Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Issue date: 12/27/2021 Revision date: 2/11/2022 Version: 2.0

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

1.1. Product identifier

Product form Product name Product code : Mixture

: Lemongrass #EU20275F at 10% in DPG

: EU20275F - 10%

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

1.2.1. Relevant identified uses

No additional information available

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

No additional information available

1.4. Emergency telephone number

No additional information available

SECTION 2: Hazards identification

| 2.1. Classification of the substance or mixture | |
|---|------|
| Classification according to Regulation (EC) No. 1272/2008 [CLP] | |
| Skin sensitisation, Category 1 | H317 |
| Hazardous to the aquatic environment — Chronic Hazard, Category 3 | H412 |

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

May cause an allergic skin reaction. Toxic to aquatic life with long lasting effects.

2.2. Label elements Labelling according to Regulation (EC) No. 1272/2008 [CLP] Hazard pictograms (CLP) :

| | GHS07 |
|--------------------------------|--|
| O'mark (OLD) | |
| Signal word (CLP) | : Warning |
| Contains | : Citral, Cornmint oil (redist), Lemon terpenes, Linalool |
| Hazard statements (CLP) | : H317 - May cause an allergic skin reaction. |
| | H412 - Harmful to aquatic life with long lasting effects. |
| Precautionary statements (CLP) | : P272 - Contaminated work clothing should not be allowed out of the workplace. |
| | P273 - Avoid release to the environment. |
| | P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing |
| | protection. |
| | P302+P352 - IF ON SKIN: Wash with plenty of water. |
| | P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. |
| | P362+P364 - Take off contaminated clothing and wash it before reuse. |
| | |

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

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SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|-----------------------|---|--------------|---|
| Citral | CAS-No.: 5392-40-5 EC-No.: 226-394-6 EC Index-No.: 605-019-00-3 REACH-no: 01-2119462829- 23 | 1 – 2 | Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 |
| Lemon terpenes | CAS-No.: 68917-33-9 EC-No.: 284-515-8;614-796-8 | 1 – 2 | Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 |
| Hexamethylindanopyran | CAS-No.: 1222-05-5 EC-No.: 214-946-9 EC Index-No.: 603-212-00-7 REACH-no: 01-2119488227- 29 | 0.5 – 1 | Aquatic Acute 1, H400 Aquatic Chronic 1, H410 |
| Mentha arvensis oil | CAS-No.: 68917-18-0 EC-No.: 294-486-3 | 0.175 – 0.35 | Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411 |
| Linalool | CAS-No.: 78-70-6 EC-No.: 201-134-4 EC Index-No.: 603-235-00-2 REACH-no: 01-2119474016- 42 | 0.075 – 0.15 | Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317 |

Full text of H- and EUH-statements: see section 16

| SECTION 4: First aid measures | | |
|--|--|--|
| 4.1. Description of first aid measures | | |
| First-aid measures after inhalation | : Remove person to fresh air and keep comfortable for breathing. | |
| First-aid measures after skin contact | : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention. | |
| First-aid measures after eye contact | : Rinse eyes with water as a precaution. | |
| First-aid measures after ingestion | : Call a poison center or a doctor if you feel unwell. | |
| 4.2. Most important symptoms and effects, both acute and delayed | | |
| Symptoms/effects after skin contact | : May cause an allergic skin reaction. | |
| 4.3. Indication of any immediate medi | ical attention and special treatment needed | |

Treat symptomatically.

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| SECTION 5: Firefighting measures | | |
|--|--|--|
| 5.1. Extinguishing media | | |
| Suitable extinguishing media | : Water spray. Dry powder. Foam. Carbon dioxide. | |
| 5.2. Special hazards arising from the substance or mixture | | |
| Hazardous decomposition products in case of fire | : Toxic fumes may be released. | |
| 5.3. Advice for firefighters | | |
| Protection during firefighting | : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. | |

| SECTION 6: Accidental release measures | | |
|---|---|--|
| 6.1. Personal precautions, protective equip | oment and emergency procedures | |
| 6.1.1. For non-emergency personnel | | |
| Emergency procedures | : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. | |
| 6.1.2. For emergency responders | | |
| Protective equipment | : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". | |
| 6.2. Environmental precautions | | |
| Avoid release to the environment. | | |
| 6.3. Methods and material for containment | and cleaning up | |
| For containment Methods for cleaning up Other information | Collect spillage. Take up liquid spill into absorbent material. Dispose of materials or solid residues at an authorized site. | |
| 6.4. Reference to other sections | | |

For further information refer to section 13.

| SECTION 7: Handling and storage | | |
|---|---|--|
| 7.1. Precautions for safe handling | | |
| Precautions for safe handling : | Ensure good ventilation of the work station. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Wear personal protective equipment. | |
| Hygiene measures : | Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. | |
| 7.2. Conditions for safe storage, including any incompatibilities | | |
| Storage conditions : | Store in a well-ventilated place. Keep cool. | |

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

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| Citral (5392-40-5) | | |
|--|---|--|
| Belgium - Occupational Exposure Limits | | |
| OEL TWA | 32 mg/m ³ (vapor and aerosol) | |
| OEL TWA [ppm] | 5 ppm (vapor and aerosol) | |
| OEL chemical category | Skin | |
| Ireland - Occupational Exposure Limits | | |
| OEL TWA [2] | 5 ppm | |
| OEL STEL [ppm] | 15 ppm (calculated) | |
| Poland - Occupational Exposure Limits | | |
| NDS (OEL TWA) | 27 mg/m³ | |
| NDSCh (OEL STEL) | 54 mg/m³ | |
| Portugal - Occupational Exposure Limits | | |
| OEL TWA [ppm] | 5 ppm | |
| OEL chemical category | Sensitizer, A4 - Not Classifiable as a Human Carcinogen, skin - potential for cutaneous exposure | |
| Spain - Occupational Exposure Limits | | |
| VLA-ED (OEL TWA) [2] | 5 ppm (inhalable fraction and vapor) | |
| OEL chemical category | Sensitizer, skin - potential for cutaneous absorption | |
| USA - ACGIH - Occupational Exposure Limits | | |
| ACGIH OEL TWA [ppm] | 5 ppm (inhalable fraction and vapor) | |
| ACGIH chemical category | Not Classifiable as a Human Carcinogen, Skin - potential significant contribution to overall exposure by the cutaneous route, dermal sensitizer | |

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection: Safety glasses

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8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Physical state | : Liquid |
|---|------------------------|
| Colour | : light yellow. amber. |
| Odour | : characteristic. |
| Odour threshold | : No data available |
| рН | : No data available |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : No data available |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : > 93 °C |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : No data available |
| Vapour pressure | : No data available |
| Relative vapour density at 20 °C | : No data available |
| Relative density | : No data available |
| Solubility | : No data available |
| Partition coefficient n-octanol/water (Log Pow) | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosive properties | : No data available |
| Oxidising properties | : No data available |
| Explosive limits | : |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

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| 10.3. Possibility of hazardous reactions | | |
|---|--|--|
| No dangerous reactions known under normal conditions of use. | | |
| 10.4. Conditions to avoid | | |
| None under recommended storage and handling conditions (see section 7). | | |
| 10.5. Incompatible materials | | |
| No additional information available | | |

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

| SECTION 11: Toxicological information | | |
|---|--|--|
| 11.1 Information on toxicological effects | | |
| Acute toxicity (dermal) : I | Not classified Not classified Not classified | |
| Linalool (78-70-6) | | |
| LD50 oral | 2790 mg/kg bodyweight | |
| Mentha arvensis oil (68917-18-0) | | |
| LD50 oral rat | 1240 mg/kg | |
| LD50 oral | 1200 mg/kg bodyweight | |
| Citral (5392-40-5) | | |
| LD50 oral rat | 4960 mg/kg | |
| LD50 dermal rabbit | 2250 mg/kg | |
| LD50 dermal | 2250 mg/kg bodyweight | |
| Hexamethylindanopyran (1222-05-5) | | |
| LD50 oral rat | > 3250 mg/kg | |
| LD50 dermal rabbit | > 3250 mg/kg | |
| Serious eye damage/irritation: IRespiratory or skin sensitisation: IGerm cell mutagenicity: ICarcinogenicity: IReproductive toxicity: ISTOT-single exposure: ISTOT-repeated exposure: I | Not classified Not classified May cause an allergic skin reaction. Not classified Not classified Not classified Not classified Not classified | |

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general Hazardous to the aquatic environment, short-term (acute) Hazardous to the aquatic environment, long-term (chronic)

: Toxic to aquatic life with long lasting effects.

: Not classified

nt, long-term : Harmful to aquatic life with long lasting effects.

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| Linalool (78-70-6) | | |
|---|---|--|
| EC50 96h - Algae [1] | 88.3 mg/l (Species: Desmodesmus subspicatus) | |
| Citral (5392-40-5) | | |
| EC50 - Crustacea [1] | 7 mg/l (Exposure time: 48 h - Species: Daphnia magna) | |
| EC50 72h - Algae [1] | 16 mg/l (Species: Desmodesmus subspicatus) | |
| EC50 96h - Algae [1] | 19 mg/l (Species: Desmodesmus subspicatus) | |
| Hexamethylindanopyran (1222-05-5) | | |
| LC50 - Fish [1] | 0.452 mg/l Wolf, 1996d-27682 | |
| LC50 - Other aquatic organisms [1] | > 0.14 mg/l REACH DOSSIER Pimephales promelas | |
| EC50 - Crustacea [2] | 260 μg/l REACH Dossier | |
| EC50 - Other aquatic organisms [1] | 0.131 mg/l REACH Dossier | |
| 12.2. Persistence and degradability | | |
| No additional information available | | |
| 12.3. Bioaccumulative potential | | |
| Citral (5392-40-5) | | |
| Partition coefficient n-octanol/water (Log Pow) | 2.76 (at 25 °C) | |
| 12.4. Mobility in soil | | |

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

| 14.1 UN number | | |
|--|--|--|
| UN-No. (ADR) UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (RID) | Not applicable Not applicable Not applicable Not applicable Not applicable | |
| 14.2. UN proper shipping name | | |
| Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) Proper Shipping Name (ADN) | Not applicable Not applicable Not applicable Not applicable Not applicable | |

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| Proper Shipping Name (RID) | : Not applicable |
|---|--|
| 14.3. Transport hazard class(es) | |
| ADR Transport hazard class(es) (ADR) | : Not applicable |
| IMDG Transport hazard class(es) (IMDG) | : Not applicable |
| IATA Transport hazard class(es) (IATA) | : Not applicable |
| ADN Transport hazard class(es) (ADN) | : Not applicable |
| RID Transport hazard class(es) (RID) | : Not applicable |
| 14.4. Packing group | |
| Packing group (ADR) Packing group (IMDG) Packing group (IATA) Packing group (ADN) Packing group (RID) | Not applicable Not applicable Not applicable Not applicable Not applicable |
| 14.5. Environmental hazards | |
| Dangerous for the environment Marine pollutant Other information | : No : No supplementary information available |
| 14.6. Special precautions for user | |
| Overland transport Not applicable | |
| Transport by sea Not applicable | |
| Air transport Not applicable | |
| Inland waterway transport Not applicable | |
| Rail transport Not applicable | |
| 14.7. Transport in bulk according to A | Annex II of Marpol and the IBC Code |
| Not applicable | |

Not applicable

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SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

| EU restriction list (REACH Annex XVII) | |
|--|---|
| Reference code | Applicable on |
| 3(a) | Lemon terpenes |
| 3(b) | Lemongrass #EU20275F at 10% in DPG ; Citral ; Mentha arvensis oil ; Lemon terpenes ; Linalool |
| 3(c) | Lemongrass #EU20275F at 10% in DPG ; Mentha arvensis oil ; Lemon terpenes ; Hexamethylindanopyran |
| 40. | Lemon terpenes |

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

15.1.2. National regulations

Germany

| Employment restrictions | : Observe restrictions according Act on the Protection of Working Mothers (MuSchG) Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG) |
|---|--|
| Water hazard class (WGK) | : WGK 1, Slightly hazardous to water (Classification according to AwSV, Annex 1) |
| Hazardous Incident Ordinance (12. BImSchV) | : Is not subject of the Hazardous Incident Ordinance (12. BImSchV) |
| Netherlands | |
| SZW-lijst van kankerverwekkende stoffen | : Cornmint oil (redist), Lemon terpenes are listed |
| SZW-lijst van mutagene stoffen | : Lemon terpenes is listed |
| SZW-lijst van reprotoxische stoffen – Borstvoeding | : None of the components are listed |
| SZW-lijst van reprotoxische stoffen – Vruchtbaarheid | : None of the components are listed |
| SZW-lijst van reprotoxische stoffen – Ontwikkeling | : None of the components are listed |
| Denmark | |
| Classification remarks | : Emergency management guidelines for the storage of flammable liquids must be followed |
| Danish National Regulations | : Young people below the age of 18 years are not allowed to use the product Pregnant/breastfeeding women working with the product must not be in direct contact with the product |
| Switzerland | |
| Storage class (LK) | : LK 10/12 - Liquids |

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

| SECTION 16: Other information | |
|-------------------------------|---|
| Abbreviations and acronyms: | |
| 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 |

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| Abbreviations and acronyms: | |
|-----------------------------|--|
| ATE | Acute Toxicity Estimate |
| BCF | Bioconcentration factor |
| BLV | Biological limit value |
| BOD | Biochemical oxygen demand (BOD) |
| COD | Chemical oxygen demand (COD) |
| DMEL | Derived Minimal Effect level |
| DNEL | Derived-No Effect Level |
| EC-No. | European Community number |
| EC50 | Median effective concentration |
| EN | European Standard |
| IARC | International Agency for Research on Cancer |
| ΙΑΤΑ | International Air Transport Association |
| IMDG | International Maritime Dangerous Goods |
| LC50 | Median lethal concentration |
| LD50 | Median lethal dose |
| LOAEL | Lowest Observed Adverse Effect Level |
| NOAEC | No-Observed Adverse Effect Concentration |
| NOAEL | No-Observed Adverse Effect Level |
| NOEC | No-Observed Effect Concentration |
| OECD | Organisation for Economic Co-operation and Development |
| OEL | Occupational Exposure Limit |
| РВТ | Persistent Bioaccumulative Toxic |
| PNEC | Predicted No-Effect Concentration |
| RID | Regulations concerning the International Carriage of Dangerous Goods by Rail |
| SDS | Safety Data Sheet |
| STP | Sewage treatment plant |
| ThOD | Theoretical oxygen demand (ThOD) |
| TLM | Median Tolerance Limit |
| VOC | Volatile Organic Compounds |
| CAS-No. | Chemical Abstract Service number |
| N.O.S. | Not Otherwise Specified |
| vPvB | Very Persistent and Very Bioaccumulative |
| ED | Endocrine disrupting properties |

| Full text of H- and EUH-statements: | |
|-------------------------------------|---|
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
| Aquatic Acute 1 | Hazardous to the aquatic environment — Acute Hazard, Category 1 |
| Aquatic Chronic 1 | Hazardous to the aquatic environment — Chronic Hazard, Category 1 |
| Aquatic Chronic 2 | Hazardous to the aquatic environment — Chronic Hazard, Category 2 |

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| Full text of H- and EUH-statements: | |
|-------------------------------------|---|
| Asp. Tox. 1 | Aspiration hazard, Category 1 |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |
| Flam. Liq. 3 | Flammable liquids, Category 3 |
| H226 | Flammable liquid and vapour. |
| H302 | Harmful if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| 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. |
| H412 | Harmful to aquatic life with long lasting effects. |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| Skin Sens. 1 | Skin sensitisation, Category 1 |
| Skin Sens. 1B | Skin sensitisation, category 1B |

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.