

GERMESEN FRESH

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

- 1.1 Product identifier:** GERMESEN FRESH
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
 Relevant uses: Air freshener. For professional use only.
 Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Details of the supplier of the safety data sheet:** Detergentes y Desinfectantes, S.A.
 Polígono Industrial Partida Alameda, parcela B
 46721 Potries - Valencia - Spain
 Phone.: +34962800718 -
 Fax: +34962899379
 dydsa@dydsa.com
 www.dydsa.com
- 1.4 Emergency telephone number:** 915 620 420

SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture:**
CLP Regulation (EC) nº 1272/2008:
 Classification of this product has been carried out in accordance with CLP Regulation (EC) nº 1272/2008.
 Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard, Category 3, H412
- 2.2 Label elements:**
CLP Regulation (EC) nº 1272/2008:
Hazard statements:
 Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects
Precautionary statements:
 P101: If medical advice is needed, have product container or label at hand
 P102: Keep out of reach of children
 P103: Read label before use
 P273: Avoid release to the environment
 P501: Dispose of the contents/containers in accordance with the current legislation on waste treatment
Supplementary information:
 EUH208: Contains 2-(4-tert-Butylbenzyl)propionaldehyde, 2,4-dimethylcyclohex-3-ene-1-carbaldehyde, 2-methylundecanal, Cedryl methyl ketone, Citral, Citronellal, Citronellol, d-Limonene, Dodecanal. May produce an allergic reaction
- 2.3 Other hazards:**
 Non-applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

- 3.1 Substance:**
 Non-applicable
- 3.2 Mixture:**
Chemical description: Aqueous solution based on alcohols, colourants, surfactants and perfume.

Components:

In accordance with Annex II of Regulation (EC) nº1907/2006 (point 3), the product contains:

| Identification | Chemical name/Classification | Concentration |
|--|---|---------------|
| CAS: 67-63-0 EC: 200-661-7 Index: 603-117-00-0 REACH 01-2119457558-25-XXX | Propan-2-ol ATP CLP00 Regulation 1272/2008 Eye Irrit. 2: H319; Flam. Liq. 2: H225; STOT SE 3: H336 - Danger | 2,5 - <10 % |
| CAS: 80-54-6 EC: 201-289-8 Index: Non-applicable REACH 01-2119485965-18-XXX | 2-(4-tert-Butylbenzyl)propionaldehyde Self-classified Regulation 1272/2008 Acute Tox. 4: H302; Aquatic Chronic 2: H411; Repr. 2: H361; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Warning | <1 % |

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continue)

| Identification | Chemical name/Classification | Concentration |
|---|--|---------------|
| CAS: 110-41-8 EC: 203-765-0 Index: Non-applicable REACH 01-2119969443-29-XXX | 2-methylundecanal Self-classified Regulation 1272/2008 Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Skin Irrit. 2: H315; Skin Sens. 1B: H317 - Warning | <1 % |
| CAS: 106-22-9 EC: 203-375-0 Index: Non-applicable REACH 01-2119453995-23-XXX | Citronellol Self-classified Regulation 1272/2008 Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1B: H317 - Warning | <1 % |
| CAS: 32388-55-9 EC: 251-020-3 Index: Non-applicable REACH 01-2119969651-28-XXX | Cedryl methyl ketone Self-classified Regulation 1272/2008 Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Skin Sens. 1B: H317 - Warning | <1 % |
| CAS: 5392-40-5 EC: 226-394-6 Index: 605-019-00-3 REACH 01-2119462829-23-XXX | Citral ATP CLP00 Regulation 1272/2008 Skin Irrit. 2: H315; Skin Sens. 1: H317 - Warning | <1 % |
| CAS: 5989-27-5 EC: 227-813-5 Index: 601-029-00-7 REACH 01-2119529223-47-XXX | d-Limonene ATP CLP00 Regulation 1272/2008 Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Flam. Liq. 3: H226; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Warning | <1 % |
| CAS: 106-23-0 EC: 203-376-6 Index: Non-applicable REACH 01-2119474900-37-XXX | Citronellal Self-classified Regulation 1272/2008 Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Warning | <1 % |
| CAS: 68039-49-6 EC: 268-264-1 Index: Non-applicable REACH Non-applicable | 2,4-dimethylcyclohex-3-ene-1-carbaldehyde Self-classified Regulation 1272/2008 Aquatic Chronic 3: H412; Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1B: H317 - Warning | <1 % |
| CAS: 112-54-9 EC: 203-983-6 Index: Non-applicable REACH 01-2119969441-33-XXX | Dodecanal Self-classified Regulation 1272/2008 Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1B: H317 - Warning | <1 % |
| CAS: 1222-05-5 EC: 214-946-9 Index: 603-212-00-7 REACH 01-2119488227-29-XXX | 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran ATP ATP01 Regulation 1272/2008 Aquatic Acute 1: H400; Aquatic Chronic 1: H410 - Warning | <1 % |

To obtain more information on the risk of the substances consult sections 8, 11, 12 and 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

This product does not contain substances classified as dangerous for inhalation, however, in case of symptoms of intoxication remove the person affected from the exposure area and provide with fresh air. Seek medical attention if the symptoms get worse or persist.

By skin contact:

In case of contact it is recommended to clean the affected area thoroughly with water and neutral soap. In case of modifications on the skin (stinging, redness, rashes, blisters,...), seek medical advice with this Security Data Sheet

By eye contact:

This product does not contain substances classified as dangerous for eye contact. Rinse eyes thoroughly for at least 15 minutes with lukewarm water, ensuring that the person affected does not rub or close their eyes.

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head up to avoid inhalation. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable

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SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Product is non-flammable under normal conditions of storage, manipulation and use. In the case of inflammation as a result of improper manipulation, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems. IT IS NOT RECOMMENDED to use tap water as an extinguishing agent.

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and individual respiratory equipment. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Isolate leaks provided that there is no additional risk for the people performing this task. Personal protection equipment must be used against potential contact with the spilled product (See section 8). Evacuate the area and keep out those who do not have protection.

6.2 Environmental precautions:

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Product is non-flammable under normal conditions of storage, manipulation and use. It is recommended to transfer at slow speeds to avoid the generation of electrostatic charges that can affect flammable products. Consult section 10 for information on conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity.

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

| | |
|----------------|-----------|
| Minimum Temp.: | 5 °C |
| Maximum Temp.: | 30 °C |
| Maximum time: | 24 Months |

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SECTION 7: HANDLING AND STORAGE (continue)

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the work environment

There are no environmental limits for the substances contained in the product

DNEL (Workers):

| Identification | | Short exposure | | Long exposure | |
|---|------------|----------------|----------------------|-------------------------|----------------------|
| | | Systemic | Local | Systemic | Local |
| Propan-2-ol CAS: 67-63-0 EC: 200-661-7 | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 888 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 500 mg/m ³ | Non-applicable |
| 2-(4-tert-Butylbenzyl)propionaldehyde CAS: 80-54-6 EC: 201-289-8 | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 2,075 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 0,44 mg/m ³ | Non-applicable |
| 2-methylundecanal CAS: 110-41-8 EC: 203-765-0 | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 7 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 25,2 mg/m ³ | Non-applicable |
| Citronellol CAS: 106-22-9 EC: 203-375-0 | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 327,4 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | 10 mg/m ³ | 161,6 mg/m ³ | 10 mg/m ³ |
| Cedryl methyl ketone CAS: 32388-55-9 EC: 251-020-3 | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 0,333 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 1,175 mg/m ³ | Non-applicable |
| Citral CAS: 5392-40-5 EC: 226-394-6 | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 1,7 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 9 mg/m ³ | Non-applicable |
| d-Limonene CAS: 5989-27-5 EC: 227-813-5 | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 33,3 mg/m ³ | Non-applicable |
| Citronellal CAS: 106-23-0 EC: 203-376-6 | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 1,7 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 9 mg/m ³ | Non-applicable |
| Dodecanal CAS: 112-54-9 EC: 203-983-6 | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 14,1 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 49,7 mg/m ³ | Non-applicable |
| 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran CAS: 1222-05-5 EC: 214-946-9 | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 28,85 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 5,29 mg/m ³ | Non-applicable |

DNEL (General population):

| Identification | | Short exposure | | Long exposure | |
|--|------------|----------------|----------------|----------------------|----------------|
| | | Systemic | Local | Systemic | Local |
| Propan-2-ol CAS: 67-63-0 EC: 200-661-7 | Oral | Non-applicable | Non-applicable | 26 mg/kg | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 319 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 89 mg/m ³ | Non-applicable |

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continue)

| Identification | | Short exposure | | Long exposure | |
|---|------------|----------------|----------------------|-------------------------|----------------------|
| | | Systemic | Local | Systemic | Local |
| 2-(4-tert-Butylbenzyl)propionaldehyde CAS: 80-54-6 EC: 201-289-8 | Oral | Non-applicable | Non-applicable | 0,0625 mg/kg | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 1,0375 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 0,11 mg/m ³ | Non-applicable |
| 2-methylundecanal CAS: 110-41-8 EC: 203-765-0 | Oral | Non-applicable | Non-applicable | 3,5 mg/kg | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 3,5 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 3,1 mg/m ³ | Non-applicable |
| Citronellol CAS: 106-22-9 EC: 203-375-0 | Oral | Non-applicable | Non-applicable | 13,8 mg/kg | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 196,4 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | 10 mg/m ³ | 47,8 mg/m ³ | 10 mg/m ³ |
| Cedryl methyl ketone CAS: 32388-55-9 EC: 251-020-3 | Oral | Non-applicable | Non-applicable | 0,166 mg/kg | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 0,166 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 0,289 mg/m ³ | Non-applicable |
| Citral CAS: 5392-40-5 EC: 226-394-6 | Oral | Non-applicable | Non-applicable | 0,6 mg/kg | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 1 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 2,7 mg/m ³ | Non-applicable |
| d-Limonene CAS: 5989-27-5 EC: 227-813-5 | Oral | Non-applicable | Non-applicable | 4,76 mg/kg | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 8,33 mg/m ³ | Non-applicable |
| Citronellal CAS: 106-23-0 EC: 203-376-6 | Oral | Non-applicable | Non-applicable | 0,6 mg/kg | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 1 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 2,7 mg/m ³ | Non-applicable |
| Dodecanal CAS: 112-54-9 EC: 203-983-6 | Oral | Non-applicable | Non-applicable | 7 mg/kg | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 7 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 12,3 mg/m ³ | Non-applicable |
| 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran CAS: 1222-05-5 EC: 214-946-9 | Oral | Non-applicable | Non-applicable | 0,75 mg/kg | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 14,43 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 1,3 mg/m ³ | Non-applicable |

PNEC:

| Identification | | | | |
|--|--------------|----------------|-------------------------|---------------|
| Propan-2-ol CAS: 67-63-0 EC: 200-661-7 | STP | 2251 mg/L | Fresh water | 140,9 mg/L |
| | Soil | 28 mg/kg | Marine water | 140,9 mg/L |
| | Intermittent | 140,9 mg/L | Sediment (Fresh water) | 552 mg/kg |
| | Oral | 160 g/kg | Sediment (Marine water) | 552 mg/kg |
| 2-(4-tert-Butylbenzyl)propionaldehyde CAS: 80-54-6 EC: 201-289-8 | STP | 10 mg/L | Fresh water | 0,00204 mg/L |
| | Soil | 0,0525 mg/kg | Marine water | 0,0002 mg/L |
| | Intermittent | 0,024 mg/L | Sediment (Fresh water) | 0,269 mg/kg |
| | Oral | Non-applicable | Sediment (Marine water) | 0,0269 mg/kg |
| 2-methylundecanal CAS: 110-41-8 EC: 203-765-0 | STP | 10 mg/L | Fresh water | 0,00018 mg/L |
| | Soil | 0,0136 mg/kg | Marine water | 0,000018 mg/L |
| | Intermittent | 0,0018 mg/L | Sediment (Fresh water) | 0,072 mg/kg |
| | Oral | 313 g/kg | Sediment (Marine water) | 0,00722 mg/kg |
| Citronellol CAS: 106-22-9 EC: 203-375-0 | STP | 580 mg/L | Fresh water | 0,0024 mg/L |
| | Soil | 0,00371 mg/kg | Marine water | 0,00024 mg/L |
| | Intermittent | 0,024 mg/L | Sediment (Fresh water) | 0,0256 mg/kg |
| | Oral | Non-applicable | Sediment (Marine water) | 0,00256 mg/kg |
| Cedryl methyl ketone CAS: 32388-55-9 EC: 251-020-3 | STP | 10 mg/L | Fresh water | 0,00174 mg/L |
| | Soil | 4,87 mg/kg | Marine water | 0,000174 mg/L |
| | Intermittent | 0,0086 mg/L | Sediment (Fresh water) | 24,4 mg/kg |
| | Oral | Non-applicable | Sediment (Marine water) | 2,44 mg/kg |

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continue)

| Identification | | | | |
|---|--------------|----------------|-------------------------|---------------|
| Citral CAS: 5392-40-5 EC: 226-394-6 | STP | 1,6 mg/L | Fresh water | 0,00678 mg/L |
| | Soil | 0,0209 mg/kg | Marine water | 0,000678 mg/L |
| | Intermittent | 0,0678 mg/L | Sediment (Fresh water) | 0,125 mg/kg |
| | Oral | Non-applicable | Sediment (Marine water) | 0,0125 mg/kg |
| d-Limonene CAS: 5989-27-5 EC: 227-813-5 | STP | 1,8 mg/L | Fresh water | 0,0054 mg/L |
| | Soil | 0,262 mg/kg | Marine water | 0,00054 mg/L |
| | Intermittent | Non-applicable | Sediment (Fresh water) | 1,32 mg/kg |
| | Oral | 3,33 g/kg | Sediment (Marine water) | 0,13 mg/kg |
| Citronellal CAS: 106-23-0 EC: 203-376-6 | STP | 4 mg/L | Fresh water | 0,00868 mg/L |
| | Soil | 0,0267 mg/kg | Marine water | 0,00087 mg/L |
| | Intermittent | 0,0868 mg/L | Sediment (Fresh water) | 0,159 mg/kg |
| | Oral | Non-applicable | Sediment (Marine water) | 0,0159 mg/kg |
| Dodecanal CAS: 112-54-9 EC: 203-983-6 | STP | 10 mg/L | Fresh water | 0,0035 mg/L |
| | Soil | 0,278 mg/kg | Marine water | 0,00035 mg/L |
| | Intermittent | 0,035 mg/L | Sediment (Fresh water) | 1,41 mg/kg |
| | Oral | 313 g/kg | Sediment (Marine water) | 0,141 mg/kg |
| 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran CAS: 1222-05-5 EC: 214-946-9 | STP | 1 mg/L | Fresh water | 0,0044 mg/L |
| | Soil | 0,31 mg/kg | Marine water | 0,00044 mg/L |
| | Intermittent | 0,047 mg/L | Sediment (Fresh water) | 2 mg/kg |
| | Oral | 3,3 g/kg | Sediment (Marine water) | 0,394 mg/kg |

8.2 Exposure controls:

A.- General security and hygiene measures in the work place

As a preventative measure it is recommended to use basic Personal Protection Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. For more information on Personal Protection Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1.

All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

The use of protection equipment will be necessary if a mist forms or if the professional exposure limits are exceeded.

C.- Specific protection for the hands

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|--|----------------------------|---|---|--|
|  Mandatory hand protection | Chemical protective gloves |  | EN 374-1:2003 EN 374-3:2003/AC:2006 EN 420:2003+A1:2009 | Replace the gloves at any sign of deterioration. |

D.- Ocular and facial protection

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|--|---|---|---|---|
|  Mandatory face protection | Panoramic glasses against liquid splash |  | EN 166:2001 EN 172:1994/A1:2000 EN 172:1994/A2:2001 EN ISO 4007:2012 | Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing. |

E.- Bodily protection

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|-----------|---------------|---|-------------------|----------------------------|
| | Work clothing |  | EN ISO 13688:2013 | For professional use only. |

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continue)

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|-----------|----------------------|---|--|---------|
| | Anti-slip work shoes |  | EN ISO 20347:2012 EN ISO 20344:2011 | None |

F.- Additional emergency measures

| Emergency measure | Standards | Emergency measure | Standards |
|---|--------------------------------|--|-------------------------------|
|  Emergency shower | ANSI Z358-1 ISO 3864-1:2002 |  Eyewash stations | DIN 12 899 ISO 3864-1:2002 |

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

| | |
|---------------------------|-------------------------------------|
| V.O.C. (Supply): | 7,32 % weight |
| V.O.C. density at 20 °C: | 72,81 kg/m ³ (72,81 g/L) |
| Average carbon number: | 4,02 |
| Average molecular weight: | 73,51 g/mol |

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

| | |
|--------------------------|----------|
| Physical state at 20 °C: | Liquid |
| Appearance: | Milky |
| Color: | Green |
| Odor: | Pleasant |

Volatility:

| | |
|--|-------------------|
| Boiling point at atmospheric pressure: | 100 °C |
| Vapour pressure at 20 °C: | 2401 Pa |
| Vapour pressure at 50 °C: | 12624 Pa (13 kPa) |
| Evaporation rate at 20 °C: | Non-applicable * |

Product description:

| | |
|--|------------------------------|
| Density at 20 °C: | 990 - 1000 kg/m ³ |
| Relative density at 20 °C: | 0,99 - 1,01 |
| Dynamic viscosity at 20 °C: | Non-applicable * |
| Kinematic viscosity at 20 °C: | Non-applicable * |
| Kinematic viscosity at 40 °C: | Non-applicable * |
| Concentration: | Non-applicable * |
| pH: | Non-applicable * |
| Vapour density at 20 °C: | Non-applicable * |
| Partition coefficient n-octanol/water 20 °C: | Non-applicable * |
| Solubility in water at 20 °C: | Non-applicable * |
| Solubility properties: | Non-applicable * |

*Not relevant due to the nature of the product, not providing information property of its hazards.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continue)

| | |
|-------------------------------|--------------------------------------|
| Decomposition temperature: | Non-applicable * |
| Melting point/freezing point: | Non-applicable * |
| Flammability: | |
| Flash Point: | 53 °C (Does not maintain combustion) |
| Autoignition temperature: | 202 °C |
| Lower flammability limit: | Non-applicable * |
| Upper flammability limit: | Non-applicable * |
| 9.2 Other information: | |
| Surface tension at 20 °C: | Non-applicable * |
| Refraction index: | Non-applicable * |

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected if the following technical instructions storage of chemicals. See section 7.

10.2 Chemical stability:

Chemically stable under the conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

| Shock and friction | Contact with air | Increase in temperature | Sunlight | Humidity |
|--------------------|------------------|-------------------------|------------|----------------|
| Not applicable | Not applicable | Not applicable | Precaution | Not applicable |

10.5 Incompatible materials:

| Acids | Water | Combustive materials | Combustible materials | Others |
|----------------|----------------|----------------------|-----------------------|----------------|
| Not applicable | Not applicable | Avoid direct impact | Not applicable | Not applicable |

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO₂), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

The experimental information related to the toxicological properties of the product itself is not available

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than recommended by the occupational exposure limits, it may result in adverse effects on health depending on the means of exposure:

A.- Ingestion:

- Acute toxicity: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.

B- Inhalation:

- Acute toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

C- Contact with the skin and the eyes:

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SECTION 11: TOXICOLOGICAL INFORMATION (continue)

- Contact with the skin: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for skin contact. For more information see section 3.
- Contact with the eyes: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for skin contact. For more information see section 3.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, however it does contain substances classified as dangerous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensibilizing effects. For more information see section 3.
- Cutaneous: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous with sensibilizing effects. For more information see section 3.

F- Specific target organ toxicity (STOT)-time exposure:

Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for inhalation. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

| Identification | Acute toxicity | | Genus |
|---|-----------------|-----------------|--------|
| | LD50 oral | LD50 dermal | |
| Propan-2-ol CAS: 67-63-0 EC: 200-661-7 | LD50 oral | 5280 mg/kg | Rat |
| | LD50 dermal | 12800 mg/kg | Rat |
| | LC50 inhalation | 72,6 mg/L (4 h) | Rat |
| Citronellol CAS: 106-22-9 EC: 203-375-0 | LD50 oral | 3450 mg/kg | Rat |
| | LD50 dermal | 2650 mg/kg | |
| | LC50 inhalation | Non-applicable | |
| 2-(4-tert-Butylbenzyl)propionaldehyde CAS: 80-54-6 EC: 201-289-8 | LD50 oral | 1390 mg/kg | Rat |
| | LD50 dermal | 5100 mg/kg | Rabbit |
| | LC50 inhalation | Non-applicable | |
| Citral CAS: 5392-40-5 EC: 226-394-6 | LD50 oral | 4950 mg/kg | Rat |
| | LD50 dermal | 2250 mg/kg | Rabbit |
| | LC50 inhalation | Non-applicable | |
| d-Limonene CAS: 5989-27-5 EC: 227-813-5 | LD50 oral | 4400 mg/kg | Rat |
| | LD50 dermal | 5100 mg/kg | Rabbit |
| | LC50 inhalation | Non-applicable | |
| 2-methylundecanal CAS: 110-41-8 EC: 203-765-0 | LD50 oral | 5100 mg/kg | Rat |
| | LD50 dermal | 8300 mg/kg | Rabbit |
| | LC50 inhalation | Non-applicable | |
| Citronellal CAS: 106-23-0 EC: 203-376-6 | LD50 oral | 2500 mg/kg | Rat |
| | LD50 dermal | Non-applicable | |
| | LC50 inhalation | Non-applicable | |
| 2,4-dimethylcyclohex-3-ene-1-carbaldehyde CAS: 68039-49-6 EC: 268-264-1 | LD50 oral | 2500 mg/kg | |
| | LD50 dermal | Non-applicable | |
| | LC50 inhalation | Non-applicable | |
| Dodecanal | LD50 oral | 23100 mg/kg | Rat |

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SECTION 11: TOXICOLOGICAL INFORMATION (continue)

| Identification | Acute toxicity | | Genus |
|----------------|-----------------|----------------|-------|
| | LD50 dermal | Non-applicable | |
| CAS: 112-54-9 | LC50 inhalation | Non-applicable | |
| EC: 203-983-6 | | | |

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

12.1 Toxicity:

| Identification | Acute toxicity | Specie | Genus | |
|---|----------------|----------------------|---------------------------------|------------|
| Propan-2-ol CAS: 67-63-0 EC: 200-661-7 | LC50 | 9640 mg/L (96 h) | Pimephales promelas | Fish |
| | EC50 | 13299 mg/L (48 h) | Daphnia magna | Crustacean |
| | EC50 | 1000 mg/L (72 h) | Scenedesmus subspicatus | Algae |
| 2-(4-tert-Butylbenzyl)propionaldehyde CAS: 80-54-6 EC: 201-289-8 | LC50 | 2 mg/L (96 h) | Danio rerio | Fish |
| | EC50 | 11 mg/L (48 h) | Daphnia magna | Crustacean |
| | EC50 | 29 mg/L (72 h) | Desmodesmus subspicatus | Algae |
| 2-methylundecanal CAS: 110-41-8 EC: 203-765-0 | LC50 | 0,35 mg/L (96 h) | Oncorhynchus mykiss | Fish |
| | EC50 | 0,21 mg/L (48 h) | Daphnia magna | Crustacean |
| | EC50 | 0,11 mg/L (72 h) | Pseudokirchneriella subcapitata | Algae |
| Cedryl methyl ketone CAS: 32388-55-9 EC: 251-020-3 | LC50 | 0,1 - 1 mg/L (96 h) | | Fish |
| | EC50 | 0,1 - 1 mg/L | | Crustacean |
| | EC50 | 0,1 - 1 mg/L | | Algae |
| Citral CAS: 5392-40-5 EC: 226-394-6 | LC50 | 6,1 mg/L (24 h) | Oryzias latipes | Fish |
| | EC50 | 11 mg/L (24 h) | Daphnia magna | Crustacean |
| | EC50 | 16 mg/L (72 h) | Scenedesmus subspicatus | Algae |
| d-Limonene CAS: 5989-27-5 EC: 227-813-5 | LC50 | 0,702 mg/L (96 h) | Pimephales promelas | Fish |
| | EC50 | 0,577 mg/L (48 h) | Daphnia magna | Crustacean |
| | EC50 | Non-applicable | | |
| 2,4-dimethylcyclohex-3-ene-1-carbaldehyde CAS: 68039-49-6 EC: 268-264-1 | LC50 | 10 - 100 mg/L (96 h) | | Fish |
| | EC50 | 10 - 100 mg/L | | Crustacean |
| | EC50 | 10 - 100 mg/L | | Algae |
| 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran CAS: 1222-05-5 EC: 214-946-9 | LC50 | 0,1 - 1 mg/L (96 h) | | Fish |
| | EC50 | 0,1 - 1 mg/L | | Crustacean |
| | EC50 | 0,1 - 1 mg/L | | Algae |

12.2 Persistence and degradability:

| Identification | Degradability | | Biodegradability | |
|--|---------------|----------------|------------------|----------------|
| Propan-2-ol CAS: 67-63-0 EC: 200-661-7 | BOD5 | 1.19 g O2/g | Concentration | 100 mg/L |
| | COD | 2.23 g O2/g | Period | 14 days |
| | BOD5/COD | 0.53 | % Biodegradable | 86 % |
| 2-(4-tert-Butylbenzyl)propionaldehyde CAS: 80-54-6 EC: 201-289-8 | BOD5 | Non-applicable | Concentration | 20 mg/L |
| | COD | Non-applicable | Period | 28 days |
| | BOD5/COD | Non-applicable | % Biodegradable | 81 % |
| 2-methylundecanal CAS: 110-41-8 EC: 203-765-0 | BOD5 | Non-applicable | Concentration | 100 mg/L |
| | COD | Non-applicable | Period | 28 days |
| | BOD5/COD | Non-applicable | % Biodegradable | 68 % |
| Citral CAS: 5392-40-5 EC: 226-394-6 | BOD5 | 0.56 g O2/g | Concentration | 100 mg/L |
| | COD | 1.99 g O2/g | Period | 28 days |
| | BOD5/COD | 0.28 | % Biodegradable | 92 % |
| d-Limonene CAS: 5989-27-5 EC: 227-813-5 | BOD5 | Non-applicable | Concentration | Non-applicable |
| | COD | Non-applicable | Period | 28 days |
| | BOD5/COD | Non-applicable | % Biodegradable | 100 % |

12.3 Bioaccumulative potential:

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SECTION 12: ECOLOGICAL INFORMATION (continue)

| Identification | Bioaccumulation potential | |
|---|---------------------------|-----------|
| Propan-2-ol CAS: 67-63-0 EC: 200-661-7 | BCF | 3 |
| | Pow Log | 0,05 |
| | Potential | Low |
| 2-(4-tert-Butylbenzyl)propionaldehyde CAS: 80-54-6 EC: 201-289-8 | BCF | 275 |
| | Pow Log | 4,2 |
| | Potential | High |
| 2-methylundecanal CAS: 110-41-8 EC: 203-765-0 | BCF | |
| | Pow Log | 5 |
| | Potential | |
| Citral CAS: 5392-40-5 EC: 226-394-6 | BCF | 10 |
| | Pow Log | 3,45 |
| | Potential | Low |
| d-Limonene CAS: 5989-27-5 EC: 227-813-5 | BCF | 660 |
| | Pow Log | 4,83 |
| | Potential | High |
| Citronellal CAS: 106-23-0 EC: 203-376-6 | BCF | 280 |
| | Pow Log | 3,53 |
| | Potential | High |
| 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran CAS: 1222-05-5 EC: 214-946-9 | BCF | 1584 |
| | Pow Log | 5,9 |
| | Potential | Very High |

12.4 Mobility in soil:

| Identification | Absorption/desorption | | Volatility | |
|--|-----------------------|-------------------|------------|---------------------------------|
| Propan-2-ol CAS: 67-63-0 EC: 200-661-7 | Koc | 1,5 | Henry | 8,207E-1 Pa·m ³ /mol |
| | Conclusion | Very High | Dry soil | Yes |
| | Surface tension | 22400 N/m (25 °C) | Moist soil | Yes |
| 2-(4-tert-Butylbenzyl)propionaldehyde CAS: 80-54-6 EC: 201-289-8 | Koc | 1285 | Henry | 2,523E+0 Pa·m ³ /mol |
| | Conclusion | Low | Dry soil | Yes |
| | Surface tension | Non-applicable | Moist soil | Yes |
| 2-methylundecanal CAS: 110-41-8 EC: 203-765-0 | Koc | 4000 | Henry | Non-applicable |
| | Conclusion | Low | Dry soil | Non-applicable |
| | Surface tension | Non-applicable | Moist soil | Non-applicable |
| d-Limonene CAS: 5989-27-5 EC: 227-813-5 | Koc | 6324 | Henry | 2,533E+3 Pa·m ³ /mol |
| | Conclusion | Immobile | Dry soil | Yes |
| | Surface tension | 26750 N/m (25 °C) | Moist soil | Yes |
| Dodecanal CAS: 112-54-9 EC: 203-983-6 | Koc | Non-applicable | Henry | Non-applicable |
| | Conclusion | Non-applicable | Dry soil | Non-applicable |
| | Surface tension | 28670 N/m (25 °C) | Moist soil | Non-applicable |

12.5 Results of PBT and vPvB assessment:

Non-applicable

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

| Code | Description | Waste class (Regulation (EU) No 1357/2014) |
|-----------|---|--|
| 07 01 04* | Other organic solvents, washing liquids and mother liquor | Dangerous |

Type of waste (Regulation (EU) No 1357/2014):

HP14 Ecotoxic

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SECTION 13: DISPOSAL CONSIDERATIONS (continue)

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommend disposal down the drain. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) n°1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION

This product is not regulated for transport (ADR/RID,IMDG,IATA)

SECTION 15: REGULATORY INFORMATION

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

Candidate substances for authorisation under the Regulation (EC) 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) 1005/2009, about substances that deplete the ozone layer: Non-applicable

Active substances for which a decision of non-inclusion onto Annex I (Regulation (EU) No 528/2012): Non-applicable

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII, REACH):

Non-applicable

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) N° 1907/2006 (Regulation (EC) N° 453/2010)

Modifications related to the previous security card which concerns the ways of managing risks. :

CLP Regulation (EC) n° 1272/2008:

- Hazard statements
- Precautionary statements

Texts of the legislative phrases mentioned in section 2.:

H412: Harmful to aquatic life with long lasting effects

Texts of the legislative phrases mentioned in section 3.:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

CLP Regulation (EC) n° 1272/2008:

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SECTION 16: OTHER INFORMATION (continue)

Acute Tox. 4: H302 - Harmful if swallowed
Aquatic Acute 1: H400 - Very toxic to aquatic life
Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects
Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects
Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects
Eye Irrit. 2: H319 - Causes serious eye irritation
Flam. Liq. 2: H225 - Highly flammable liquid and vapour
Flam. Liq. 3: H226 - Flammable liquid and vapour
Repr. 2: H361 - Suspected of damaging fertility or the unborn child
Skin Irrit. 2: H315 - Causes skin irritation
Skin Sens. 1: H317 - May cause an allergic skin reaction
Skin Sens. 1B: H317 - May cause an allergic skin reaction
STOT SE 3: H336 - May cause drowsiness or dizziness

Classification procedure:

Aquatic Chronic 3: Calculation method

Advice related to training:

Minimal training is recommended to prevent industrial risks for staff using this product, in order to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

<http://esis.jrc.ec.europa.eu>

<http://echa.europa.eu>

<http://eur-lex.europa.eu>

Abbreviations and acronyms:

- ADR: European agreement concerning the international carriage of dangerous goods by road
- IMDG: International maritime dangerous goods code
- IATA: International Air Transport Association
- ICAO: International Civil Aviation Organisation
- COD: Chemical Oxygen Demand
- BOD5: 5-day biochemical oxygen demand
- BCF: Bioconcentration factor
- LD50: Lethal Dose 50
- CL50: Lethal Concentration 50
- EC50: Effective concentration 50
- Log-POW: Octanol-water partition coefficient
- Koc: Partition coefficient of organic carbon

The information contained in this security data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this security data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -