

SECTION 1. Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product code : Hygienfresh Detergente White Xtra

Trades code : A39-512

Product line: Hygienfresh

UFI: JE51-J0HX-M00F-45P8

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

Deo detergent for clothes and white clothing. Shine and smoothes her your white clothes

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.comEmail 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

Hazard Class and Category Code(s):

Skin Irrit. 2, Eye Irrit. 2

Hazard statement Code(s):

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

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

2.2. Label elements

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

Issued on 02/11/2022 - Rel. # 6 on 02/11/2022

2 / 21

In conformity to Regulation (EU) 2020/878

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



Hazard statement Code(s):
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.

Supplemental Hazard statement Code(s):
EUH208 - Contains dipentene, reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1), Isoeugenol. May produce an allergic reaction.

Precautionary statements:

General

- P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.

Prevention

- P264 - Wash your hand thoroughly after handling.
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.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.

Contains (Reg.EC 648/2004):

5% < 15% anionic surfactants, < 5% perfumes, enzymes, optical brighteners, Miscela di:
5-cloro-2-metil-2H-isotiazol-3-one [EC no. 247-500-7]; 2-metil-2H-isotiazol-3-one [EC no. 220-239-6] (3:1), non-ionic surfactants, D-Limonene ((S)-p-menta-1,8-diene), a-Hexylcinnamaldehyde, Linalool, Benzyl salicylate, Citronellol, Citrale

Content of VOC ready to use condition: 1,13 %

UFI: JE51-J0HX-M00F-45P8

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 |
|--|------------------------|--|--------------|-------------|-----------|-------------------------------|
| Sodium Lauryl Ether sulfate | $\geq 5 < 10\%$ | Skin Irrit. 2, H315; Eye Dam. 1, H318; Aquatic Chronic 3, H412 Limits: Eye Dam. 1, H318 %C ≥ 10 ; Eye Irrit. 2, H319 $5 \leq$ %C < 10 ; 1 1 ATE oral = 2.000,0 mg/kg ATE dermal = 2.000,0 mg/kg ATE inhal = 4.100,0mg/l/4 h | ND | 68891-38-3 | 500-234-8 | 01-2119488 639-16 |
| Sodium dodecylbenzenesulfonate | $\geq 1 < 5\%$ | Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Irrit. 2, H319 ATE oral = 438,0 mg/kg ATE dermal = 2.000,0 mg/kg | ND | 25155-30-0 | 246-680-4 | NR |
| Alcohols, C13-15, branched and linear, ethoxylated | $\geq 1 < 5\%$ | Acute Tox. 4, H302; Eye Dam. 1, H318; Aquatic Chronic 3, H412 Limits: Eye Irrit. 2, H319 %C ≤ 10 ; Eye Dam. 1, H318 %C > 10 ; 1 1 ATE oral = 300,0 mg/kg | ND | 157627-86-6 | ND | NR |
| Coconut diethanolamide | $\geq 1 < 3\%$ | Skin Irrit. 2, H315; Eye Dam. 1, H318 ATE oral = 5.000,0 mg/kg | ND | 68603-42-9 | 271-657-0 | NR |
| 2-aminoethanol, monoester with boric acid | $\geq 1 < 5\%$ | Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335 ATE oral = 2.000,0 mg/kg ATE dermal = 2.000,0 mg/kg | ND | 10377-81-8 | 233-829-3 | NR |
| disodium 2,2'-([1,1'-biphenyl]-4,4'-diyldivinyl ene)bis(benzenesulphonate) | $\geq 0,1 < 1\%$ | Eye Irrit. 2, H319 ATE oral = 2.000,0 mg/kg ATE dermal = 2.000,0 mg/kg ATE inhal = 3,7mg/l/4 h | ND | 27344-41-8 | 248-421-0 | NR |
| dipentene Note: C | $\geq 0,1 < 1\%$ | 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 | 601-029-00-7 | 5989-27-5 | 205-341-0 | 01-2119529 223-47-000 1 |

| Substance | Concentration[w/w] | Classification | Index | CAS | EINECS | REACH |
|--|--------------------|--|--------------|------------|-----------|-------------------------------|
| | | mg/kg ATE dermal = 5.000,0 mg/kg | | | | |
| α-Hexylcinnamaldehyde | < 0,1% | Skin Sens. 1, H317; Aquatic Chronic 2, H411 ATE oral = 2.450,0 mg/kg | ND | 101-86-0 | 202-983-3 | 01-2119533 092-50 |
| 4-tert-Butylcyclohexyl acetate - FEMA 0 | < 0,1% | 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 | 01-2119976 286-24 |
| Subtilisin | < 0,1% | Skin Irrit. 2, H315; Eye Dam. 1, H318; Resp. Sens. 1, H334; STOT SE 3, H335 ATE oral = 1.800,0 mg/kg ATE inhal = 0,1mg/l/4 h | 647-012-00-8 | 9014-01-1 | 232-752-2 | 01-2119480 434-38 |
| Linalool | < 0,1% | 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 | 01-2119474 016-42-000 0 |
| Benzyl salicylate | < 0,1% | Skin Sens. 1B, H317; Eye Irrit. 2, H319; Aquatic Chronic 3, H412 1 1 ATE oral = 2.227,0 mg/kg | 607-754-00-5 | 118-58-1 | 204-262-9 | 01-2119969 442-31 |
| Linalyl acetate - FEMA 2636 | < 0,1% | 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 | 01-2119454 789-19-000 0 |
| amylase, α- | < 0,1% | Resp. Sens. 1, H334 ATE oral = 2.000,0 mg/kg | 647-015-00-4 | 9000-90-2 | 232-565-6 | NR |
| Citronellol | < 0,1% | Skin Irrit. 2, H315; Skin Sens. 1B, H317; Eye Irrit. 2, H319; STOT SE 3, H335 ATE oral = 3.450,0 mg/kg | ND | 106-22-9 | 203-375-0 | 01-2119453 995-23-000 0 |

| Substance | Concentration[w/w] | Classification | Index | CAS | EINECS | REACH |
|---------------------|--------------------|--|--------------|-----------|-----------|-------------------------------|
| | | ATE dermal = 2.650,0 mg/kg ATE inhal = 1,3mg/l/4 h | | | | |
| cineole - FEMA 2465 | < 0,1% | Flam. Liq. 3, H226; Skin Sens. 1B, H317 ATE oral = 2.480,0 mg/kg ATE dermal = 5.000,0 mg/kg | ND | 470-82-6 | 207-431-5 | NR |
| citral | < 0,1% | Skin Irrit. 2, H315; Skin Sens. 1, H317 ATE oral = 4.960,0 mg/kg ATE dermal = 2.250,0 mg/kg | 605-019-00-3 | 5392-40-5 | 226-394-6 | 01-2119462 829-23-000 1 |

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. Suitable: LaTeX, nitrile, PVC

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 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.
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

Subtilisin:

ACGIH TLV: Ceiling: 0.00006 mg/m³ Ceiling (as crystalline active enzyme, listed under Subtilisins)

Belgium: 0.00006 mg/m³ Maximum Limit Value (8 hours)

Denmark: Ceiling: 0.00006 mg/m³

Ireland: TWA: 0.00006 mg/m³ STEL: 0.00006 mg/m³

Netherlands: Ceiling: 0.00006 mg/m³

Norway: 0.00006 mg/m³ Ceiling

Portugal: Ceiling: 0.00006 mg/m³

Spain: VLA-EC: 0.00006 mg/m³

Sweden: 1 glycineunit/m³ LLV 3 glycineunit/m³ LLV

Switzerland: STEL: 0.00006 mg/m³

Germany: = 1 glycineunit/m³ LLV = 3 glycineunit/m³ LLV

United Kingdom: 0.00004 mg/m³ TWA

amylase, α-:

Alpha-amylase: DMEL = 60 ng/m³

Fresh Water PNEC 0.06 g/L

PNEC seawater 0.006 g/L

PNEC waste treatment plants (STP) 65000 g/L

- Substance: Sodium Lauryl Ether sulfate

DNEL

Systemic effects Long term Workers inhalation = 175 (mg/m³)

Systemic effects Long term Workers dermal = 2750 (mg/kg bw/day)

Systemic effects Long term Consumers inhalation = 52 (mg/m³)

Systemic effects Long term Consumers dermal = 1650 (mg/kg bw/day)

Systemic effects Long term Consumers oral = 15 (mg/kg bw/day)

PNEC

Sweet water = 0,24 (mg/l)

Issued on 02/11/2022 - Rel. # 6 on 02/11/2022

8 / 21

In conformity to Regulation (EU) 2020/878

sediment Sweet water = 5,45 (mg/kg/sediment)
Sea water = 0,02 (mg/l)
sediment Sea water = 0,54 (mg/kg/sediment)
intermittent emissions = 0,07 (mg/l)
STP = 10000 (mg/l)
ground = 0,946 (mg/kg ground)

- Substance: Coconut diethanolamide

DNEL

Systemic effects Long term Workers inhalation = 73,4 (mg/m³)
Systemic effects Long term Workers dermal = 4,16 (mg/kg bw/day)
Systemic effects Long term Consumers inhalation = 21,73 (mg/m³)
Systemic effects Long term Consumers dermal = 2,5 (mg/kg bw/day)
Systemic effects Long term Consumers oral = 6,25 (mg/kg bw/day)
Local effects Long term Workers dermal = 0,09 (mg/kg bw/day)
Local effects Long term Consumers dermal = 0,0562 (mg/kg bw/day)

PNEC

Sweet water = 0,007 (mg/l)
sediment Sweet water = 0,195 (mg/kg/sediment)
Sea water = 0,001 (mg/l)
sediment Sea water = 0,019 (mg/kg/sediment)
intermittent emissions = 0,024 (mg/l)
STP = 830 (mg/l)
ground = 0,035 (mg/kg ground)

- Substance: 2-aminoethanol, monoester with boric acid

DNEL

Systemic effects Long term Workers inhalation = 5,9 (mg/m³)
Systemic effects Long term Workers dermal = 3,3 (mg/kg bw/day)
Systemic effects Long term Consumers inhalation = 1,4 (mg/m³)
Systemic effects Long term Consumers dermal = 1,7 (mg/kg bw/day)
Systemic effects Long term Consumers oral = 1,7 (mg/kg bw/day)

PNEC

Sweet water = 0,026 (mg/l)
sediment Sweet water = 0,054 (mg/kg/sediment)
Sea water = 0,003 (mg/l)
sediment Sea water = 0,005 (mg/kg/sediment)
intermittent emissions = 0,26 (mg/l)
STP = 10 (mg/l)
ground = 0,014 (mg/kg ground)

- Substance: disodium 2,2'-([1,1'-biphenyl]-4,4'-diyldivinylene)bis(benzenesulphonate)

DNEL

Systemic effects Long term Workers inhalation = 20,5 (mg/m³)
Systemic effects Long term Workers dermal = 53 (mg/kg bw/day)
Systemic effects Long term Consumers dermal = 19 (mg/kg bw/day)
Systemic effects Long term Consumers oral = 1,9 (mg/kg bw/day)

PNEC

Sweet water = 0,0625 (mg/l)
sediment Sweet water = 198000 (mg/kg/sediment)
Sea water = 0,00625 (mg/l)
sediment Sea water = 19800 (mg/kg/sediment)
intermittent emissions = 0,1028 (mg/l)
STP = 100 (mg/l)
ground = 1 (mg/kg ground)

- 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: Subtilisin**DNEL**

Systemic effects Long term Consumers oral = 1,8 (mg/kg bw/day)

Systemic effects Short term Consumers oral = 3,6 (mg/kg bw/day)

Local effects Long term Workers inhalation = 0,06 (mg/m³)Local effects Long term Consumers inhalation = 0,000015 (mg/m³)**PNEC**

Sweet water = 0,0017 (mg/l)

Sea water = 0,00017 (mg/l)

intermittent emissions = 0,0009 (mg/l)

STP = 65 (mg/l)

ground = 0,568 (mg/kg ground)

- 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: amylase, α -**DNEL**Local effects Long term Workers inhalation = 0,00006 (mg/m³)Local effects Long term Consumers inhalation = 0,000015 (mg/m³)**PNEC**

Sweet water = 0,0052 (mg/l)

Sea water = 0,00052 (mg/l)

intermittent emissions = 0,052 (mg/l)

STP = 65 (mg/l)

ground = 0,001 (mg/kg ground)

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

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

Manipulate with gloves. The gloves should be checked before being used. Use a technique suitable 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 the 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

permeation time: 480 min

(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.

Subtilisin:

The local authority must be informed if the losses cannot be limited

Waste water must be conveyed to the waste water treatment plant

SECTION 9. Physical and chemical properties**9.1. Information on basic physical and chemical properties**

| Physical and chemical properties | Value | Determination method |
|--|-----------------------------|----------------------|
| Appearance | Liquid | |
| Colour | white | |
| Odour | characteristic | |
| Odour threshold | not determined | |
| pH | 8.5 - 10 | |
| Melting point/freezing point | not determined | |
| Initial boiling point and boiling range | not determined | |
| Flash point | nonflammable | 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 | 1.00 - 1.08 gr/cm3 | |
| Solubility | Completely soluble in water | |
| Water solubility | not determined | |
| 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: 1,13 %

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 sulfide, 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 = 5.980,6 mg/kg

ATE(mix) dermal = 60.241,0 mg/kg

ATE(mix) inhal = ∞

(a) acute toxicity: 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

α-Hexylcinnamaldehyde: Oral (rat) LD50: 2450 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.

Benzyl salicylate: Oral Rat LD50 = 2227 mg/kg bw

Citronellol: orl-rat LD50:3450 mg/kg

skn-rbt LD50:2650 mg/kg

ihl-rat LCLo:1.3 mg/m3/4H

(b) skin corrosion/irritation: If brought into contact with the skin, the product causes significant inflammation with erythema, scabs, or edema.

Sodium Lauryl Ether sulfate: Acute effects: contact with eyes will cause irritation; symptoms may include: redness, edema, pain and tears.

Through contact with the skin has irritation with erythema, edema, dryness and cracking.

Sodium dodecylbenzenesulfonate: Skin irritation-not irritating (2.5%), moderate irritation (5%), moderate-severe irritation (47-50%).

Coconut diethanolamide: Irritating

2-aminoethanol, monoester with boric acid: Irritation of the skin:

Rabbit (New Zealand White): non-irritant, (1993). Eye irritation:

Rabbit (New Zealand White): moderately irritating, 1998

Bovine (in vitro study): not severely irritating or corrosive, 2010

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

Benzyl salicylate: Skin - rabbit

Result: No skin irritation

(OECD Test Guideline 404)

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

(c) serious eye damage/irritation: If brought into contact with eyes, the product, causes significant irritations which may last for more than 24 hours.

Sodium dodecylbenzenesulfonate: Eye irritation-mild irritation (1%); moderate irritation (5%), and severe irritation (47-50%)

Coconut diethanolamide: Acute Irritazione\Corrosione eyes

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.

Benzyl salicylate: Eyes - In vitro study

Result: Moderate eye irritation
(OECD Test Guideline 437)

Eyes - rabbit

Result: Irritating to eyes.

(Draize Test)

(d) respiratoryorskinsensitisation: Coconut diethanolamide: Non-sensitizing

Subtilisin: Respiratory system: substance-sensitizing (human experience)

Citronellol: mouse - May cause sensitization 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.

Subtilisin: No indication of mutagenic effects (OECD TG 471, 473, 476)

Linalyl acetate: 14550 Rat LD50 (mg/kg bw)

13360 Mouse LD50 (mg/kg bw)

(f) carcinogenicity: Sodium dodecylbenzenesulfonate: IARC: no component of this product present at levels greater than or equal to 0.1% identified as known or anticipated carcinogen by IARC.

Coconut diethanolamide: IARC Group 2B carcinogen-possible carcinogenic to humans

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)

(g) eproductivetoxicity: based on available data, the classification criteria are not met.

(h) specific target organ toxicity (STOT) single exposure: Subtilisin: Target organ-specific toxic (single exposure) Irritant, respiratory tract (ACGIH 2001)

(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)

(j) aspiration hazard: Benzyl salicylate: in vivo assay - mouse

May cause allergic skin reaction.

(OECD Test Guideline 429)

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

Issued on 02/11/2022 - Rel. # 6 on 02/11/2022

14 / 21

In conformity to Regulation (EU) 2020/878

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:

Sodium Lauryl Ether sulfate:

LD50 (alcohols, C12-14, ethoxylated, sulfated, sodium salts; CAS No.: 68891-38-3)

Via Inhalation Administration:

Test species: rat

Value: 4100 mg/kg

Specification: LD50 (alcohols, C12-14, ethoxylated, sulfated, sodium salts; CAS No.: 68891-38-3)

Via Dermal intake:

Test species: rat

Value: > 2000 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) = 4100

Sodium dodecylbenzenesulfonate:

LD50 (rat) Oral (mg/kg body weight) = 438

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2000

Alcohols, C13-15, branched and linear, ethoxylated:

LD50 (rat) Oral (mg/kg body weight) > 300

Coconut diethanolamide:

Ingestion: oral rat LD50: > 2,000 mg/kg

Eye contact: irritating to the eye (rabbit). Can cause irreversible damage to the eye.

Skin contact: moderately irritating for a single application (4 h-rabbit)

Readily biodegradable in accordance with the criteria of Directive 67/548 and subsequent modifications.

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

2-aminoethanol, monoester with boric acid:

Acute oral toxicity

Parameter: LD50 (2-aminoethanol, monoester with boric acid; CAS No.: 10377-81-8)

Exposure route: Orally

Species: Rat

Effective dose: > 2000 mg / kg

Acute dermal toxicity

Parameter: discriminating dose. (2-aminoethanol, monoester with boric acid; CAS No.: 10377-81-8)

Exposure route: Dermal

Species: Rat

Effective dose: > 2000 mg / kg

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

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2000

disodium 2,2'-([1,1'-biphenyl]-4,4'-diyldivynylene)bis(benzenesulphonate):

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) = 3,66

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 be 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 excitement, 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

α -Hexylcinnamaldehyde:

LD50 (rat) Oral (mg/kg body weight) = 2450

4-tert-Butylcyclohexyl acetate:

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

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

Subtilisin:

LD50 (rat) Oral (mg/kg body weight) = 1800

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 0,13

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

Benzyl salicylate:

LD50 (rat) Oral (mg/kg body weight) = 2227

Linalyl acetate:

LD50 (rat) Oral (mg/kg body weight) = 14550

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 13360

amylase, α -:

LD50 oral, rat-2,000 mg/kg

LD50 (rat) Oral (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

cineole:

LD50 (rat) Oral (mg/kg body weight) = 2480

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

citral:

LD50 (rat) Oral (mg/kg body weight) = 4960

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2250

11.2. Information on other hazards

No data available.

SECTION 12. Ecological information

12.1. Toxicity

Related to contained substances:

Sodium Lauryl Ether sulfate:

LC50 (alcohols, C12-14, ethoxylated, sulfated, sodium salts; CAS No.: 68891-38-3)

Parametro: Fish

Danio Rerio

Value = 7.1 mg/l

For. test: 96 h

Specification: EC50 (alcohols, C12-14, ethoxylated, sulfated, sodium salts; CAS No.: 68891-38-3)

Parametro: Daphnia

Daphnia magna

Value = 7.2 mg/l

For. test: 48 h

Specification: EC50 (alcohols, C12-14, ethoxylated, sulfated, sodium salts; CAS No.: 68891-38-3)

Parametro: Algae

Scenedesmus subspicatus

Value = 27 mg/l

C(E)L50 (mg/l) = 7,1

Sodium dodecylbenzenesulfonate:

C(E)L50 (mg/l) = 1,67

Alcohols, C13-15, branched and linear, ethoxylated:

C(E)L50 (mg/l) = 1

Coconut diethanolamide:

Acute/prolonged toxicity to fish: (83d) 2.52 mg/l (brachydanio rerio)

Acute toxicity to Aquatic Invertebrates: EC50 (12:0 am) 2.8 mg/l (daphnia Magna)

Primary: Biodegradabilit > 90% (OECD)

Easy Biodegradabilit: 60% > (manometric Tests, O2 consumption)

Theoretical O2 demand (thod) 2.52 mg O2/mg.

Chemical O2 demand (COD): 2.51 mg O2/mg.

C(E)L50 (mg/l) = 2,39

2-aminoethanol, monoester with boric acid:

Acute (short-term) toxicity on fish

Parameter: LC50 (2-aminoethanol, monoester with boric acid; CAS No.: 10377-81-8)

Species: Cyprinus carpio

Effective dose: = 617 mg / l

Exposure time: 96 h

Acute (short-term) toxicity to Daphnia

Parameter: EC50 (2-aminoethanol, monoester with boric acid; CAS No.: 10377-81-8)

Issued on 02/11/2022 - Rel. # 6 on 02/11/2022

17 / 21

In conformity to Regulation (EU) 2020/878

Species: *Daphnia magna*
Effective dose: = 423 mg / l
Exposure time: 48 h
Acute (short-term) toxicity to algae
Parameter: EC50 (2-aminoethanol, monoester with boric acid; CAS No.: 10377-81-8)
Species: *Pseudokirchneriella subcapitata*
Effective dose: = 26 mg / l
Exposure time: 72 h
C(E)L50 (mg/l) = 26

disodium 2,2'-([1,1'-biphenyl]-4,4'-diyldivinylene)bis(benzenesulphonate):
C(E)L50 (mg/l) = 10

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

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

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

Subtilisin:

C(E)L50 (mg/l) = 0,586

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

Benzyl salicylate:

Zebra fish (*Brachydanio rerio*) 96 hour LC50 = 1.03 mg/L

48 hour LC50 = 1.4mg/l

C(E)L50 (mg/l) = 1,03

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

amylase, α -:
EC50 (72 h): 100 mg/l > Desmodesmus subspic
LC50 (96 h): 100 mg/l > Pimephales promelas EC50 (48 h): > 100 mg/l Daphnia Magna
C(E)L50 (mg/l) = 100

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

cineole:
C(E)L50 (mg/l) = 102

citral:
Oryzias latipes OECD TG 203 LC50 (96 h): 4.1 mg/L
Other Daphnia magna EC50 (72 hours) = 7 mg/L
Senastrum capricornutum Other EC50 (72hr) = 5 mg/L
C(E)L50 (mg/l) = 4,1

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

12.2. Persistence and degradability

Related to contained substances:
Sodium Lauryl Ether sulfate:
Easily biodegradable

2-aminoethanol, monoester with boric acid:
Parameter: Biodegradation
Effective dose: approx. 73%
Exposure time: 28 days
Parameter: Biodegradation
Effective dose: > 60%
Exposure time: 10 days
Easily biodegradable.

Subtilisin:
Rapidly biodegradable (OECD TG 301B)

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

amylase, α -:
Quickly ecologic (96% after 14 days)

citral:
OECD TG 301 c Readily biodegradable
1/2 T Photodegradation = 1.14 years (direct) T 1/2 = 2.83 hour s (indirect)

12.3. Bioaccumulative potential

Related to contained substances:

Sodium dodecylbenzenesulfonate:

Bioaccumulation-28 leptomismacrochirus d -64 g/l

Bioconcentration factor (BCF): 220

Subtilisin:

Do not bio-accumulate

Linalool:

106

citral:

None

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. Operate according to local or national regulations

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**

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

15.2. Chemical safety assessment

The supplier has made an assessment of chemical safety

SECTION 16. Other information**16.1. Other information**

Points modified compared to previous release: 2.2. Label elements, 2.3. Other hazards, 4.1. Description of first aid measures, 8.1. Control parameters, 9.2. Other information, 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008, 12.1. Toxicity, 12.2. Persistence and degradability, 12.3. Bioaccumulative potential, 12.4. Mobility in soil

Description of the hazard statements exposed to point 3

- H315 = Causes skin irritation.
- H318 = Causes serious eye damage.
- H412 = Harmful to aquatic life with long lasting effects.
- H302 = Harmful if swallowed.
- H312 = Harmful in contact with skin.
- H319 = Causes serious eye irritation.
- H335 = May cause respiratory irritation.
- H226 = Flammable liquid and vapour.
- H317 = May cause an allergic skin reaction.
- H400 = Very toxic to aquatic life.

H410 = Very toxic to aquatic life with long lasting effects.

H411 = Toxic to aquatic life with long lasting effects.

H334 = May cause allergy or asthma symptoms or breathing difficulties if inhaled

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.