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

1.1. Product identifier

Product code : Hygienfresh GocceBucato con Ammorbidente – Clean Sense
Trades code : A47-020
Product line: Hygienfresh

UFI: 6533-T0X7-S00V-HS85

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

Laundry Drops with Softener - Fragrance with fixative for extra perfomance
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

Members of Public in England, Scotland and Wales can contact NHS 111/NHS 24 by dialling 111
In Northern Ireland contact your local GP
In Republic of Ireland call 01 809 2166

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

Hazard Class and Category Code(s):
Skin Sens. 1A, Eye Irrit. 2, Aquatic Chronic 3

Hazard statement Code(s):
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H412 - Harmful 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.
The product, if brought into contact with skin can cause skin sensitization.
The product is dangerous to the environment as it is harmful to aquatic life with long lasting effects

2.1.2 Additional information:

For full text of Hazard- and EU Hazard-statements: see SECTION 16.

2.2. Label elements

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



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

Hazard statement Code(s):
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H412 - Harmful 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
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
Disposal
P501 - Dispose of contents / container in accordance with local and national regulations.

Contains:
aqua, parfum, dihydrogenated tallow hydroxyethylmonium methosulfate, C12-15 Alketh-3, ricinus communis oil, ethoxydiglycol, benzalkonium chloride, terpineol, amyl cinnamal, citronellol, amyl salicylate, cinnamyl alcohol, geraniol, hexyl cinnamal, hexamethylindanopyran, isoeugenol, alpha isomethyl ionone, limonene, dimethicone, steareth-21, amines, c12-16-alkyldimethyl.

Contains (Reg.EC 648/2004):

>= 5% < 15% Perfumes, Cationic surfactants, < 5% Terpineol, amyl cinnamal, citronellol, amyl salicylate, cinnamyl alcohol, geraniol, hexyl cinnamal, hexamethylindanopyran, isoeugenol, alpha isomethyl ionone, limonene.

Content of VOC ready to use condition: 1,69 %

UFI: 6533-T0X7-S00V-HS85

2.3. Other hazards

The product does not contain substances identified as endocrine disruptors for human health according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

The product does not contain substances identified as endocrine disruptors for the environment according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

The product does not contain substances identified as PBT according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

The product does not contain substances identified as vPvB according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

The product does not contain substances identified as PMT according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

The product does not contain substances identified as vPvM according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

No information on other hazards

SECTION 3. Composition/information on ingredients

3.1 Substances

Irrilevant

3.2 Mixtures

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACh
Fatty acids, C16-18 (even numbered) and C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized	>= 5 < 15%	ATE oral = 5.000,000 mg/kg ATE dermal = 2.000,000 mg/kg	ND	1335202-88-4	931-203-0	01-2119463889-16-0004
3a,4,5,6,7,7a-hexahydro-1H-4,7-methanoinden-1-yl propionate - FEMA 0	>= 1 < 5%	Aquatic Chronic 2, H411 1 1 ATE oral = 5.000,000 mg/kg ATE dermal = 5.000,000 mg/kg	ND	68912-13-0	272-805-7	ND
2,2,2-trichloro-1-phenylehtylacetate - FEMA 0	>= 1 < 5%	Skin Corr. 2, H315; Aquatic Chronic 3, H412 1 1 ATE oral = 6.800,000 mg/kg ATE dermal = 2.000,000 mg/kg	ND	90-17-5	201-972-0	01-2119929625-31-0000
Terpineol - FEMA 0	>= 0,1 < 1%	Skin Irrit. 2, H315; Eye Irrit. 2, H319 ATE oral = 2.000,000 mg/kg ATE dermal = 2.000,000 mg/kg ATE inhal = 4,760 mg/l/4 h	ND	8000-41-7	232-268-1	01-2119553062-49-xxxx
2-Methyl-3-(p-isopropylphenyl)propionaldehyde - FEMA 2743	>= 0,1 < 1%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Chronic 2,	ND	103-95-7	203-161-7	01-2119970582-32-0000

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACh
		H411 1 1 ATE oral = 3.810,000 mg/kg ATE dermal = 5.000,000 mg/kg				
3,7-dimethyloctan-3-ol - FEMA 3060	>= 0,1 < 1%	Skin Irrit. 2, H315; Skin Sens. 1B, H317; Eye Irrit. 2, H319 ATE oral = 5.000,000 mg/kg ATE dermal = 4.500,000 mg/kg ATE inhal = 0,885 mg/l/4 h	ND	78-69-3	201-133-9	01-2119638275-36
2-benzylideneheptanal	>= 0,1 < 1%	Skin Sens. 1, H317; Aquatic Chronic 2, H411 ATE oral = 3.730,000 mg/kg ATE dermal = 2.000,000 mg/kg	ND	122-40-7	204-541-5	01-2119978288-18
Citronellol	>= 0,1 < 1%	Skin Irrit. 2, H315; Skin Sens. 1B, H317; Eye Irrit. 2, H319; STOT SE 3, H335 ATE oral = 3.450,000 mg/kg ATE dermal = 2.650,000 mg/kg ATE inhal = 1,300 mg/l/4 h	ND	106-22-9	203-375-0	01-2119453995-23-0000
4-tert-Butylcyclohexyl acetate - FEMA 0	>= 0,1 < 1%	Skin Sens. 1B, H317; Aquatic Chronic 2, H411 1 1 ATE oral = 5.000,000 mg/kg ATE dermal = 5.000,000 mg/kg	ND	32210-23-4	250-954-9	01-2119976286-24
2-Methylundecanal - FEMA 2749	>= 0,1 < 1%	Skin Irrit. 2, H315; Skin Sens. 1B, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 1 1 ATE oral = 5.000,000 mg/kg ATE dermal = 10.000,000 mg/kg	ND	110-41-8	203-765-0	01-2119969443-29-0000
pentyl salicylate - FEMA 0	>= 0,1 < 1%	Acute Tox. 4, H302; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 1 1 ATE oral = 2.000,000 mg/kg	ND	2050-08-0	218-080-2	01-2120771342-58
Cinnamyl alcohol	>= 0,1 < 1%	Skin Sens. 1, H317 ATE oral = 2.000,000	ND	104-54-1	ND	ND

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACh
		mg/kg ATE dermal = 5.000,000 mg/kg				
Geraniol - FEMA 2507	>= 0,1 < 1%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Dam. 1, H318 ATE oral = 3.500,000 mg/kg ATE dermal = 5.000,000 mg/kg ATE inhal = 0,500 mg/l/4 h	603-241-00-5	106-24-1	203-377-1	01-2119552430-49-0000
Anisaldehyde (p-Methoxybenzaldehyde) - FEMA 2670	>= 0,10 < 1%	Acute Tox. 4, H302; Repr. 2, H361; Aquatic Chronic 3, H412 1 1 ATE oral = 3.200,000 mg/kg ATE dermal = 5.000,000 mg/kg	ND	123-11-5	204-602-6	01-2119977101-43
α-Hexylcinnamaldehyde	>= 0,1 < 1%	Skin Sens. 1, H317; Aquatic Acute 1, H400; Aquatic Chronic 2, H411 ATE oral = 2.450,000 mg/kg	ND	101-86-0	202-983-3	01-2119533092-50
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran	>= 0,1 < 1%	Aquatic Acute 1, H400; Aquatic Chronic 1, H410 1 1 ATE oral = 3.250,000 mg/kg ATE dermal = 3.250,000 mg/kg	603-212-00-7	1222-05-5	214-946-9	01-2119488227-29-0000
Isoeugenol	>= 0,01 < 0,1%	Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Irrit. 2, H315; Skin Sens. 1A, H317; Eye Irrit. 2, H319; Acute Tox. 4, H332; STOT SE 3, H335 Limits: Skin Sens. 1A, H317 %C >=0,01; ATE oral = 1.560,000 mg/kg ATE dermal = 770,000 mg/kg	604-094-00-X	97-54-1	202-590-7	01-2120223682-61
ethanol	< 0,1%	Flam. Liq. 2, H225; Eye Irrit. 2, H319 Limits: Eye Irrit. 2, H319 %C >=50; ATE oral = 7.060,000 mg/kg ATE dermal = 20.000,000 mg/kg ATE inhal = 116,900 mg/l/4 h	603-002-00-5	64-17-5	200-578-6	01-2119457610-43
cinnamaldehyde	< 0,1%	Acute Tox. 4, H312;	606-155-00-6	104-55-2	203-213-9	01-211993

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACh
		Skin Irrit. 2, H315; Skin Sens. 1A, H317; Eye Irrit. 2, H319; Aquatic Acute 1, H400; Aquatic Chronic 2, H411 Limits: Skin Sens. 1A, H317 %C >=0,01; ATE oral = 2.200,000 mg/kg				5242-45

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 soap and water

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 or rash 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 protective gloves and clothing. Suitable: reticle, nitrile, PVC
Eliminate all open flames and possible sources of ignition.
Not smoking.
Provide adequate ventilation.
Evacuate the danger area and, if necessary, consult an expert.

6.2. Environmental precautions

Contain spill with earth or sand.
If the product has entered a watercourse in sewers or has contaminated soil or vegetation, notify it to the 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 for removal. Possibly absorb it with inert material.
Prevent it from entering the sewer system.

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

Avoid contact and inhalation of vapors
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

There are no data on occupational exposure limits

- Substance: Fatty acids, C16-18 (even numbered) and C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized
DNEL
Systemic effects Long term Workers inhalation = 44 (mg/m3)
Systemic effects Long term Workers dermal = 312,5 (mg/kg bw/day)
Systemic effects Long term Consumers inhalation = 13 (mg/m3)
Systemic effects Long term Consumers dermal = 187,5 (mg/kg bw/day)
Systemic effects Long term Consumers oral = 7,5 (mg/kg bw/day)
PNEC
Sweet water = 0,00191 (mg/l)
sediment Sweet water = 0,58 (mg/kg/sediment)
Sea water = 0,000191 (mg/l)
sediment Sea water = 0,058 (mg/kg/sediment)
STP = 2,96 (mg/l)
ground = 0,115 (mg/kg ground)

- Substance: Terpineol
DNEL
Systemic effects Long term Workers inhalation = 5,8 (mg/m3)

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

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

- 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: ethanol
DNEL
Systemic effects Long term Workers inhalation = 950 (mg/m3)
Systemic effects Long term Workers dermal = 343 (mg/kg bw/day)
Systemic effects Long term Consumers inhalation = 114 (mg/m3)
Systemic effects Long term Consumers dermal = 206 (mg/kg bw/day)
Systemic effects Long term Consumers oral = 87 (mg/kg bw/day)
PNEC
Sweet water = 0,96 (mg/l)
sediment Sweet water = 3,6 (mg/kg/sediment)
Sea water = 0,79 (mg/l)
sediment Sea water = 2,9 (mg/kg/sediment)
STP = 580 (mg/l)
ground = 0,63 (mg/kg ground)

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

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Determination method
Physical state	Liquid	
Colour	white	
Odour	Characteristic	
Odour threshold	not determined	
Melting point/freezing point	not determined	
Boiling point or initial boiling point and boiling range	not determined	
Flammability	irrelevant	
Lower and upper explosion limit	not determined	
Flash point	> 65 °C	ASTM D92
Auto-ignition temperature	not determined	
Decomposition temperature	not determined	
pH	3 - 4.5	
Kinematic viscosity	not determined	
Solubility	Completely soluble in water	
Water solubility	Completely soluble in water	
Partition coefficient n-octanol/water (log value)	not determined	
Vapour pressure	not determined	
Density and/or relative density	0.98 - 1.02 gr/cm3	
Relative vapour density	not determined	
Particle characteristics	irrelevant	

Physical and chemical properties	Value	Determination method

9.2. Other information

Content of VOC ready to use condition: 1,69 %

9.2.1 Information with regard to physical hazard classes

a) Explosives

i) sensitivity to shock
Irrilevant

ii) effect of heating under confinement
Irrilevant

iii) effect of ignition under confinement
Irrilevant

iv) sensitivity to impact
Irrilevant

v) sensitivity to friction
Irrilevant

vi) thermal stability
Irrilevant

vii) package
Irrilevant

b) Flammable gases

i) Tci / explosion limits
Irrilevant

ii) fundamental burning velocity
Irrilevant

c) Aerosols
Irrilevant

d) Oxidising gases
Irrilevant

e) Gases under pressure
Irrilevant

f) Flammable liquids
Irrilevant

g) Flammable solids

i) burning rate, or burning time as regards metal powders
Irrilevant

ii) statement on whether the wetted zone has been passed
Irrilevant

h) Self-reactive substances and mixtures

i) decomposition temperature
Irrilevant

ii) detonation properties
Irrilevant

iii) deflagration properties
Irrilevant

iv) effect of heating under confinement
Irrilevant

v) explosive power, if applicable
Irrilevant

i) Pyrophoric liquids
Irrilevant

j) Pyrophoric solids

i) statement on whether spontaneous ignition occurs when poured or within five minutes thereafter, as regards solids in powder form
Irrilevant

ii) statement on whether pyrophoric properties could change over time
Irrilevant

k) Self-heating substances and mixtures

i) statement on whether spontaneous ignition occurs and the maximum temperature rise obtained
Irrilevant

ii) results of screening tests referred to in section 2.11.4.2 of Annex I to Regulation (EC) No 1272/2008, if relevant and available
Irrilevant

l) Substances and mixtures, which emit f lammable gases in contact with water. The following information may be provided

i) identity of the emitted gas, if known
Irrilevant

ii) statement on whether the emitted gas ignites spontaneously
Irrilevant

iii) gas evolution rate
Irrilevant

m) Oxidising liquids
Irrilevant

n) Oxidizing solids
Irrilevant

o) Organic peroxides

i) decomposition temperature
Irrilevant

ii) detonation properties
Irrilevant

iii) deflagration properties
Irrilevant

iv) effect of heating under confinement
Irrilevant

v) explosive power
Irrilevant

p) Corrosive to metals

i) metals that are corroded by the substance or mixture
Irrilevant

ii) corrosion rate and statement on whether it refers to steel or aluminium
Irrilevant

iii) reference to other sections of the safety data sheet with regard to compatible or incompatible materials
Irrilevant

q) Desensitised explosives

i) desensitising agent used
Irrilevant

ii) exothermic decomposition energy
Irrilevant

iii) corrected burning rate (Ac)
Irrilevant

iv) explosive properties of the desensitised explosive in that state
Irrilevant

9.2.2 Other safety characteristics

a) mechanical sensitivity
Irrilevant

b) self-accelerating polymerisation temperature
Irrilevant

c) formation of explosible dust/air mixtures
Irrilevant

d) acid/alkaline reserve
Irrilevant

e) evaporation rate
Irrilevant

f) miscibility
Irrilevant

g) conductivity
Irrilevant

h) corrosiveness
Irrilevant

i) gas group
Irrilevant

j) redox potential
Irrilevant

k) radical formation potential
Irrilevant

l) photocatalytic properties
Irrilevant

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

It can generate inflammable gases to contact with elementary metals, nitrides, inorganic sulfide, strong reducing agents.
It can generate toxic gases to contact with inorganic solfide, strong reducing agents.

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 = 23.243,6 mg/kg
ATE(mix) dermal = 747.863,3 mg/kg
ATE(mix) inhal = 10.683,8 mg/l/4 h

(a) acute toxicity: 2-benzylideneheptanal: orl-rat LD50: 3730 mg / kg
The dermal LD50 value for alpha-amylcinnamaldehyde was calculated to be greater than 2000 mglkg.
Citronellol: orl-rat LD50:3450 mg/kg
skn-rbt LD50:2650 mg/kg
ihl-rat LCLo:1.3 mg/m3/4H
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.
pentyl salicylate: LC50 = 15.8 mg/L 83d Zebra fish (Brachydanio rerio)
Geraniol: LD50 Oral (rat) (mg / kg body weight) = 3500
LD50 Dermal (rabbit) (mg / kg body weight) => 5000
LC50 Inhalation (rat) of vapor / dust / aerosol / smoke (mg / l / 4h): 0.5
α-Hexylcinnamaldehyde: Oral (rat) LD50: 2450 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
ethanol: LD50 Oral-rat-7.060 mg/kg
Remarks: Lungs, Thorax, or Respiration: Other changes.
LC50 Inhalation-rat-10:0-20000 ppm
(b) skincorrosion/irritation: 3a,4,5,6,7,7a-hexahydro-1H-4,7-methanoinden-1-yl propionate: Skin irritation (Component) : human Result: No skin irritation Method: closed patch test
Exposure time: 48 h rabbit Result: Skin irritation
Exposure time: 24 h
Terpineol: Skin-rabbit-skin irritant-Draize Test
2-benzylideneheptanal: skn-rbt 100 mg/24H SEV
skn-gpg 100 mg/24H MOD
Citronellol: skn-rbt 100 mg/24H SEV
Skin - Human - Skin irritation - 48 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
Geraniol: skn-rbt 100 mg/24H SEV
skn-gpg 100 mg/24H SEV
skn-man 16 mg/24H SEV
ethanol: Skin-rabbit
Result: Irritating to skin. -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.
Geraniol: Eyes-rabbit
Result: Risk of serious damage to eyes. -12:00 am
(Directive 67/548/EEC, Annex V, b. 5.)

ethanol: Eyes-rabbit
Result: Mild eye irritation-12:0 am
(Draize Test)
Terpineol: Eyes-rabbit-Slight eye irritation Test Draize
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.
(d) respiratoryorskinsensitisation: The product, if brought into contact with skin can cause skin sensitization.
3a,4,5,6,7,7a-hexahydro-1H-4,7-methanoinden-1-yl propionate: Sensitisation (Component) : Component: 68912-13-0
Test substance: 0.0%
maximisation study human
Result: Did not cause sensitization on laboratory animals.
Test substance: 20% in petrolatum
Citronellol: mouse - May cause sensitization by skin contact.
Geraniol: Guinea pig
May cause sensitisation by skin contact.
(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.
(f) carcinogenicity: Geraniol: No component of this product present at levels greater than or equal to 0.1% is identified as
probable, possible or confirmed human carcinogen by IARC.
(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)
ethanol: Reproductive toxicity-Human-female-Oral
Effects on Newborn: Apgar score (human only). Effects on Newborn: Other measures or neonatal effects.
Effects on Newborn: Drug dependence.
(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: based on available data, the classification criteria are not met.

Related to contained substances:
Fatty acids, C16-18 (even numbered) and C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized:
Oral, LD50: 5000 mg / kg (rat)
Dermal, LD50:> 2000 mg / kg (rat)
LD50 (rat) Oral (mg/kg body weight) = 5000
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2000

3a,4,5,6,7,7a-hexahydro-1H-4,7-methanoinden-1-yl propionate:
Acute oral toxicity (Component) LD50 rat Dose: > 5,000 mg/kg Remarks: RIFM
Acute dermal toxicity : LD50 rabbit Dose: > 5,000 mg/kg

Sensitisation (Component) : Component: 68912-13-0
Test substance: 0.0%
maximisation study human
Result: Did not cause sensitization on laboratory animals.
Test substance: 20% in petrolatum

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

2,2,2-trichloro-1-phenylehtylacetate:
LD50 Oral - rat - 6.800 mg / kg
DL50 Dermal - on rabbit -> 2,000 mg / kg
LD50 (rat) Oral (mg/kg body weight) = 6800
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2000

Terpineol:
LD50 oral, rat-5,420 mg/kg
Ld50 oral, rat-4,300 mg/kg
Dermal Ld50-rabbit-> 2,000 mg/kg
LD50 (rat) Oral (mg/kg body weight) = 2000
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2000
CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 4,76

2-Methyl-3-(p-isopropylphenyl)propionaldehyde:
Oral-rat LD50 3810 mg / kg
Remarks: Behavior: ataxia Behavior: coma Cute and annexed: other: hair

Food and Cosmetics Toxicology. Vol. 2, Pg. 327, 1964.

LD50 Dermal - rat -> 5.000 mg / kg
Remarks: Sense organs: sight: lacrimation Behavior: drowsiness (depressive activity generic) Skin and appendages: other: hair
LD50 (rat) Oral (mg/kg body weight) = 3810
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

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

2-benzylideneheptanal:
LD50 (rat) Oral (mg/kg body weight) = 3730
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2000

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

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

2-Methylundecanal:
LD50 Oral - rat -> 5.000 mg / kg
DL50 Dermal - rabbit -> 10,000 mg / kg
LD50 (rat) Oral (mg/kg body weight) = 5000
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 10000

pentyl salicylate:
LD50 (rat) Oral (mg/kg body weight) = 2000

Cinnamyl alcohol:
LD50 (rat) Oral (mg/kg body weight) = 2000
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

Geraniol:
LD50 (rat) Oral (mg/kg body weight) = 3500
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000
CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 0,5

Anisaldehyde (p-Methoxybenzaldehyde):
LD50 (rat) Oral (mg/kg body weight) = 3200
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

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

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

Isoeugenol:
LD50 (rat) Oral (mg/kg body weight) = 1560
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 770

ethanol:
ROUTES of EXPOSURE: the substance can be absorbed into the body by inhalation of its fumes and ingestion.
INHALATION RISK: A harmful contamination of the air will be reached quite slowly due to evaporation of the substance at 20 C.
Effects of short-term exposure: the substance is irritating to the eyes. Inhalation of high vapour can concetrazioni cause irritation of the eyes and respiratory tract. The substance may cause effects on the central nervous system effects of REPEATED EXPOSURE or long term: the liquid degreasing the skin features. The substance may have an effect on the high central nervous system respiratory tract, causing irritation, headaches, fatigue and lack of concentration. See Notes.

ACUTE HAZARDS/Symptoms INHALATION Cough. Headaches. Fatigue. Drowsiness.
CUTE CUTE.
EYE Redness. Pain. Burning.

SWALLOWED burning sensation. Headaches. Confusion. Vertigo. State of unconsciousness.

N O T and consumption of ethanol during pregnancy can have adverse effects on the unborn child. Chronic ethanol ingestion can cause cirrhosis of the liver.
LD50 (rat) Oral (mg/kg body weight) = 7060
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 20000
CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 116,9

cinnamaldehyde:
Oral LD50-rat-2,220 mg/kg
Observations: behavior: somnolence (General depressed activity) Diarrhea
LD50 (rat) Oral (mg/kg body weight) = 2200

11.2. Information on other hazards

No data available.

11.2.1. Endocrine disrupting properties

The product does not contain substances identified as endocrine disruptors for human health according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

The product does not contain substances identified as endocrine disruptors for the environment according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

SECTION 12. Ecological information

12.1. Toxicity

Related to contained substances:
Fatty acids, C16-18 (even numbered) and C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized:
fish, CL50 : 1,91 mg/l (OECD 203 (96h))
daphnia, CE50 : 2,23 mg/l (EU Method C.2 (48h))
alga, CI50 : 2,14 mg/l (OECD 201 (72h))
C(E)L50 (mg/l) = 1,91 1
1

3a,4,5,6,7,7a-hexahydro-1H-4,7-methanoinden-1-yl propionate:
C(E)L50 (mg/l) = 4,6

Terpineol:
C(E)L50 (mg/l) = 68

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 1
1

2-benzylideneheptanal:
Fish: 96h LC50: 0.91 mg / L (Oryzias latipes)
Crustacea: 48h EC50: 0.28 mg / L (Daphnia magna)
Algae: 72h EC50: 2.3 mg / L (Selenastrum capricornutum)
C(E)L50 (mg/l) = 0,28

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 1
1

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 1
1

Geraniol:
static test LC50-zebrafish (zebra fish)-ca. 22 mg/l-96 h (OECD Test Guideline 203)
Broadcast application EC50-Daphnia magna (Water flea)-10.8 mg/l-48 h (OECD Test Guideline 202)
Growth inhibition EC50-Desmodesmus subspicatus (green algae)-13.1 mg/l-72 h
C(E)L50 (mg/l) = 10,8 1
1

Anisaldehyde (p-Methoxybenzaldehyde):
C(E)L50 (mg/l) = 43

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

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 1
1

ethanol:
C(E)L50 (mg/l) = 11200

The product is dangerous for the environment as it is toxic for 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:
3,7-dimethyloctan-3-ol:
aerobic-28 d exposure time Result: 60-70%-Rapidly biodegradable.
Method: OECD TG 301

2-benzylideneheptanal:
51% (by BOD), 81% (by TOC)

pentyl salicylate:
Pentyl 2-hydroxybenzoate is predicted to be readily degradable.

Geraniol:
Aerobic chemical oxygen demand:
Exposure time 3 days
Result: 80 - 100% - Easily biodegradable.
(OECD Test Guideline 301A)

Anisaldehyde (p-Methoxybenzaldehyde):
BOD (5d): 2.020 mg/g
COD: 1.5150 mg/g
Ratio BOD/COD: 60%

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

Related to contained substances:
Geraniol:
log Pow: 3.47

12.5. Results of PBT and vPvB assessment

The product does not contain substances identified as PBT according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

The product does not contain substances identified as vPvB according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

12.6. Endocrine disrupting properties

The product does not contain substances identified as endocrine disruptors for human health according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

The product does not contain substances identified as endocrine disruptors for the environment according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

12.7. Other adverse effects

No adverse effects

Regulation (EC) No 2006/907 - 2004/648
The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

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

Not included in the scope of application regulations concerning the transport of dangerous goods: by road (ADR); by rail (RID); by air (ICAO / IATA); by sea (IMDG).

14.2. UN proper shipping name

None

14.3. Transport hazard class(es)

None

14.4. Packing group

None

14.5. Environmental hazards

None

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

DELEGATED REGULATION (EU) 2024/2564 (ATP XXII)
DELEGATED REGULATION (EU) 2023/707
REGULATION (EU) No 1357/2014 - waste:

HP14 - Ecotoxic

Substances in the Candidate List (REACH Article 59)
Based on available data, no SVHC substances are present

15.2. Chemical safety assessment

No chemical safety assessment was carried out by the supplier

SECTION 16. Other information

16.1. Other information

Points modified compared to previous release: 2.1. Classification of the substance or mixture, 2.2. Label elements, 2.3. Other hazards, 3.2 Mixtures, 4.1. Description of first aid measures, 4.3. Indication of any immediate medical attention and special treatment needed, 8.1. Control parameters, 9.2. Other information, 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008, 11.2. Information on other hazards, 12.1. Toxicity, 12.2. Persistence and degradability, 12.5. Results of PBT and vPvB assessment, 12.6. Endocrine disrupting properties, 12.7. Other adverse effects, 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Description of the hazard statements exposed to point 3
H411 = Toxic to aquatic life with long lasting effects.
H315 = Causes skin irritation.
H412 = Harmful to aquatic life with long lasting effects.
H319 = Causes serious eye irritation.
H317 = May cause an allergic skin reaction.
H335 = May cause respiratory irritation.
H400 = Very toxic to aquatic life.
H410 = Very toxic to aquatic life with long lasting effects.
H302 = Harmful if swallowed.
H318 = Causes serious eye damage.
H361 = Suspected of damaging fertility or the unborn child .
H312 = Harmful in contact with skin.
H332 = Harmful if inhaled.
H225 = Highly flammable liquid and vapour.

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

H317 - May cause an allergic skin reaction. Classification procedure: Calculation method
H319 - Causes serious eye irritation. Classification procedure: Calculation method
H412 - Harmful to aquatic life with long lasting effects. Classification procedure: Calculation method

Main normative references:
Directive 1999/45/EC
Directive 2001/60/EC
Regulation (EC) No 1272/2008
Regulation (EU) No 453/2010
Regulation (EC) No 790/2009 (1st ATP CLP)
Regulation (EU) No 286/2011 (2nd ATP CLP)
Regulation (EU) No 618/2012 (3rd ATP CLP)
Regulation (EU) No 487/2013 (4th ATP CLP)
Regulation (EU) No 944/2013 (5th ATP CLP)
Regulation (EU) No 605/2014 (6th ATP CLP)
Regulation (EU) 2015/1221 (7th ATP CLP)
Regulation (EU) 2016/918 (8th ATP CLP)
Regulation (EU) 2016/1179 (9th ATP CLP)
Regulation (EU) 2017/776 (10th ATP CLP)

Regulation (EU) 2018/669 (11th ATP CLP)
Regulation (EU) 2019/521 (12th ATP CLP)
Delegated Regulation (EU) 2018/1480 (13th ATP CLP)
Delegated Regulation (EU) 2020/217 (14th ATP CLP)
Delegated Regulation (EU) 2020/1182 (15th ATP CLP)
Delegated Regulation (EU) 2021/643 (16th ATP CLP)
Delegated Regulation (EU) 2021/849 (17th ATP CLP)
Delegated Regulation (EU) 2022/692 (18th ATP CLP)
Delegated Regulation (EU) 2023/707 (Introduction of new hazard and endocrine classes)
Delegated Regulation (EU) 2023/1434 (19th ATP CLP)
Delegated Regulation (EU) 2023/1435 (20th ATP CLP)
Delegated Regulation (EU) 2024/197 (21st ATP CLP)
Delegated Regulation (EU) 2024/2564 (22nd ATP CLP)
Delegated Regulation (EU) 2025/1222 (23rd ATP CLP)
Databases consulted: ECHA (European Chemicals Agency), internal databases of raw materials provided by the respective manufacturers.

Legend of abbreviations and acronyms

(Q)SAR: (Quantitative) Structure-Activity Relationships

ACGIH / TWA: 8-hour time-weighted average

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

AIIC: Australian Inventory of Industrial Chemicals

ASTM: ASTM International (American Society for Testing and Materials)

ATE: Acute Toxicity Estimates

BCF: BioConcentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAO: Cargo Aircraft Only

CAS: Chemical Abstracts Service number

CAV: Poison Control Center

CE: EC number (European inventory of Existing Commercial chemical Substances)

CLP: Regulation (EC) No 1272/2008

CMR: Carcinogenic, mutagenic or toxic for reproduction

COD: Chemical Oxygen Demand

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DIN: German Institute for Standardization standard

DMEL: Derived Minimal Effect Level

DNEL: Derived No-Effect Level

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

EC50: Effective Concentration to 50% of test population

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

ELx: Loading rate associated with x% response

EmS: Emergency Schedule

ErCx: Concentration associated with x% growth rate response

GefStoffVO: Ordinance on Hazardous Substances, Germany

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

GLP: Good Laboratory Practice

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association

IATA DGR: Dangerous Goods Regulations of the International Air Transport Association

IBC: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk

IC50: Inhibitory Concentration to 50% of test population

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the International Civil Aviation Organization

IMDG: International Maritime Dangerous Goods Code

IMO: International Maritime Organization

INCI: International Nomenclature of Cosmetic Ingredients

INDEX: Identification number in Annex VI of CLP

ISO: International Organization for Standardization

IT OEL CMR / Valori limite 8 ore: 8-hour limit values

IT OEL CMR / Valori limite breve durata: Short-term limit values

IT VLEP / STEL: Limit Values - Short Term

IT VLEP / TWA: Limit Values - 8 Hours

KSt: Explosion coefficient

LC50: Lethal Concentration 50%

LCLo: Lowest Lethal Concentration

LD50: Lethal Dose 50%

LOAEC: Lowest Observed Adverse Effect Concentration

LOAEL: Lowest Observed Adverse Effect Level

LOEC: Lowest Observed Effect Concentration

LOEL: Lowest Observed Effect Level

LTE: Long-term exposure

MAK: Maximum Allowable Concentration

MARPOL: International Convention for the Prevention of Pollution from Ships

NEN: Dutch standard

NOAEL: No Observed Adverse Effect Level

NOEC: No Observed Effect Concentration

NOEL: No Observed Effect Level

NOELR: No Observed Effect Loading Rate

OCSE (OECD): Organisation for Economic Co-operation and Development

OEL: Occupational Exposure Limit

OPPTS: Office of Pollution Prevention and Toxics

PBT: Persistent, Bioaccumulative and Toxic

PEC: Predicted Effect Concentration

PEL: Permissible Exposure Limit

PMT: Persistent, Mobile and Toxic

PNEC: Predicted No-Effect Concentration

PNOS: Particulates Not Otherwise Specified

REACH: Regulation (EC) No 1907/2006

RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail

SADT: Self-Accelerating Decomposition Temperature

SPM: Synthetic Polymer Microparticles

STA (ATE): Acute Toxicity Estimate

STE: Short-term exposure

STOT: Specific Target Organ Toxicity

SVHC: Substance of Very High Concern

ThOD: Theoretical Oxygen Demand

TLV: Threshold Limit Value

TLV CEILING: Concentration that should not be exceeded during any part of the working exposure

TWA STEL: Short-term exposure limit

TWATLV: Threshold Limit Value - Time Weighted Average (8-hour day)

UVCB: Substances of Unknown or Variable composition, Complex reaction products or Biological materials

VOC: Volatile Organic Compound

vPvB: Very Persistent and Very Bioaccumulative

vPvM: Very Persistent and Very Mobile

VwVwS: Administrative Regulation on Substances Hazardous to Waters

WGK: Water Hazard Class (Germany)

** 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.