSA: Chemical Safety Assessment (Valutazione del Rischio Chimico)

CSR: Chemical Safety Report (Relazione sulla Sicurezza Chimica)

DNEL: Derived no effect level (Livello derivato senza effetto)

EC Numbers: European Community number (replace the outmoded "EINECS/ELINCS number")

EFFA: European Flavour and Fragrance Association

EINECS: European Inventory of Existing Commercial Chemical Substances (Registro Europeo delle Sostanze chimiche in Commercio)

ELINCS: European List of Notified Chemical Substances

EMA: The European Agency for the Evaluation of Medicinal Products

GefStoffVO: Gefahrstoffverordnung (Ordinanza sulle sostanze pericolose in Germania)

GHS: Globally Harmonised System (Sistema Globale Armonizzato)

IATA: International Air Transport Association (Associazione Internazionale del Trasporto Aereo)

IATA-DGR: IATA Dangerous Goods Regulations (Regolamento sulle merci pericolose della IATA)

ICAO: International Civil Aviation Organization (Organizzazione Internazionale dell'Aviazione Civile)

ICAO-TI: International Civil Aviation Organization - Technical Instructions for the Safe Transport of Dangerous Goods by Air (Istruzioni tecniche della "Organizzazione internazionale per l'aviazione civile" (ICAO)

IFRA: The International Fragrance Association

IMDG: International Maritime Dangerous Goods code (Codice sul Regolamento del Trasporto Marittimo)

IOFI: International Organization of the Flavor Industry

ISS: Istituto Superiore di Sanità

KSt: Explosion Constant (explosion risk), coefficiente d'esplosione.

LC50: Lethal Concentration 50 (concentration in water having 50% chance of causing death to aquatic life), (concentrazione letale per il 50 per cento della popolazione di test)

LD50: Lethal Dose 50 (median concentration of a toxicant that will kill 50% of the test animals within a designated period), (dose letale per il 50 per cento della popolazione di test)

LOAEL: Lowest Observed Adverse Effect Level (La più piccola dose senza effetto avverso osservabile)

LOEL: Lowest Observed Effect Level (La più bassa dose al quale si riscontra un effetto biologico)

Log Kow: Partition coefficient (Coefficiente di ripartizione ottanolo – acqua)

MOAEL: Maximum Observed adverse effect level (Dose massima alla quale tutti i soggetti manifestano un determinato effetto)

MSDS- Material Safety Data Sheet (SDS Scheda di Sicurezza)

NLP: No-Longer Polymers

NOAEL: No Observed Adverse Effect Level (Dose senza effetto avverso osservabile)

NOEL: No Observed Effect Level (Dose priva di qualsiasi effetto biologico)

OR: Only Representative (Rappresentante Esclusivo)

PBT: Persistent, bioaccumulative and toxic (sostanze persistenti bioaccumulabili e tossiche)

Ph. Eur.: European Pharmacopoeia

PNEC: Predicted no effect concentration (Concentrazione prevedibile priva di effetti)

REACH: Registration Evaluation Authorisation and Restriction of Chemicals

RID: Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regolamento concernente il trasporto internazionale di merci pericolose per ferrovia)

STA: Stima della tossicità acuta

STAmix: Stima della tossicità acuta (Miscela)

STEL: Short Term Exposure Limit (Limite d'esposizione a corto termine)

STOT: Specific Target Organ Toxicity (Tossicità organo-specifica)

TLV-STEL: Threshold Limit Value - Short-Term Exposure Limit (valore massimo consentito per esposizioni brevi)

TLV-TWA: Threshold Limit Values - Time Weighted Average (Valore limite di soglia media ponderata nel tempo)

WGK: Wassergefährdungsklasse (Classe di pericolo per le acque (Germania))