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

1.1. Product identifier

Product code : Hygienfresh Sfere Profumanti - Fior di Cotone
Trades code : A80-045
Product line: Hygienfresh

UFI: T6D1-J029-T00J-D4QC

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

Perfumed pearl for electric dryer
Sectors of use:
Private households (= general public = consumers)[SU21], Public domain (administration, education, entertainment, services, craftsmen)[SU22]

Uses advised against
Do not use for purposes other than those listed

1.3. Details of the supplier of the safety data sheet

Tintolav s.r.l. - Via M. D' Antona 7 - 10028 Trofarello (TO) Tel. 011/649.68.27 Fax 011/649.67.42

Email: info@tintolav.com - Sito internet: www.tintolav.com

Email tecnico competente: a.conedera@tintolav.com

National contact: Malta: Emergency Ambulance 112
Accident & Emergency Department 2545 4030

1.4. Emergency telephone number

The UK National Poisons Emergency number +44 (0)870 600 6266
London: Emergency 24 hour telephone +44 (0) 207188 0100

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008:

Pictograms:
GHS07, GHS09

Hazard Class and Category Code(s):
Skin Irrit. 2, Skin Sens. 1A, Eye Irrit. 2, Aquatic Chronic 2

Hazard statement Code(s):
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H411 - Toxic to aquatic life with long lasting effects.

If brought into contact with eyes, the product causes significant irritations which may last for more than 24 hours, if brought into contact with skin, it causes significant inflammation with erythema, scabs, or edema
The product, if brought into contact with skin can cause skin sensitization.
The product is dangerous to the environment as it is toxic to aquatic life with long lasting effects

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008:

Pictogram, Signal Word Code(s):
GHS07, GHS09 - Warning

Hazard statement Code(s):
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H411 - Toxic to aquatic life with long lasting effects.

Supplemental Hazard statement Code(s):
not applicable

Precautionary statements:
General
P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
Prevention
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
Response
P302+P352 - IF ON SKIN: Wash with plenty of water and soap.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
Disposal
P501 - Dispose of contents / container in accordance with local and national regulations.

Contains:
Parfum, Hexyl cinnamal, 4-tert-butylcyclohexyl acetate, Limonene, cis 3-hexenyl salicylate, Hexyl salicylate, Vanillin, Linalyl acetate, Tetrahydrolinalool, Linalool, Alpha isomethyl ionone, (3E)-3,4,5,6,6-pentamethylhept-3-en-2-one; (3R,5R)-3,5,6,6-tetramethyl-4-methylideneheptan-2-one; (3R,5S)-3,5,6,6-tetramethyl-4-methylideneheptan-2-on, Nopyl acetate, Diidroterpinile acetato, Neryl acetate, Citronellol, Geranyl acetate, Lauraldehyde, Isoeugenol.

Content of VOC ready to use condition: 20,41 %

UFI: T6D1-J029-T00J-D4QC

2.3. Other hazards

The substance / mixture NOT contains substances PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII

No information on other hazards

SECTION 3. Composition/information on ingredients

3.1 Substances

Irrilevant

3.2 Mixtures

Refer to paragraph 16 for full text of hazard statements

Note C - Some organic substances may be marketed either in a specific isomeric form or as a mixture of several

isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACh
α-Hexylcinnamaldehyde	>= 5 < 15%	Skin Sens. 1, H317; Aquatic Chronic 2, H411 ATE oral = 2.450,0 mg/kg	ND	101-86-0	202-983-3	01-2119533092-50
Hydrocarbons, C4, 1,3-butadiene-free, polymd., triisobutylene fraction, hydrogenated	>= 5 < 15%	Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 4, H413 1 1 ATE oral = 5.000,0 mg/kg ATE dermal = 2.000,0 mg/kg ATE inhal = 4.951,0mg/l/4 h	ND	93685-81-5	297-629-8	01-2119490725-29
dipentene Note: C	>= 5 < 15%	Flam. Liq. 3, H226; Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 1 ATE oral = 4.400,0 mg/kg ATE dermal = 5.000,0 mg/kg	601-029-00-7	5989-27-5	205-341-0	01-2119529223-47-0001
4-tert-Butylcyclohexyl acetate - FEMA 0	>= 1 < 5%	Skin Sens. 1B, H317; Aquatic Chronic 2, H411 1 1 ATE oral = 5.000,0 mg/kg ATE dermal = 5.000,0 mg/kg	ND	32210-23-4	250-954-9	01-2119976286-24
spiro[1,3-dioxolane-2,5'-(4',4',8',8'-tetramethyl-hexahydro-3',9'-methanonaphthalene)]	>= 1 < 5%	Aquatic Chronic 2, H411 1 1	606-069-00-9	154171-76-3	415-460-1	01-0000016239-67-0000
2,6-dimethyloct-7-en-2-ol - FEMA 0	>= 1 < 5%	Skin Irrit. 2, H315; Eye Irrit. 2, H319 ATE oral = 3.600,0 mg/kg ATE dermal = 5.000,0 mg/kg	ND	18479-58-8	242-362-4	01-2119457274-37
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran	>= 1 < 5%	Aquatic Acute 1, H400; Aquatic Chronic 1, H410 ATE oral = 3.250,0 mg/kg ATE dermal = 3.250,0 mg/kg	603-212-00-7	1222-05-5	214-946-9	01-2119488227-29-0000
3,5,5-Trimethylhexyl acetate - FEMA 0	>= 1 < 5%	Skin Irrit. 2, H315; Aquatic Chronic 2, H411 1 1	ND	58430-94-7	261-245-9	NR

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACh
		ATE oral = 4.250,0 mg/kg ATE dermal = 5.000,0 mg/kg				
benzyl acetate - FEMA 2135	>= 1 < 5%	Aquatic Chronic 3, H412 1 1 ATE oral = 2.490,0 mg/kg ATE dermal = 5.000,0 mg/kg ATE inhal = 245,0mg/l/4 h	ND	140-11-4	205-399-7	01-2119638272-42
2,6-di-tert-butyl-p-cresol - FEMA 2184	>= 1 < 5%	Aquatic Acute 1, H400; Aquatic Chronic 1, H410 1 1 ATE oral = 1.700,0 mg/kg ATE dermal = 8.000,0 mg/kg	ND	128-37-0	204-881-4	01-2119565113-46
(Z)-hex-3-enyl salicylate	>= 1 < 5%	Skin Sens. 1, H317; Aquatic Chronic 1, H410 ATE oral = 5.000,0 mg/kg ATE dermal = 5.000,0 mg/kg	ND	65405-77-8	265-745-8	NR
3-ethoxy-4-hydroxybenzaldehyde - FEMA 2464	>= 1 < 5%	Eye Irrit. 2, H319; Aquatic Chronic 2, H411 1 1 ATE oral = 3.160,0 mg/kg ATE dermal = 2.000,0 mg/kg	ND	121-32-4	204-464-7	NR
Hexyl salicylate - FEMA 0	>= 1 < 5%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Irrit. 2, H319; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 1 1 ATE oral = 5.000,0 mg/kg ATE dermal = 5.000,0 mg/kg	ND	6259-76-3	228-408-6	01-2119638275-36-0002
Linalool	>= 1 < 5%	Skin Irrit. 2, H315; Skin Sens. 1B, H317; Eye Irrit. 2, H319 ATE oral = 2.790,0 mg/kg ATE dermal = 5.610,0 mg/kg ATE inhal = 307,0mg/l/4 h	603-235-00-2	78-70-6	201-134-4	01-2119474016-42-0000
Reaction mass of 2-methylbutyl salicylate and pentyl salicylate	>= 1 < 5%	Acute Tox. 4, H302; Aquatic Acute 1, H400; Aquatic	ND	ND	911-280-7	01-2119969444-27-0002

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACh
		Chronic 1, H410 1 1 ATE oral = 2.000,0 mg/kg				
Vanillin - FEMA 3107	>= 1 < 5%	Skin Sens. 1, H317; Eye Irrit. 2, H319 ATE oral = 2.000,0 mg/kg ATE dermal = 5.010,0 mg/kg	ND	121-33-5	204-465-2	NR
Patchouli Oil	>= 1 < 5%	Asp. Tox. 1, H304; Aquatic Chronic 2, H411 1 1	ND	ND	939-227-3	01-2120766170-60-xxxx
Terpineol, acetate	>= 1 < 5%	Aquatic Chronic 2, H411 1 1 ATE oral = 5.075,0 mg/kg	ND	8007-35-0	232-357-5	NR
Linalyl acetate - FEMA 2636	>= 1 < 5%	Skin Irrit. 2, H315; Skin Sens. 1B, H317; Eye Irrit. 2, H319; Aquatic Chronic 2, H411 1 1 ATE oral = 14.550,0 mg/kg ATE dermal = 13.360,0 mg/kg	ND	115-95-7	204-116-4	01-2119454789-19-0000
Dimethyl benzyl carbinyl acetate (alpha,alpha-Dimethylphenethyl acetate) - FEMA 2392	>= 1 < 5%	Aquatic Chronic 3, H412 1 1	ND	151-05-3	205-781-3	NR
3,7-dimethyloctan-3-ol - FEMA 3060	>= 1 < 5%	Skin Irrit. 2, H315; Skin Sens. 1B, H317; Eye Irrit. 2, H319 ATE oral = 5.000,0 mg/kg ATE dermal = 4.500,0 mg/kg ATE inhal = 0,9mg/l/4 h	ND	78-69-3	201-133-9	01-2119638275-36
(3E)-3,4,5,6,6-pentamethylhept-3-en-2-one; (3R,5R)-3,5,6,6-tetramethyl-4-methylideneheptan-2-one; (3R,5S)-3,5,6,6-tetramethyl-4-methylideneheptan-2-one	>= 0,1 < 1%	Skin Sens. 1B, H317; Aquatic Chronic 2, H411 1 1	ND	ND	939-627-8	01-2119980043-42-0000
Citronellol	>= 0,1 < 1%	Skin Irrit. 2, H315; Skin Sens. 1B, H317; Eye Irrit. 2, H319; STOT SE 3, H335 ATE oral = 3.450,0 mg/kg ATE dermal = 2.650,0 mg/kg ATE inhal = 1,3mg/l/4 h	ND	106-22-9	203-375-0	01-2119453995-23-0000
Nopyl acetate - FEMA 0	>= 0,1 < 1%	Skin Sens. 1B, H317;	ND	128-51-8	204-891-9	01-211998

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACh
		Eye Irrit. 2, H319; Aquatic Chronic 2, H411 1 1 ATE oral = 3.000,0 mg/kg ATE dermal = 2.000,0 mg/kg				2322-38-0000
Reaction mass of cis-1-methyl-1-(4-methylcyclohexyl) ethyl acetate and trans-1-methyl-1-(4-methylcyclohexyl) ethyl acetate and cis-4-isopropyl-1-methylcyclohexyl acetate and trans-4-isopropyl-1-methylcyclohexyl acetate	>= 0,1 < 1%	Skin Sens. 1B, H317; Eye Irrit. 2, H319; Aquatic Chronic 2, H411 1 1 ATE oral = 2.000,0 mg/kg ATE dermal = 2.000,0 mg/kg	ND	ND	939-728-7	01-2119983293-30
(2E)-3,7-dimethylocta-2,6-dien-1-yl acetate - FEMA 2773	>= 0,1 < 1%	Skin Irrit. 2, H315; Skin Sens. 1B, H317; Aquatic Chronic 3, H412 1 1 ATE oral = 5.000,0 mg/kg ATE dermal = 5.000,0 mg/kg	ND	141-12-8	205-459-2	NR
Reaction Mass of Cis-4-(isopropyl) cyclohexanemethanol and Trans-4-(isopropyl) cyclohexanemethanol	>= 0,1 < 1%	Skin Irrit. 2, H315; Skin Sens. 1B, H317 ATE oral = 10.000,0 mg/kg ATE dermal = 2.000,0 mg/kg	ND	5502-75-0	939-719-8	01-2119983532-32-xxx
Geranyl acetate - FEMA 2509	>= 0,1 < 1%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Chronic 3, H412 1 1 ATE oral = 6.330,0 mg/kg	ND	105-87-3	203-341-5	01-2119973480-35-0000
Dodecanal - FEMA 2615	>= 0,1 < 1%	Skin Irrit. 2, H315; Skin Sens. 1B, H317; Eye Irrit. 2, H319 ATE oral = 5.000,0 mg/kg	ND	112-54-9	203-983-6	01-2119969441-33
Isoeugenol	>= 0,1 < 1%	Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1A, H317; Eye Irrit. 2, H319 Limits: Skin Sens. 1A, H317 %C >=0,01;	604-094-00-X	97-54-1	202-590-7	NR
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one - FEMA 0	>= 0,1 < 1%	Skin Sens. 1, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 1 1 ATE oral = 5.000,0 mg/kg ATE dermal = 5.000,0 mg/kg	ND	32388-55-9	251-020-30	01-2119969651-28-xxxx

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACh
1-(5,6,7,8-tetrahydro-3,5,5,6,8,8-hexamethyl-2-naphthyl)ethan-1-one - FEMA 0	< 0,1%	Acute Tox. 4, H302; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 10 10 ATE oral = 920,0 mg/kg ATE dermal = 7.940,0 mg/kg	ND	1506-02-1	216-133-4	01-2119539433-40-0000

Fractionated global values

H226	= 13,33	H304	= 11,48	H413	= 9,90	H317	= 28,09
H411	= 27,93	H319	= 15,94	H315	= 17,95	H400	= 14,08
H410	= 16,65	H412	= 4,91	H302	= 2,18	H335	= 0,40
H225	= 0,00	H331	= 0,00	H318	= 0,00	H373	= 0,00

SECTION 4. First aid measures

4.1. Description of first aid measures

Inhalation:
Air the area. Move immediately the contaminated patient from the area and keep him at rest in a well ventilated area. If you feel unwell seek medical advice.

Direct contact with skin (of the pure product).:
Take contaminated clothing Immediately off.
Wash immediately with plenty of running water and possibly with soap, the areas of the body that have, or are only suspected to have, come in contact with the product.
In case of contact with skin, wash immediately with water and soap.

Direct contact with eyes (of the pure product).:
Wash immediately and thoroughly with running water, keeping eyelids open for at least 10 minutes, then protect your eyes with a dry sterile gauze. Seek medical advice immediately
Do not use eye drops or ointments of any kind before the examination or advice from an oculist.

Ingestion:
Not hazardous. It's possible to give activated charcoal in water or liquid paraffin medicine

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

No data available.

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

If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
If medical advice is needed, have product container or label at hand.

SECTION 5. Firefighting measures

5.1. Extinguishing media

Advised extinguishing agents:
Water spray, CO2, foam, dry chemical, depending on the materials involved in the fire.

Extinguishing means to avoid:
Water jets. Use water jets only to cool the surfaces of the containers exposed to fire.

5.2. Special hazards arising from the substance or mixture

No data available.

5.3. Advice for firefighters

Use protection for the breathing apparatus
Safety helmet and full protective suit.
The spray water can be used to protect the people involved in the extinction
You may also use selfrespirator, especially when working in confined and poorly ventilated area and if you use halogenated extinguishers (Halon 1211 fluobrene, Solkan 123, NAF, etc...)
Keep containers cool with water spray

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel:
Leave the area surrounding the spill or release. Do not smoke
Wear mask, gloves and protective clothing.

6.1.2 For emergency responders:
Wear mask, gloves and protective clothing.
Eliminate all unguarded flames and possible sources of ignition. No smoking.
Provision of sufficient ventilation.
Evacuate the danger area and, in case, consult an expert.

6.2. Environmental precautions

Contain spill
Inform the competent authorities.
Discharge the remains in compliance with the regulations

6.3. Methods and material for containment and cleaning up

6.3.1 For containment:
Rapidly recover the product, wear a mask and protective clothing
Recover the product for reuse, if possible, or the removal.

6.3.2 For cleaning up:
After wiping up, wash with water the area and materials involved

6.3.3 Other information:
None in particular.

6.4. Reference to other sections

Refer to paragraphs 8 and 13 for more information

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Wear protective gloves/protective clothing/eye protection/face protection.
At work do not eat or drink.
Contaminated work clothing should not be allowed out of the workplace.
See also paragraph 8 below.

7.2. Conditions for safe storage, including any incompatibilities

Keep in original container closed tightly. Do not store in open or unlabeled containers.
Keep containers upright and safe by avoiding the possibility of falls or collisions.
Store in a cool place, away from sources of heat and `direct exposure of sunlight.

7.3. Specific end use(s)

Private households (= general public = consumers):
Handle with care.
Store in ventilated place away from heat sources,
Keep the container tightly closed.

Public domain (administration, education, entertainment, services, craftsmen):
Handle with care. Store in a ventilated area and away from heat, keep the container tightly closed.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Related to contained substances:
dipentene:
TWA: 30 from AIHA
TWA: 165.5 (mg/m3) from AIHA

- Substance: α-Hexylcinnamaldehyde
DNEL
Systemic effects Long term Workers inhalation = 0,000078 (mg/m3)
Systemic effects Short term Workers inhalation = 0,00628 (mg/m3)
PNEC
Sweet water = 0,03 (mg/l)
sediment Sweet water = 47,7 (mg/kg/sediment)
Sea water = 0,003 (mg/l)
sediment Sea water = 4,77 (mg/kg/sediment)
ground = 9,51 (mg/kg ground)

- Substance: 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran
DNEL
Systemic effects Long term Workers inhalation = 22 (mg/m3)
Systemic effects Long term Workers dermal = 60 (mg/kg bw/day)
Systemic effects Long term Consumers inhalation = 6,5 (mg/m3)
Systemic effects Long term Consumers dermal = 36 (mg/kg bw/day)
Systemic effects Long term Consumers oral = 3,8 (mg/kg bw/day)
PNEC
Sweet water = 0,0044 (mg/l)
sediment Sweet water = 2 (mg/kg/sediment)
Sea water = 0,00044 (mg/l)
sediment Sea water = 0,394 (mg/kg/sediment)
ground = 0,31 (mg/kg ground)

- Substance: benzyl acetate
DNEL

Systemic effects Long term Workers inhalation = 21,9 (mg/m3)
Systemic effects Long term Workers dermal = 6,25 (mg/kg bw/day)
Systemic effects Long term Consumers inhalation = 5,5 (mg/m3)
Systemic effects Long term Consumers dermal = 3,125 (mg/kg bw/day)
Systemic effects Long term Consumers oral = 3,125 (mg/kg bw/day)

- Substance: 2,6-di-tert-butyl-p-cresol
DNEL
Systemic effects Long term Workers inhalation = 3,5 (mg/m3)
Systemic effects Long term Workers dermal = 8,3 (mg/kg bw/day)
Systemic effects Long term Consumers inhalation = 1,74 (mg/m3)
Systemic effects Long term Consumers dermal = 5 (mg/kg bw/day)
Systemic effects Long term Consumers oral = 0,25 (mg/kg bw/day)

- Substance: Hexyl salicylate
DNEL
Systemic effects Long term Workers inhalation = 0,79 (mg/m3)
Systemic effects Long term Workers dermal = 2083 (mg/kg bw/day)
Systemic effects Short term Workers inhalation = 0,79 (mg/m3)
Systemic effects Short term Workers dermal = 2083 (mg/kg bw/day)

- Substance: Linalool
DNEL
Systemic effects Long term Workers inhalation = 2,8 (mg/m3)
Systemic effects Long term Workers dermal = 2,5 (mg/kg bw/day)
Systemic effects Long term Consumers inhalation = 0,7 (mg/m3)
Systemic effects Long term Consumers dermal = 1,25 (mg/kg bw/day)
Systemic effects Long term Consumers oral = 0,2 (mg/kg bw/day)

- Substance: Linalyl acetate
DNEL
Systemic effects Long term Workers inhalation = 2,75 (mg/m3)
Systemic effects Long term Workers dermal = 2,5 (mg/kg bw/day)
Systemic effects Long term Consumers inhalation = 0,68 (mg/m3)
Systemic effects Long term Consumers dermal = 1,25 (mg/kg bw/day)
Systemic effects Long term Consumers oral = 0,2 (mg/kg bw/day)

- Substance: Citronellol
DNEL
Systemic effects Long term Workers inhalation = 161,6 (mg/m3)

- Substance: Reaction mass of cis-1-methyl-1-(4-methylcyclohexyl) ethyl acetate and trans-1-methyl-1-(4-methylcyclohexyl) ethyl acetate and cis- 4-isopropyl-1-methylcyclohexyl acetate and trans-4-isopropyl-1-methylcyclohexyl acetate
PNEC
Sweet water = 0,00227 (mg/l)
sediment Sweet water = 0,254 (mg/kg/sediment)
Sea water = 0,000002 (mg/l)
sediment Sea water = 0,0254 (mg/kg/sediment)
STP = 1,7 (mg/l)
ground = 0,0494 (mg/kg ground)

- Substance: Geranyl acetate
DNEL
Systemic effects Long term Workers inhalation = 62,59 (mg/m3)
Systemic effects Long term Workers dermal = 35,5 (mg/kg bw/day)
Systemic effects Long term Consumers inhalation = 15,4 (mg/m3)
Systemic effects Long term Consumers dermal = 17,75 (mg/kg bw/day)

PNEC
Sweet water = 3,72 (mg/l)
Sea water = 0,372 (mg/l)
sediment Sea water = 0,0442 (mg/kg/sediment)

8.2. Exposure controls

Appropriate engineering controls:
Private households (= general public = consumers):
No specific checks planned

Public domain (administration, education, entertainment, services, craftsmen):
No specific monitoring foreseen

Individual protection measures:

(a) Eye / face protection
When handling the pure product use safety glasses (spectacles cage) (EN 166).

(b) Skin protection

(i) Hand protection
Handle with gloves. Gloves must be checked before use. Use a technique suitable for removing gloves (without touching the outer surface of the glove) to avoid the skin contact with this product Dispose of contaminated gloves after use in accordance with current legislation and good laboratory practices. Wash and dry your hands.
The selected protective gloves have to satisfy the requirements of EU directive 89/686 / EEC e the resulting EN 374 standards.
Full contact
Material: Nitrile rubber
minimum thickness: 0.11 mm
breakthrough time: 480 min
The choice of an appropriate glove depends not only on the material but also on other quality characteristics which vary from one manufacturer to another.
For the choice of the type of gloves to use consult the supplier / manufacturer of the gloves.
Observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves.

(ii) Other
When handling the pure product wear full protective skin clothing.

(c) Respiratory protection
Not needed for normal use.

(d) Thermal hazards
No hazard to report

Environmental exposure controls:
Related to contained substances:
dipentene:
Do not let this chemical agent contaminate the environment.

Vanillin:
Individual protection

Eye/face protection

Safety glasses with side protection according to EN166 Use eye protection tested and approved in accordance with the requirements of appropriate technical standards as NIOSH (US) or EN 166 (EU)

Skin protection

Manipulate with gloves. The gloves should be checked before being used. Use a suitable technique for the removal of gloves (without touching the outside of the glove) to avoid skin contact with this product dispose of contaminated gloves after use in accordance with current legislation and good laboratory practices. Wash and dry your hands.
Selected protective gloves shall comply with the requirements of EU Directive 89/686/EEC and EN 374 standards arising therefrom.

Full contact
Material: nitrile rubber
minimum thickness: 0.11 mm
Penetration time: 480 min
Material tested: Dermatril (740/KCL Aldrich Z677272, size M)

Spraying contact
Material: nitrile rubber
minimum thickness: 0.11 mm
Penetration time: 480 min
Material tested: Dermatril (740/KCL Aldrich Z677272, size M)

Data source: KCL GmbH, D-36124 Eichenzell, tel. +49 (0) 6659 87300, e-mail sales@kcl.de, test method: EN374
When used in solution, or mixed with other substances, and under conditions other than those mentioned in EN 374, contact the supplier of gloves approved by the EC. This recommendation applies to the Council and must be assessed by an Industrial Hygienist and a security officer aware of the specific situation of intended use by our customers. You should not be interpreted as an endorsement of a specific exposure scenario.

Physical protection
rainwear, protective equipment must be selected depending on the concentration and amount of hazardous substance in the workplace.

Respiratory protection
For low exposure levels to use respirators for dusts of P95 (US) type or of type P1 (EU EN 143). For most high security levels use cartridge type respirators OV/AG/P99 or ABEK-type P2 (EU EN 143). Use respirators and components tested and approved by the relevant standardisation bodies, such as the NIOSH (U.S.A.) CEN (EU).

Environmental exposure controls
Avoid spills or leaks, if this can be done without danger. Do not let product enter drains. The dump into the environment must be avoided.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Determination method
Appearance	Solid	
Colour	Blue	
Odour	characteristic	
Odour threshold	not determined	
pH	irrelevant	

Physical and chemical properties	Value	Determination method
Melting point/freezing point	not determined	
Initial boiling point and boiling range	not determined	
Flash point	irrelevant	ASTM D92
Evaporation rate	irrelevant	
Flammability (solid, gas)	nonflammable	
Upper/lower flammability or explosive limits	not determined	
Vapour pressure	not determined	
Vapour density	not determined	
Relative density	irrelevant	
Solubility	irrelevant	
Water solubility	irrelevant	
Partition coefficient: n-octanol/water	not determined	
Auto-ignition temperature	not determined	
Decomposition temperature	not determined	
Viscosity	not determined	
Explosive properties	not explosive	
Oxidising properties	non-oxidizing	

9.2. Other information

Content of VOC ready to use condition: 20,41 %

SECTION 10. Stability and reactivity

10.1. Reactivity

No reactivity hazards

10.2. Chemical stability

No hazardous reaction when handled and stored according to provisions.

10.3. Possibility of hazardous reactions

There are no hazardous reactions

10.4. Conditions to avoid

Nothing to report

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11. Toxicological information

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

ATE(mix) oral = 72.356,8 mg/kg
ATE(mix) dermal = ∞
ATE(mix) inhal = ∞

(a) acute toxicity: α-Hexylcinnamaldehyde: Oral (rat) LD50: 2450 mg/kg
dipentene: LD50 Oral-rat-4.400 mg/kg
Remarks: Behavioral: Change in motor activity (specific assay). Respiratory disorder Skin and Appendages: Other: Hair. Inhalation: Irritating to respiratory system.
LD50 Dermal-rabbit->5.000 mg/kg
4-tert-Butylcyclohexyl acetate: Rats (10 per dose, sex and strain not reported) were administered 4-tert-butylcyclohexyl acetate by gavage at 5000 mg/kg-bw. No information on mortality was reported
Rabbits (4, sex and strain not reported) were administered 4-tert-butylcyclohexyl acetate dermally at 5000 mg/kg-bw. One rabbit died.
2,6-dimethyloct-7-en-2-ol: LD50 Oral - rat - 3,600 mg/kg
LD50 Dermal - rabbit - > 5,000 mg/kg
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran: Acute Oral Toxicity
(1) Wistar rats (10/sex) were administered commercial grade HHCB (65% HHCB in either diethyl phthalate or isopropyl myristate) via gavage at 5000 mg/kg-bw and observed for 14 days. The corrected dose of HHCB was 3250 mg/kg-bw. One death occurred at this dose.
LD50 > 3250 mg/kg-bw
(2) Rats (10 females/dose; strain not specified) were administered commercial sample (65% HHCB in either diethyl phthalate or isopropyl myristate) via gavage at 3000 mg/kg-bw and observed for 14 days. It is not clear whether the reported dose reflected dose of the mixture or of HHCB. Therefore, a conservative estimate of the LD50 is considered to be 65% of the test concentration. No mortality was observed during the study.
LD50 > 1950 mg/kg-bw
2,6-di-tert-butyl-p-cresol: LD50 oral: 1700 mg/kg (rat)
LD50 oral: 800 - 1600 mg/kg (mouse)
LD50 dermal: >8000 mg/kg (guinea pig)
Citronellol: orl-rat LD50:3450 mg/kg
skn-rbt LD50:2650 mg/kg
ihl-rat LCLo:1.3 mg/m3/4H
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one: LD50 rat Dose: > 5.000 mg/kg
LD50 rabbit Dose: > 5.000 mg/kg
(b) skincorrosion/irritation: If brought into contact with the skin, the product causes significant inflammation with erythema, scabs, or edema.
benzyl acetate: Skin - rabbit - Irritating to skin - 24 h
4-tert-Butylcyclohexyl acetate: Rabbits (species, sex and number not specified) were administered 4-tert-butylcyclohexyl acetate dermally to the ears and backs. Observations of the backs included slight erythema after 1 and 5 min, severe erythema and slight edema at 15 min, and severe erythema and edema at 20 hours. On day 8, slight redness and severe scaling were observed. Observations of the ears included severe erythema and edema with blistering after 20 hours. Severe necrosis was recorded on day 8. (Bhatia, S.P., et al., Food and Chemical Toxicology 46 (2008) S36-S41) 4-tert-Butylcyclohexyl acetate was irritating to rabbit skin
2,6-dimethyloct-7-en-2-ol: Skin - rabbit
Result: Mild skin irritation - 24 h
(Draize Test)
benzyl acetate: Skin-rabbit-skin irritant-24 h
Linalyl acetate: Linalyl acetate (100%) appeared to be severely irritating to rabbit skin and moderately irritating to the skin of the guinea pig. In a test with miniature swines application of 0.05 g linalyl acetate under a patch for 48 hours, no irritation was observed.
Linalyl acetate in Application of acetone (33%) to the back of male volunteers without known allergies during 48 hours under occlusion did not induce signs of irritation up to 120 hours after removal of the patch.
Citronellol: skn-rbt 100 mg/24H SEV

Skin - Human - Skin irritation - 48 h
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one: rabbit
Result: Skin irritation
Exposure time: 12:0 am
(c) serious eye damage/irritation: If brought into contact with eyes, the product, causes significant irritations which may last for more than 24 hours.
4-tert-Butylcyclohexyl acetate: Albino rabbits (3/sex dose not specified) were instilled 0.1 mL aliquot of 0.625% solution (vehicle not reported) into the right eye of each rabbit with no further treatment while the left eye served as control. Scores were recorded according to the Draize scale. Slight to moderate irritation with conjunctival chemosis and discharge were observed in all three rabbits (mean score for redness and 1.9 for 1 chemosis). All eyes cleared by day 4. (Bhatia, S.P., et al., Food and Chemical Toxicology 46 (2008) S36-S41) 4-tert-Butylcyclohexyl acetate was irritating to rabbit eyes.
2,6-dimethyloct-7-en-2-ol: Eyes - rabbit
Result: Moderate eye irritation
(Draize Test)
(d) respiratoryorskinsensitisation: The product, if brought into contact with skin can cause skin sensitization.
2,6-dimethyloct-7-en-2-ol: Maximisation Test
Did not cause sensitisation on laboratory anima
Citronellol: mouse - May cause sensitization by skin contact.
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one: Maximisation study human
Result: Did not cause sensitization on laboratory animals.
Test substance: 30% in petrolatum
(e) germ cell mutagenicity: 4-tert-Butylcyclohexyl acetate: Salmonella typhimurium strains TA98, TA100, TA1535, TA1537 and Ta 1538 were exposed to 4-tert-butylcyclohexyl acetate at 8 to 5000 g/plate in a bacterial reverse mutation assay in the presence and absence of metabolic activation. Positive and negative controls were used but their response was not provided. Cytotoxicity was observed at and above 200 g/plate.
4-tert-Butylcyclohexyl acetate was not mutagenic in this assay.
benzyl acetate: Laboratory tests revealed mutagenic effects.
Genotoxicity in vitro lymphocyte-topo-
mutation in mammalian somatic cells
In vitro genotoxicity-Hamster-Lungs
Cytogenetic analysis
Linalyl acetate: 14550 Rat LD50 (mg/kg bw)
13360 Mouse LD50 (mg/kg bw)
(f) carcinogenicity: dipentene: Carcinogenicity-rat-Oral
Tumorigenic: Carcinogenic by RTECS criteria. Kidney, Ureter, Bladder: Kidney tumors. Tumorigenic Effects: Testicular tumors.
Carcinogenicity-mouse-Oral
Equivocal tumorigenic agent by RTECS criteria: Tumorigenic. Gastrointestinal: Tumors.
This product is or contains a component that is not classifiable as to its carcinogenicity IARC, ACGIH, NTP, based on its or EPA classification.
IARC: Group 3-3: Not classifiable as to its carcinogenicity to humans (D-Limonene)
benzyl acetate: Cancerogenicit-rat-Oral
Oncogenia: second neoplastic RTECS gastrointestinal tumors
Cancerogenicit-rat-Oral
Oncogenia: Liver cancer second neoplastic RTECS:
This product or contains a component that cannot be classified according to its effect
carcinogen IARC classification, ACGIH, NTP or EPA.
IARC: Group 3-3: Not classifiable as to its carcinogenicity to humans (Benzyl acetate)
(g) eproductivetoxicity: 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran: Mated female Crl:CD(SD)Br rats (animals/sex/dose not specified) were administered HHCB via gavage at 0, 2, 6 or
20 mg/kg-bw/day beginning on gestation day 14. The F1 offspring were exposed in utero and throughout lactation. At the end of the pre-weaning period, 24 male and 24 female pups per dose were retained for further study. On day 22 post-partum, excess pups and parents were sacrificed and examined for abnormalities. When offspring were 84 days of age, males and females were mated and produced litters. After day 21 post-partum, all F2 pups and F1 dams were sacrificed and examined internally and externally for abnormalities. No adverse effects on behavior or reproduction were observed at any dose in parental animals or in F1 or F2 pups.
NOAEL (systemic and reproductive toxicity) = 20 mg/kg-bw/day (based on no effects at the highest dose tested)

(h) specific target organ toxicity (STOT) single exposure: based on available data, the classification criteria are not met.

(i) specific target organ toxicity (STOT) repeated exposure4-tert-Butylcyclohexyl acetate: In a modified developmental toxicity screening test (OCED TG 421), Crl: CD pregnant (SD) rats were administered 4-tert-butylcyclohexyl acetate (a mixture of 71% 28% trans and cis) in corn oil by gavage at 0, 40, 160 or 640 mg/kg-bw per day during gestation days 7 20. Rats were Caesarean-sectioned on day 21 of gestation and examined for number and distribution of corpora lutea, implantation sites and placenta. Live and dead fetuses and early and late resorptions were recorded. Fetuses were examined for sex ratio, gross external alterations and skeletal and soft tissue alterations. There were no effects on maternal body weights, weight gain, food consumption or organ weights. Pup viability, body weights, external observations and microscopic examination showed no significant alterations that could be related to the administration of the test substance.
NOAEL (maternal or developmental toxicity) = 640 mg/kg-bw/day (based on no effects at the highest dose tested)

1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran: Sprague-Dawley rats (15/sex/dose) were administered HHCB via the diet at 0, 5, 15, 50 or 150 mg/kg-bw/day for 13
weeks. Test concentrations were determined from a range finding study in which a LOAEL of 300 mg/kg-bw/day (based on hepatic effects) was determined. Mean estimated test substance intakes were 5.4, 15.7, 51.8 or 155.8 mg/kg-bw/day for males and 5.1, 15.6, 51.9 or 154.6 mg/kg-bw/day for females. There were no mortalities, adverse clinical signs or treatment-related effects on body weight, hematology or ophthalmologic evaluation. Slightly lower mean plasma triglyceride levels were observed at week13 in males at 50 and 150 mg/kg-bw/day. Slightly lower plasma glucose concentrations were noted at week 7 in males and females given 15, 50 and 150 mg/kg-bw/day and at week 13 in males given 50 and 150 mg/kg-bw/day; these effects were not seen at the end of the 4-week recovery period. There were no treatment-related differences in absolute organ weights or organ weight

(j) aspiration hazard: Linalyl acetate: Inhalation exposure of mice to Swiss linalyl acetate 2.74 mg/L air during 90 minutes led to reduced
motor activity compared to untreated controls. The effect was more severe in mice of aged 6-8
weeks (up to 100% reduction) than in mice of 6 months (up to 81% reduction). A relationship with
dose was suspected, based on the (not reported) results of a separate test with a double dose in old
mice (REF. 16).

Related to contained substances:
α-Hexylcinnamaldehyde:
LD50 (rat) Oral (mg/kg body weight) = 2450

Hydrocarbons, C4, 1,3-butadiene-free, polymd., triisobutylene fraction, hydrogenated:
LD50 (rat) Oral (mg/kg body weight) = 5000
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2000
CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 4951

dipentene:
Routes of Entry: Absorbed through skin. Eye contact. Inhalation. Ingestion.
Toxicity to Animals:
Acute oral toxicity (LD50): 4400 mg/kg [Rat].
Acute dermal toxicity (LD50): >5000 mg/kg [Rabbit].
Chronic Effects on Humans: CARCINOGENIC EFFECTS: 3 (Not classifiable for human.) by IARC.
Other Toxic Effects on Humans:
Hazardous in case of skin contact (irritant, sensitizer), of inhalation (lung irritant).
Slightly hazardous in case of skin contact (permeator), of ingestion.
Special Remarks on Toxicity to Animals: Not available.
Special Remarks on Chronic Effects on Humans: May cause adverse reproductive effects and birth defects (teratogenic)
Special Remarks on other Toxic Effects on Humans:
Acute Potential Health Effects:
Skin: Causes skin irritation. It can be absorbed through intact skin. However, it is generally regarded to have low toxicity by dermal route.
Eyes: Causes eye irritation.
Inhalation: Aspiration of large doses may produce pulmonary edema and chemical pneumonitis. May cause dizziness and suffocation. No nasal or pharyngeal irritation has been reported.
Ingestion: It is generally regarded to have low toxicity by oral route. It may produce burning pain in the mouth and throat, abdominal pain, nausea, vomiting, and diarrhea. There may an odor of terpenes in the vomitus or breath.

It may affect behavior/central nervous and peripheral nervous system. Central nervous system effects may include excitememt, somnolence, delirium, ataxia, convulsions, and stupor while peripheral system effects may include spastic paralysis. It may affect respiration (respiratory depression, choking, coughing, dyspnea, cyanosis). Other symptoms may include cyanosis, fever, and tachycardia. Systemic absorption of large doses may produce pulmonary edema and chemical pneumonitis. The urine may smell like violets.
Chronic Potential Health Effects:
Ingestion: Prolonged or repeated ingestion may produce nausea, lowered blood sugar and cholesterol, and kidney damage (hematuria, albuminuria, tubular necrosis), and may also affect the liver.
Skin: It may be a weak sensitizer and responsible for some rare allergic responses (dermatitis)
LD50 (rat) Oral (mg/kg body weight) = 4400
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

4-tert-Butylcyclohexyl acetate:
LD50 (rat) Oral (mg/kg body weight) = 5000
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

2,6-dimethyloct-7-en-2-ol:
Skin - rabbit
Result: Mild skin irritation - 24 h
(Draize Test)
Eyes - rabbit
Result: Moderate eye irritation
(Draize Test)
Oral LD50 (rat) : 3600 mg/kg
Dermal LD50 (rabbit) >5000 mg/kg
LD50 (rat) Oral (mg/kg body weight) = 3600
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran:
LD50 (rat) Oral (mg/kg body weight) = 3250
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 3250

3,5,5-Trimethylhexyl acetate:
Oral LD50-rat-4250.0 mg/kg
LD50 Dermal-rabbit->5000 mg/kg
LD50 (rat) Oral (mg/kg body weight) = 4250
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

benzyl acetate:
Oral LD50-rat-2,490 mg/kg
Observations: behavior: somnolence (General depressed activity)
LD50 Dermal-rabbit-> 5,000 mg/kg
Acute toxicity of the vapor (LC50): 245 8 hours
LD50 (rat) Oral (mg/kg body weight) = 2490
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000
CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 245

2,6-di-tert-butyl-p-cresol:
LD50 (rat) Oral (mg/kg body weight) = 1700
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 8000

(Z)-hex-3-enyl salicylate:
LD50 Oral - rat - 5.000 mg / kg
LD50 (rat) Oral (mg/kg body weight) = 5000
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

3-ethoxy-4-hydroxybenzaldehyde:
LD50 (rat) Oral (mg/kg body weight) > 3160
LD50 Dermal (rat or rabbit) (mg/kg body weight) > 2000

Hexyl salicylate:
LD50 (rat) Oral (mg/kg body weight) = 5000
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

Linalool:
LD50 (rat) Oral (mg/kg body weight) = 2790
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5610
CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 307

Reaction mass of 2-methylbutyl salicylate and pentyl salicylate:
LD50 (rat) Oral (mg/kg body weight) = 2000

Vanillin:
LD50 (rat) Oral (mg/kg body weight) = 2000
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5010

Terpineol, acetate:
LD50 (rat) Oral (mg/kg body weight) = 5075

Linalyl acetate:
LD50 (rat) Oral (mg/kg body weight) = 14550
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 13360

3,7-dimethyloctan-3-ol:
LD50 oral, rat-> 5,000 mg/kg oral rat
Ld50-4,500 mg/kg Inhalation-rat
LCLO-male and female-8h-0.885 mg/l
LD50 (rat) Oral (mg/kg body weight) = 5000
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 4500
CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 0,885

Citronellol:
LD50 (rat) Oral (mg/kg body weight) = 3450
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2650
CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 1,3

Nopyl acetate:
LD50 (rat) Oral (mg/kg body weight) = 3000
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2000

Reaction mass of cis-1-methyl-1-(4-methylcyclohexyl) ethyl acetate and trans-1-methyl-1-(4-methylcyclohexyl) ethyl acetate and cis- 4-isopropyl-1-methylcyclohexyl acetate and trans-4-isopropyl-1-methylcyclohexyl acetate:
LD50 (rat) Oral (mg/kg body weight) = 2000
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2000

(2E)-3,7-dimethylocta-2,6-dien-1-yl acetate:
Acute toxicity
LD50 Oral - Rat -> 5,000 mg / kg
LD50 Dermal - Rabbit -> 5,000 mg / kg
LD50 (rat) Oral (mg/kg body weight) = 5000
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

Reaction Mass of Cis-4-(isopropyl) cyclohexanemethanol and Trans-4-(isopropyl) cyclohexanemethanol:
LD50 (rat) Oral (mg/kg body weight) = 10000
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2000

Geranyl acetate:
LD50 (rat) Oral (mg/kg body weight) = 6330

Dodecanal:
LD50 (rat) Oral (mg/kg body weight) = 5000

[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one:
LD50 (rat) Oral (mg/kg body weight) = 5000
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

1-(5,6,7,8-tetrahydro-3,5,5,6,8,8-hexamethyl-2-naphthyl)ethan-1-one:
LD 50 ORAL / RAT (mg /Kg) : 920
LD50 DERMAL/RAT(mg /Kg) : 7940
LD50 (rat) Oral (mg/kg body weight) = 920
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 7940

11.2. Information on other hazards

No data available.

SECTION 12. Ecological information

12.1. Toxicity

3,5,5-Trimethylhexyl acetate:
Hydrocarbons, C4, 1,3-butadiene-free, polymd., triisobutylene fraction, hydrogenated:
Related to contained substances:
α-Hexylcinnamaldehyde:
Freshwater Fish Toxicity: acute LC50 >1-10 mg/L
Freshwater Invertebrates Toxicity: acute EC <1 mg/L
Algal Toxicity: acute EC <1 mg/L.
C(E)L50 (mg/l) = 0,99

Hydrocarbons, C4, 1,3-butadiene-free, polymd., triisobutylene fraction, hydrogenated:
C(E)L50 (mg/l) = 1000
NOEC (mg/l) = 1000

dipentene:
Ecotoxicity: Not available.
BOD5 and COD: Not available.
Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.
Special Remarks on the Products of Biodegradation: Not available.
C(E)L50 (mg/l) = 0,702

4-tert-Butylcyclohexyl acetate:
Golden ide (Leuciscus idus) were exposed to 4-tert-butylcyclohexyl acetate at nominal concentrations of 0, 10, 13, 16 and 20 mg/L under static conditions for 48 hours. EF Marlowet was used as a solubilizer. Mortality was 0, 10, 100 and 80% at 10, 13, 16 and 20 mg/L.
48-h LC50 = 14 mg/L
Water fleas (Daphnia magna) were exposed to 4-tert-butylcyclohexyl acetate at nominal concentrations of 2.8 to 28.4 mg/L (measured concentrations, 2.4 to 28.4 mg/L) under static conditions for 48 hours.
48-h EC50 = 23.4 mg/L
C(E)L50 (mg/l) = 14

2,6-dimethyloct-7-en-2-ol:
96 Hour LC50 = 4.81 mg/l EPA ECOSAR
Daphnia magna 48 hrs LC50 = 5.70 mg
Green algae 96 hr NOEC, LOEC or NOEL, LOEL EC50 = 3.88 mgl
C(E)L50 (mg/l) = 4,81

1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran:
21 days Daphnia magna NOEC 111 g/L NOEC 21 days Bluegill sunfish (lepomismacrochirus) 68 g/L NOEC 35-day early life stage test Fathead minnows (Pimephales promelas) 68 g/L NOEC 72 h Algae (Pseudokirchneriella subcapitata) 201 g/L 8 weeks NOEC Earthworm (Eisenia fetida) 45 g/kg Soil DM 4 weeks Springtails NOEC (Folsomia candida) 45 g/kg Soil DM
C(E)L50 (mg/l) = 0,282

3,5,5-Trimethylhexyl acetate:
C(E)L50 (mg/l) = 4
NOEC (mg/l) = 4

benzyl acetate:
Toxicity to fish Lc50-Oryzias latipes-4 mg/l-96 h
C(E)L50 (mg/l) = 4

2,6-di-tert-butyl-p-cresol:
Toxicity to fish LC50 - Oryzias latipes - 5.3 mg/l - 48 h
Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia pulex (Water flea) - 1.44 mg/l - 48 h
C(E)L50 (mg/l) = 1,44

(Z)-hex-3-enyl salicylate:
C(E)L50 (mg/l) = 0,61

3-ethoxy-4-hydroxybenzaldehyde:
C(E)L50 (mg/l) = 87,599998

Linalool:
Fish: 96h LC50:39 mg/L (Oryzias latipes)
Crustacea: 48h EC50:52 mg/L (Daphnia magna)
Algae: 72h EC50:28 mg/L (Selenastrum capricornutum)
C(E)L50 (mg/l) = 27,799999

Vanillin:
Semi-static test Lc50-Pimephales promelas (Chub)-57 mg/l-96 h
Static Lc50-Pimephales promelas (Chub)-88 mg/l-96 h
Flow-through Lc50 test-Pimephales promelas (Chub) 53-61.3 mg/l 96 h
C(E)L50 (mg/l) = 57

Linalyl acetate:
Cyprinus carpio, 96-hour LC50 value of 2.86 mg/L
Daphnia magna, 48-hour EC50 value of 2.91 mg/L
Scenedesmus subspicatus, 72-hour exposure, EC50 value of 4.2 mg/L
C(E)L50 (mg/l) = 2,86

3,7-dimethyloctan-3-ol:
Toxic to fish Lc50 semi-static test-Danio rerio (zebrafish)-8.9 mg/l-96 h
method: OECD 203 semi-static test TG
NOEC-Danio rerio (zebrafish)-5 mg/l-96 h
method: OECD 203 Toxic TG to daphnia and other aquatic invertebrates – Daphnia magna Ec50 Immobilization (big water Flea)-14.2 mg/l-48 h method: OECD TG 202 Immobilization NOEC-Daphnia magna (water Flea grande)-8.2 mg/l-48 h Method: OECD TG 202 Toxic for algae growth Inhibition Ec50 Desmodesmus subspicatus-(green algae)-13.2 mg/l-72 h method: OECD 201 TG NOEC growth-inhibitor Desmodesmus subspicatus (green algae)-8.5 mg/l-72 h method: OECD 201 TG
C(E)L50 (mg/l) = 8,9

Citronellol:
LC50 (96 h) 14,66 mg/l, Leuciscus idus
EC50 (48 h) 17 mg/l, Daphnia magna
EC50 (72 h) 2,4 mg/l, Scenedesmus subspicatus
C(E)L50 (mg/l) = 2,4

Reaction mass of cis-1-methyl-1-(4-methylcyclohexyl) ethyl acetate and trans-1-methyl-1-(4-methylcyclohexyl) ethyl acetate and cis- 4-isopropyl-1-methylcyclohexyl acetate and trans-4-isopropyl-1-methylcyclohexyl acetate:
C(E)L50 (mg/l) = 2,732

Reaction Mass of Cis-4-(isopropyl) cyclohexanemethanol and Trans-4-(isopropyl) cyclohexanemethanol:
The substance was toxic to Oncorhynchus mykiss when tested according to OECD 203. The 96 hr LC50 for was reported to be 4.2 mg/L (based on nominal concentrations, measured concentrations were >80% to nominal).

The substance was harmful to Daphnia magna when tested according to OECD 202. The 48 hr EC50 for was reported to be 13 mg/L (based on nominal concentrations, measured concentrations were >80% to nominal).

The substance was toxic to aquatic algae when tested according to OECD 201. The 72 hr EC50 based on growth rate was reported to be 10 mg/L (based on nominal concentrations, measured concentrations were >80% to nominal).The 72h EC10 based on growth rate was reported to be 5.2 mg/L (based on nominal concentrations, measured concentrations were >80% to nominal).

The substance was not acutely toxic to microorganisms when tested according to OECD 209. The 3 hr EC50 for activated sludge respiration inhibition was reported to be 190 mg/L (nominal).
C(E)L50 (mg/l) = 4,2

1-(5,6,7,8-tetrahydro-3,5,5,6,8,8-hexamethyl-2-naphthyl)ethan-1-one:
Fathead minnow Pimephales promelas LC50 = 0.100
Marine copepod Acartia tonsa 48-h, marine, mortality LC50 = 0.71
C(E)L50 (mg/l) = 0,1 10
10

The product is dangerous for the environment as it is toxic to aquatic organisms following acute exposure.

Use according to good working practices to avoid pollution into the environment.

12.2. Persistence and degradability

Related to contained substances:
2,6-dimethyloct-7-en-2-ol:
72% within 28 days in an OECD 301B assay

Linalool:

90 % (by BOD), 99 % (by TOC), 100 % (by GC)

3,7-dimethyloctan-3-ol:
aerobic-28 d exposure time Result: 60-70%-Rapidly biodegradable.
Method: OECD TG 301

12.3. Bioaccumulative potential

Related to contained substances:
Linalool:
106

12.4. Mobility in soil

Related to contained substances:
Linalool:
log Pow: 2.55
Soil adsorption (Koc): 75
Henry's Law constant(PaM3/mol): 2

12.5. Results of PBT and vPvB assessment

No PBT/vPvB ingredient is present

12.6. Endocrine disrupting properties

No data available.

12.7. Other adverse effects

No adverse effects

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Do not reuse empty containers. Dispose of them in accordance with the regulations in force. Any remaining product should be disposed of according to applicable regulations by addressing to authorized companies.
Recover if possible. Send to authorized discharge plants or for incineration under controlled conditions. Operate according to local and National rules in force

SECTION 14. Transport information

14.1. UN number or ID number

ADR/RID/IMDG/ICAO-IATA: 0000

ADR exemption because compliance with the following characteristics:
Combination packagings: per inner packaging 5 kg per package 30 Kg
Inner packagings placed in skrink-wrapped or stretch-wrapped trays: per inner packaging 5 kg per package 20 Kg

14.2. UN proper shipping name

ADR/RID/IMDG: MATERIA PERICOLOSA PER L'AMBIENTE, SOLIDA, N.A.S. (α-Hexylcinnamaldehyde, acetato di

4-terz-butilcicloesile, spiro[1,3-diossolane-2,5'-(4',4',8',8'-tetrametil-esaidro-3',9'-metanonaftalene)], 1,3,4,6,7,8-esaidro-4,6,6,7,8,8-esametillinden[5,6-c]pirano, dipentene, 3,5,5-Trimethylhexyl acetate, acetato di benzile, 2,6-di-terz-butil-p-cresolo, cis-3-Hexenyl salicylate, terpinolo, acetato, Dimethyl benzyl carbinyl acetate (alpha,alpha-Dimethylphenethyl acetate), Geranyl acetate, Dodecanal, ACETYLCEDRENE, 1-(5,6,7,8-tetraidro-3,5,5,6,8,8-esametil-2-n)
ADR/RID/IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (α-Hexylcinnamaldehyde, 4-tert-Butylcyclohexyl acetate, spiro[1,3-dioxolane-2,5'-(4',4',8',8'-tetramethyl-hexahydro-3',9'-methanonaphthalene)], 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran, dipentene, 3,5,5-Trimethylhexyl acetate, benzyl acetate, 2,6-di-tert-butyl-p-cresol, (Z)-hex-3-enyl salicylate, Terpineol, acetate, Dimethyl benzyl carbinyl acetate (alpha,alpha-Dimethylphenethyl acetate), Geranyl acetate, Dodecanal, [3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetr)
ICAO-IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (α-Hexylcinnamaldehyde, 4-tert-Butylcyclohexyl acetate, spiro[1,3-dioxolane-2,5'-(4',4',8',8'-tetramethyl-hexahydro-3',9'-methanonaphthalene)], 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran, dipentene, 3,5,5-Trimethylhexyl acetate, benzyl acetate, 2,6-di-tert-butyl-p-cresol, (Z)-hex-3-enyl salicylate, Terpineol, acetate, Dimethyl benzyl carbinyl acetate (alpha,alpha-Dimethylphenethyl acetate), Geranyl acetate, Dodecanal, [3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetr)

14.3. Transport hazard class(es)

ADR/RID/IMDG/ICAO-IATA: Class : 9
ADR/RID/IMDG/ICAO-IATA: Label :
ADR: Tunnel restriction code : --
ADR/RID/IMDG/ICAO-IATA: Limited quantities : 5 kg
IMDG - EmS : F-A, S-F

14.4. Packing group

ADR/RID/IMDG/ICAO-IATA: III

14.5. Environmental hazards

ADR/RID/ICAO-IATA: Product is environmentally hazardous
IMDG: Marine polluting agent : Yes

14.6. Special precautions for user

No data available.

14.7. Maritime transport in bulk according to IMO instruments

It is not intended to carry bulk

SECTION 15. Regulatory information

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

Seveso category:
E2 - ENVIRONMENTAL HAZARDS

REGULATION (EU) No 1357/2014 - waste:
HP4 - Irritant — skin irritation and eye damage
HP14 - Ecotoxic

15.2. Chemical safety assessment

The supplier has made an assessment of chemical safety

SECTION 16. Other information

16.1. Other information

Description of the hazard statements exposed to point 3
H317 = May cause an allergic skin reaction.
H411 = Toxic to aquatic life with long lasting effects.
H226 = Flammable liquid and vapour.
H304 = May be fatal if swallowed and enters airways.
H413 = May cause long lasting harmful effects to aquatic life.
H315 = Causes skin irritation.
H400 = Very toxic to aquatic life.
H410 = Very toxic to aquatic life with long lasting effects.
H319 = Causes serious eye irritation.
H412 = Harmful to aquatic life with long lasting effects.
H302 = Harmful if swallowed.
H335 = May cause respiratory irritation.

Classification based on data of all mixture components

Main normative references:
Directive 1999/45/EC
Directive 2001/60/EC
Regulation 1272/2008/EC
Regulation 2010/453/EC

** The information contained herein is based on our knowledge at the date above.
Related solely to the product and do not constitute a guarantee of a particular quality.
It is the duty of the user to ensure that these are appropriate and complete information regarding the specific use intended.
This data sheet cancels and replaces any previous edition.