# LIME #EU40565F

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 11.12.2023 Version: 1.0

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

### 1.1. Product identifier

| | | |
|---|---|---|
| Product form | : | Mixture |
| Trade name | : | LIME #EU40565F |
| UFI | : | 2QAM-K3RS-600F-30D0 |
| Product code | : | EU40565F |
| Type of product | : | Perfumes, fragrances |
| Product group | : | Trade product |

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

#### 1.2.1. Relevant identified uses

| | | |
|---|---|---|
| Main use category | : | Industrial use,Professional use |
| Industrial/Professional use spec | : | For professional use only<br>Industrial |
| Use of the substance/mixture | : | Perfumes, fragrances |
| Function or use category | : | Odour agents |

#### 1.2.2. Uses advised against

No additional information available

### 1.3. Details of the supplier of the safety data sheet

FRENCH COLOR & FRAGRANCE International GmbH
Mittlerer Weg 35
DE– 79424 Auggen
Germany
T 49-7631-931-8900
SDS@frenchcolor.com - www.frenchcolor.com

### 1.4. Emergency telephone number

| | | |
|---|---|---|
| Emergency number | : | 1-800-255-3924; +01-813-248-0585; China:+400-120-0751; Mexico:+01-800-099-0731; Brazil: +0-800-591-6042; India: +000-800-100-4086 |

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Classification according to Regulation (EC) No. 1272/2008 [CLP]**

| | |
|---|---|
| Acute toxicity (oral), Category 4 | H302 |
| Skin corrosion/irritation, Category 2 | H315 |
| Skin sensitisation, Category 1 | H317 |
| Reproductive toxicity, Category 1A | H360 |
| Aspiration hazard, Category 1 | H304 |
| Hazardous to the aquatic environment – Acute Hazard, Category 1 | H400 |
| Hazardous to the aquatic environment – Chronic Hazard, Category 2 | H411 |

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

**Adverse physicochemical, human health and environmental effects**

Causes serious eye irritation. May damage fertility or the unborn child. Harmful if swallowed. Causes skin irritation. May be fatal if swallowed and enters airways. Very toxic to aquatic life. Toxic to aquatic life with long lasting effects. May cause an allergic skin reaction.

## 2.2. Label elements

### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07 GHS08 GHS09

Signal word (CLP) : Danger

Contains : Benzyl benzoate; Lemon terpenes; Citral; Lime oil distilled ; Geraniol; Nerol; Citronellol Pure; Geranium oil Egyptian ; Linalyl acetate; Grapefruit oil; Triplal (Vertocitral); Geranyl acetate; Mayol; Hexyl cinnamic aldehyde; Artemesia vulgaris oil (Armoise); Bergamot oil

Hazard statements (CLP) : H302 - Harmful if swallowed.
H304 - May be fatal if swallowed and enters airways.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H360 - May damage fertility or the unborn child.
H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P272 - Contaminated work clothing should not be allowed out of the workplace.

Extra phrases : For professional users only.

## 2.3. Other hazards

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

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

# 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] |
|---|---|---|---|
| benzyl benzoate | CAS-No.: 120-51-4<br>EC-No.: 204-402-9<br>EC Index-No.: 607-085-00-9<br>REACH-no: 01-2119976371-33 | 36,6 – 73,194 | Acute Tox. 4 (Oral), H302<br>Aquatic Acute 1, H400<br>Aquatic Chronic 2, H411 |
| Lemon terpenes | CAS-No.: 68917-33-9<br>EC-No.: 284-515-8 | 8,4 – 16,8 | Flam. Liq. 3, H226<br>Skin Irrit. 2, H315<br>Skin Sens. 1, H317<br>Asp. Tox. 1, H304<br>Aquatic Chronic 2, H411 |

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|---|---|---|
| citral<br>substance with national workplace exposure limit(s) (BE, ES, IE, PL, PT) | CAS-No.: 5392-40-5<br>EC-No.: 226-394-6<br>EC Index-No.: 605-019-00-3<br>REACH-no: 01-2119462829-23 | 1,5 – 3 | Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Skin Sens. 1, H317 |
| Lime oil distilled | CAS-No.: 8008-26-2<br>EC-No.: 290-010-3<br>REACH-no: 01-2120138646-51 | 0,6 – 1,25 | Flam. Liq. 3, H226<br>Skin Irrit. 2, H315<br>Skin Sens. 1, H317<br>Repr. 1A, H360FD<br>Asp. Tox. 1, H304<br>Aquatic Chronic 1, H410 |
| Citronellol Pure | CAS-No.: 106-22-9<br>EC-No.: 203-375-0<br>REACH-no: 01-2119453995-23 | 0,6 – 1,2 | Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Skin Sens. 1B, H317 |
| Geraniol | CAS-No.: 106-24-1<br>EC-No.: 203-377-1<br>EC Index-No.: 603-241-00-5<br>REACH-no: 01-2119552430-49 | 0,36 – 0,72 | Skin Irrit. 2, H315<br>Eye Dam. 1, H318<br>Skin Sens. 1, H317 |
| Geranium oil Egyptian | CAS-No.: 8000-46-2<br>EC-No.: 290-140-0<br>REACH-no: 01-2120769423-50 | 0,3 – 0,5 | Skin Irrit. 2, H315<br>Eye Dam. 1, H318<br>Skin Sens. 1, H317<br>Aquatic Chronic 3, H412 |
| Nerol | CAS-No.: 106-25-2<br>EC-No.: 203-378-7 | 0,24 – 0,48 | Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Skin Sens. 1, H317 |
| Linalyl acetate | CAS-No.: 115-95-7<br>EC-No.: 204-116-4<br>REACH-no: 01-2119454789-19 | 0,2 – 0,3 | Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Skin Sens. 1, H317 |
| Grapefruit oil | CAS-No.: 8016-20-4<br>EC-No.: 600-007-4 | 0,1 – 0,2 | Flam. Liq. 3, H226<br>Skin Irrit. 2, H315<br>Skin Sens. 1, H317<br>Asp. Tox. 1, H304<br>Aquatic Chronic 2, H411 |
| Triplal (Vertocitral) | CAS-No.: 68039-49-6<br>EC-No.: 268-264-1 | 0,1 – 0,1815 | Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Skin Sens. 1, H317<br>Aquatic Chronic 3, H412 |
| Geranyl acetate | CAS-No.: 105-87-3<br>EC-No.: 203-341-5<br>REACH-no: 01-2119973480-35 | 0,1 – 0,15 | Skin Irrit. 2, H315<br>Skin Sens. 1, H317<br>Aquatic Chronic 3, H412 |
| Mayol | CAS-No.: 13828-37-0<br>EC-No.: 237-539-8 | 0,1 – 0,15 | Skin Sens. 1B, H317<br>Skin Irrit. 2, H315 |
| Hexyl cinnamic aldehyde | CAS-No.: 101-86-0<br>EC-No.: 202-983-3<br>REACH-no: 01-2119533092-50 | 0,1 – 0,1 | Skin Sens. 1, H317<br>Aquatic Chronic 2, H411 |

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|---|---|---|
| Artemesia vulgaris oil (Armoise) | CAS-No.: 68991-20-8<br>EC-No.: 283-874-8 | 0,1 – 0,1 | Flam. Liq. 3, H226<br>Acute Tox. 4 (Oral), H302<br>Skin Sens. 1, H317<br>STOT SE 2, H371<br>Asp. Tox. 1, H304<br>Aquatic Chronic 3, H412<br>Eye Irrit. 2, H319 |
| Bergamot oil | CAS-No.: 8007-75-8<br>EC-No.: 289-612-9 | 0,1 – 0,1 | Flam. Liq. 3, H226<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Skin Sens. 1, H317<br>Asp. Tox. 1, H304<br>Aquatic Chronic 3, H412 |
| Alcohol C-10<br>substance with national workplace exposure limit(s) (BG, DE, LT, LV, RO, CH) | CAS-No.: 112-30-1<br>EC-No.: 203-956-9 | 0 – 0,0028 | Aquatic Chronic 3, H412 |
| Aldehyde C-6<br>substance with national workplace exposure limit(s) (FI, PL) | CAS-No.: 66-25-1<br>EC-No.: 200-624-5 | 0 – 0,0007 | Flam. Liq. 3, H226 |

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 general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). Call a physician immediately.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see Get medical advice/attention. on this label). If skin irritation occurs: Get medical advice/attention. 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 cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion : Do NOT induce vomiting. Obtain emergency medical attention. Rinse mouth. Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Eye irritation.

Symptoms/effects after ingestion : Risk of lung oedema.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Sand. Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a heavy water stream.

### 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

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. 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 equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Evacuate unnecessary personnel. Only qualified personnel equipped with suitable protective equipment may intervene. 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. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Ventilate area.

### 6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Notify authorities if product enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.
Methods for cleaning up : Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. Notify authorities if product enters sewers or public waters.
Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

See Section 8. Exposure controls and personal protection. 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. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Contaminated work clothing should not be allowed out of the workplace. Separate working clothes from town clothes. Launder separately.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container closed when not in use. Store locked up. Store in a well-ventilated place. Keep cool.
Incompatible products : Strong bases. Strong acids.
Incompatible materials : Sources of ignition. Direct sunlight.
Storage temperature : 25 °C
Storage area : Store in a well-ventilated place. Store away from heat.
Special rules on packaging : Store in a closed container.
Packaging materials : Do not store in corrodable metal.

### 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

| citral (5392-40-5) | |
|---|---|
| **Belgium - Occupational Exposure Limits** | |
| OEL TWA | 32 mg/m³ (vapor and aerosol) |
| OEL TWA | 5 ppm (vapor and aerosol) |
| OEL chemical category | Skin |
| **Ireland - Occupational Exposure Limits** | |
| OEL TWA [2] | 5 ppm |
| OEL STEL | 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 | 5 ppm (inhalable fraction; vapor) |
| OEL chemical category | Sensitizer dermal, 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 |

| Alcohol C-10 (112-30-1) | |
|---|---|
| **Bulgaria - Occupational Exposure Limits** | |
| OEL TWA | 10 mg/m³ |
| **Germany - Occupational Exposure Limits (TRGS 900)** | |
| AGW (OEL TWA) [1] | 66 mg/m³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed) |
| AGW (OEL TWA) [2] | 10 ppm (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed) |
| **Latvia - Occupational Exposure Limits** | |
| OEL TWA | 10 mg/m³ |
| **Lithuania - Occupational Exposure Limits** | |
| IPRV (OEL TWA) | 10 mg/m³ |
| **Romania - Occupational Exposure Limits** | |
| OEL TWA | 100 mg/m³ |
| OEL TWA | 15 ppm |
| OEL STEL | 200 mg/m³ |
| OEL STEL | 30 ppm |
| **Switzerland - Occupational Exposure Limits** | |
| MAK (OEL TWA) [1] | 66 mg/m³ (aerosol, vapour) |
| MAK (OEL TWA) [2] | 10 ppm (aerosol, vapour) |
| KZGW (OEL STEL) | 66 mg/m³ (aerosol, vapour) |
| KZGW (OEL STEL) [ppm] | 10 ppm (aerosol, vapour) |

| Aldehyde C-6 (66-25-1) | |
|---|---|
| **Finland - Occupational Exposure Limits** | |
| HTP (OEL STEL) | 42 mg/m³ |
| HTP (OEL STEL) [ppm] | 10 ppm |
| **Poland - Occupational Exposure Limits** | |
| NDS (OEL TWA) | 40 mg/m³ |
| NDSCh (OEL STEL) | 80 mg/m³ |

#### 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:**
Avoid all unnecessary exposure.

**Personal protective equipment symbol(s):**



#### 8.2.2.1. Eye and face protection

**Eye protection:**
Chemical goggles or safety glasses. Safety glasses

#### 8.2.2.2. Skin protection

**Skin and body protection:**
Wear suitable protective clothing

**Hand protection:**
Protective gloves. Wear protective gloves.

#### 8.2.2.3. Respiratory protection

**Respiratory protection:**
In case of insufficient ventilation, wear suitable respiratory equipment. Wear appropriate mask. [In case of inadequate ventilation] wear respiratory protection.

#### 8.2.2.4. Thermal hazards

No additional information available

#### 8.2.3. Environmental exposure controls

**Environmental exposure controls:**
Avoid release to the environment.

**Other information:**
Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

| | | |
|---|---|---|
| Physical state | : | Liquid |
| Colour | : | light yellow. amber. Conforms to standard. |
| Odour | : | characteristic. characteristic. |
| Odour threshold | : | Not available |
| Melting point | : | Not applicable |
| Freezing point | : | Not available |
| Boiling point | : | Not available |
| Flammability | : | Not applicable |
| Lower explosion limit | : | Not available |
| Upper explosion limit | : | Not available |
| Flash point | : | 65 °C |
| Auto-ignition temperature | : | Not available |
| Decomposition temperature | : | Not available |
| pH | : | Not available |
| Viscosity, kinematic | : | 20,5 mm²/s |
| Solubility | : | Not available |
| Partition coefficient n-octanol/water (Log Kow) | : | Not available |
| Vapour pressure | : | Not available |
| Vapour pressure at 50°C | : | Not available |
| Density | : | Not available |
| Relative density | : | ≈ 1,11 |
| Relative vapour density at 20°C | : | Not available |

Particle characteristics : Not applicable

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

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. Not established.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Not established.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Direct sunlight. Extremely high or low temperatures.

### 10.5. Incompatible materials

Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

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

## SECTION 11: Toxicological information

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

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

| LIME #EU40565F | |
|---|---|
| ATE CLP (oral) | 683,116 mg/kg bodyweight |

| benzyl benzoate (120-51-4) | |
|---|---|
| LD50 oral rat | 500 mg/kg (Source: NLM_CIP) |
| LD50 oral | 1160 mg/kg bodyweight |
| LD50 dermal rabbit | 4000 mg/kg (Source: NLM_CIP) |

| citral (5392-40-5) | |
|---|---|
| LD50 oral rat | 4960 mg/kg (Source: NLM_CIP) |
| LD50 dermal rabbit | 2250 mg/kg (Source: NLM_CIP) |

| Lime oil distilled (8008-26-2) | |
|---|---|
| LD50 oral rat | 5600 mg/kg |
| LD50 dermal rabbit | > 5000 mg/kg |

| Geraniol (106-24-1) | |
|---|---|
| LD50 oral rat | 3600 mg/kg (Source: NLM_CIP) |
| LD50 oral | 3600 mg/kg bodyweight |
| LD50 dermal rabbit | > 5 g/kg (Source: NLM_CIP) |

| Nerol (106-25-2) | |
|---|---|
| LD50 oral rat | 4500 mg/kg (Source: NLM_CIP) |
| LD50 oral | 4500 mg/kg bodyweight |
| LD50 dermal rabbit | > 5 g/kg (Source: NLM_CIP) |

| Citronellol Pure (106-22-9) | |
|---|---|
| LD50 oral rat | 3450 mg/kg (Source: NLM_CIP) |
| LD50 oral | 3450 mg/kg bodyweight |
| LD50 dermal rabbit | 2650 mg/kg (Source: EPA_HPV) |
| LD50 dermal | 2650 mg/kg bodyweight |

| Geranium oil Egyptian (8000-46-2) | |
|---|---|
| LD50 oral | 4811 mg/kg bodyweight |
| LD50 dermal | 2500 mg/kg bodyweight |

| Linalyl acetate (115-95-7) | |
|---|---|
| LD50 oral rat | 14550 mg/kg (Source: EPA_HPV) |
| LD50 dermal rabbit | > 5000 mg/kg (Source: EPA_HPV) |

| Grapefruit oil (8016-20-4) | |
|---|---|
| LD50 oral rat | > 5 g/kg (Source: NLM_CIP) |

| Triplal (Vertocitral) (68039-49-6) | |
|---|---|
| LD50 oral | 3900 mg/kg bodyweight |

| Geranyl acetate (105-87-3) | |
|---|---|
| LD50 oral rat | 6330 mg/kg (Source: NLM_CIP) |

| Hexyl cinnamic aldehyde (101-86-0) | |
|---|---|
| LD50 oral rat | 3100 mg/kg (Source: NLM_CIP) |
| LD50 oral | 3100 mg/kg bodyweight |
| LD50 dermal rabbit | > 3000 mg/kg (Source: EPA_HPV) |
| LC50 Inhalation - Rat | > 5 mg/l/4h |

| Artemesia vulgaris oil (Armoise) (68991-20-8) | |
|---|---|
| LD50 oral | 747 mg/kg bodyweight |

| Bergamot oil (8007-75-8) | |
|---|---|
| LD50 oral rat | 11520 mg/kg (Source: NLM_CIP) |

| Alcohol C-10 (112-30-1) | |
|---|---|
| LD50 oral rat | 4720 mg/kg (Source: NZ_CCID) |
| LD50 dermal rabbit | 3560 mg/kg (Source: NLM_CIP) |

| Aldehyde C-6 (66-25-1) | |
|---|---|
| LD50 oral rat | 4890 mg/kg (Source: NLM_CIP) |
| LD50 dermal rabbit | > 8100 mg/kg (Source: ECHA_API) |

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Not classified
Respiratory or skin sensitisation : May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : May damage fertility or the unborn child.
STOT-single exposure : Not classified

| Artemesia vulgaris oil (Armoise) (68991-20-8) | |
|---|---|
| STOT-single exposure | May cause damage to organs. |

STOT-repeated exposure : Not classified
Aspiration hazard : May be fatal if swallowed and enters airways.

| LIME #EU40565F | |
|---|---|
| Viscosity, kinematic | 20,5 mm²/s |

| benzyl benzoate (120-51-4) | |
|---|---|
| Viscosity, kinematic | 7,456 mm²/s |

### 11.2. Information on other hazards

#### 11.2.1. Endocrine disrupting properties

No additional information available

#### 11.2.2. Other information

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Toxic to aquatic life with long lasting effects. Very toxic to aquatic life.
Hazardous to the aquatic environment, short–term (acute) : Very toxic to aquatic life.
Hazardous to the aquatic environment, long–term (chronic) : Toxic to aquatic life with long lasting effects.

| benzyl benzoate (120-51-4) | |
|---|---|
| LC50 - Fish [1] | 2,32 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static] Source: ECHA) |
| NOEC (chronic) | 0,168 mg/l |

| 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) |

| Geraniol (106-24-1) | |
|---|---|
| LC50 - Fish [1] | 22 mg/l (Exposure time: 96 h - Species: Danio rerio [static] Source: ECHA) |

| Nerol (106-25-2) | |
|---|---|
| LC50 - Fish [1] | 20,3 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static] Source: ECHA) |

| Linalyl acetate (115-95-7) | |
|---|---|
| LC50 - Fish [1] | 11 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [flow-through] Source: ECHA) |

| Alcohol C-10 (112-30-1) | |
|---|---|
| LC50 - Fish [1] | 2,2 – 2,5 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA) |
| LC50 - Fish [2] | 4,12 – 6,2 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static] Source: EPA) |
| EC50 - Crustacea [1] | 3 mg/l (Exposure time: 48 h - Species: Daphnia magna) |

| Aldehyde C-6 (66-25-1) | |
|---|---|
| LC50 - Fish [1] | 12 – 16,5 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA) |

### 12.2. Persistence and degradability

| LIME #EU40565F | |
|---|---|
| Persistence and degradability | Not established. |

| benzyl benzoate (120-51-4) | |
|---|---|
| Persistence and degradability | May cause long-term adverse effects in the environment. |

| Geranium oil Egyptian (8000-46-2) | |
|---|---|
| Persistence and degradability | May cause long-term adverse effects in the environment. |

### 12.3. Bioaccumulative potential

| LIME #EU40565F | |
|---|---|
| Bioaccumulative potential | Not established. |

| benzyl benzoate (120-51-4) | |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | 3,97 (at 25 °C) |
| Bioaccumulative potential | Not established. |

| citral (5392-40-5) | |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | 2,76 (at 25 °C) |

| Geraniol (106-24-1) | |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | 2,6 (at 25 °C) |

| Nerol (106-25-2) | |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | 2,76 (at 30 °C (at pH 6.5) |

| Citronellol Pure (106-22-9) | |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | 3,41 (at 25 °C) |

| Geranium oil Egyptian (8000-46-2) | |
|---|---|
| Bioaccumulative potential | Not established. |

| Linalyl acetate (115-95-7) | |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | 3,9 (at 25 °C) |

| Geranyl acetate (105-87-3) | |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | 4,04 |
| **Alcohol C-10 (112-30-1)** | |
| Partition coefficient n-octanol/water (Log Pow) | 4,5 (at 25 °C (at pH 6) |
| **Aldehyde C-6 (66-25-1)** | |
| Partition coefficient n-octanol/water (Log Pow) | 2,3 (at 25 °C (at pH 5) |

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Endocrine disrupting properties

No additional information available

### 12.7. Other adverse effects

Additional information : Avoid release to the environment.

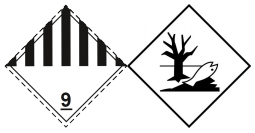
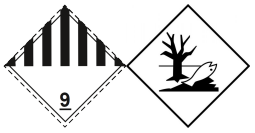
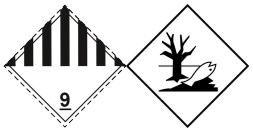
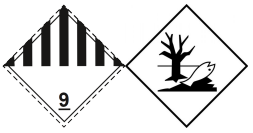
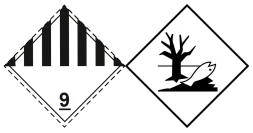
## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials : Avoid release to the environment.
HP Code : HP3 - "Flammable:"
– flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C;
– flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air;
– flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction;
– flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa;
– water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities;
– other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste.
HP5 - "Specific Target Organ Toxicity (STOT)/Aspiration Toxicity:" waste which can cause specific target organ toxicity either from a single or repeated exposure, or which cause acute toxic effects following aspiration.
HP6 - "Acute Toxicity:" waste which can cause acute toxic effects following oral or dermal administration, or inhalation exposure.
HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye.
HP13 - "Sensitising:" waste which contains one or more substances known to cause sensitising effects to the skin or the respiratory organs.
HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment

## SECTION 14: Transport information

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

| ADR | IMDG | IATA | ADN | RID |
|---|---|---|---|---|
| **14.1. UN number or ID number** | | | | |
| UN 3082 | UN 3082 | UN 3082 | UN 3082 | UN 3082 |
| **14.2. UN proper shipping name** | | | | |
| ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BENZYL BENZOATE) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BENZYL BENZOATE) | Environmentally hazardous substance, liquid, n.o.s. (BENZYL BENZOATE) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BENZYL BENZOATE) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BENZYL BENZOATE) |
| **Transport document description** | | | | |
| UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BENZYL BENZOATE), 9, III, (-) | UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BENZYL BENZOATE), 9, III, MARINE POLLUTANT | UN 3082 Environmentally hazardous substance, liquid, n.o.s. (BENZYL BENZOATE), 9, III | UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BENZYL BENZOATE), 9, III | UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BENZYL BENZOATE), 9, III |
| **14.3. Transport hazard class(es)** | | | | |
| 9 | 9 | 9 | 9 | 9 |
|  |  |  |  |  |
| **14.4. Packing group** | | | | |
| III | III | III | III | III |
| **14.5. Environmental hazards** | | | | |
| Dangerous for the environment: Yes | Dangerous for the environment: Yes<br>Marine pollutant: Yes | Dangerous for the environment: Yes | Dangerous for the environment: Yes | Dangerous for the environment: Yes |
| No supplementary information available | | | | |

## 14.6. Special precautions for user

**Overland transport**

| | | |
|---|---|---|
| Classification code (ADR) | : | M6 |
| Special provisions (ADR) | : | 274, 335, 375, 601 |
| Limited quantities (ADR) | : | 5l |
| Excepted quantities (ADR) | : | E1 |
| Packing instructions (ADR) | : | P001, IBC03, LP01, R001 |
| Special packing provisions (ADR) | : | PP1 |
| Mixed packing provisions (ADR) | : | MP19 |
| Portable tank and bulk container instructions (ADR) | : | T4 |
| Portable tank and bulk container special provisions (ADR) | : | TP1, TP29 |
| Tank code (ADR) | : | LGBV |
| Vehicle for tank carriage | : | AT |
| Transport category (ADR) | : | 3 |
| Special provisions for carriage - Packages (ADR) | : | V12 |
| Special provisions for carriage - Loading, unloading and handling (ADR) | : | CV13 |
| Hazard identification number (Kemler No.) | : | 90 |

Orange plates : 


Tunnel restriction code (ADR) : -

EAC code : •3Z

### Transport by sea

Special provisions (IMDG) : 274, 335, 969

Limited quantities (IMDG) : 5 L

Excepted quantities (IMDG) : E1

Packing instructions (IMDG) : LP01, P001

Special packing provisions (IMDG) : PP1

IBC packing instructions (IMDG) : IBC03

Tank instructions (IMDG) : T4

Tank special provisions (IMDG) : TP1, TP29

EmS-No. (Fire) : F-A

EmS-No. (Spillage) : S-F

Stowage category (IMDG) : A

### Air transport

PCA Excepted quantities (IATA) : E1

PCA Limited quantities (IATA) : Y964

PCA limited quantity max net quantity (IATA) : 30kgG

PCA packing instructions (IATA) : 964

PCA max net quantity (IATA) : 450L

CAO packing instructions (IATA) : 964

CAO max net quantity (IATA) : 450L

Special provisions (IATA) : A97, A158, A197, A215

ERG code (IATA) : 9L

### Inland waterway transport

Classification code (ADN) : M6

Special provisions (ADN) : 274, 335, 375, 601

Limited quantities (ADN) : 5 L

Excepted quantities (ADN) : E1

Carriage permitted (ADN) : T

Equipment required (ADN) : PP

Number of blue cones/lights (ADN) : 0

### Rail transport

Classification code (RID) : M6

Special provisions (RID) : 274, 335, 375, 601

Limited quantities (RID) : 5L

Excepted quantities (RID) : E1

Packing instructions (RID) : P001, IBC03, LP01, R001

Special packing provisions (RID) : PP1

Mixed packing provisions (RID) : MP19

Portable tank and bulk container instructions (RID) : T4

Portable tank and bulk container special provisions (RID) : TP1, TP29

Tank codes for RID tanks (RID) : LGBV

Transport category (RID) : 3

Special provisions for carriage – Packages (RID) : W12

Special provisions for carriage - Loading, unloading and handling (RID) : CW13, CW31

Colis express (express parcels) (RID) : CE8

Hazard identification number (RID) : 90

## 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

**REACH Annex XVII (Restriction List)**

| EU restriction list (REACH Annex XVII) | | |
|---|---|---|
| **Reference code** | **Applicable on** | **Entry title or description** |
| 3(a) | Lime oil distilled ; Grapefruit oil ; Bergamot oil ; Artemesia vulgaris oil (Armoise) | Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F |
| 40. | Lime oil distilled ; Grapefruit oil ; Bergamot oil ; Artemesia vulgaris oil (Armoise) | Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not. |
| 3(b) | LIME #EU40565F ; benzyl benzoate ; Geraniol ; citral ; Lime oil distilled ; Citronellol Pure ; Grapefruit oil ; Linalyl acetate ; Mayol ; Triplal (Vertocitral) ; Geranium oil Egyptian ; Hexyl cinnamic aldehyde ; Bergamot oil ; Geranyl acetate ; Artemesia vulgaris oil (Armoise) | Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10 |
| 3(c) | LIME #EU40565F ; benzyl benzoate ; Lime oil distilled ; Grapefruit oil ; Triplal (Vertocitral) ; Geranium oil Egyptian ; Hexyl cinnamic aldehyde ; Bergamot oil ; Geranyl acetate ; Artemesia vulgaris oil (Armoise) | Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1 |

**REACH Annex XIV (Authorisation List)**

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

**REACH Candidate List (SVHC)**

Contains no substance(s) listed on the REACH Candidate List

**PIC Regulation (Prior Informed Consent)**

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

**POP Regulation (Persistent Organic Pollutants)**

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

**Ozone Regulation (1005/2009)**

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

**Explosives Precursors Regulation (2019/1148)**

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

**Drug Precursors Regulation (273/2004)**

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 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 3, Highly hazardous to water (Classification according to AwSV, Annex 1). |
| Chemicals Prohibition Ordinance (ChemVerbotsV) | : | This product is subject to ChemVerbotsV Annex 2 Entry 1. The following requirements must be observed: authorization requirement (according to § 6 paragraph 1 sentence 1), basic requirements for carrying out the delivery (according to § 8 paragraph 1, 3 and 4), identification and documentation (according to § 9 paragraph 1 to 3) and exclusion of the shipping route (according to § 10). |
| Hazardous Incident Ordinance (12. BImSchV) | : | Is not subject of the Hazardous Incident Ordinance (12. BImSchV) |

#### Netherlands

| | | |
|---|---|---|
| ABM category | : | A(1) - highly toxic for aquatic organisms, may have longterm hazardous effects in aquatic environment |
| SZW-lijst van kankerverwekkende stoffen | : | Lemon terpenes,Triplal (Vertocitral),Artemesia vulgaris oil (Armoise),Bergamot oil are listed |
| SZW-lijst van mutagene stoffen | : | Lemon terpenes,Triplal (Vertocitral),Artemesia vulgaris oil (Armoise),Bergamot oil are 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

| | | |
|---|---|---|
| Class for fire hazard | : | Class III-1 |
| Store unit | : | 50 liter |
| Classification remarks | : | Flammable according to the Danish Ministry of Justice; 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 |

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Other information : None.

| 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 |
| Aquatic Chronic 3 | Hazardous to the aquatic environment – Chronic Hazard, Category 3 |
| Asp. Tox. 1 | Aspiration hazard, Category 1 |
| Eye Dam. 1 | Serious eye damage/eye irritation, 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. |

| Full text of H- and EUH-statements: | |
|---|---|
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H360 | May damage fertility or the unborn child. |
| H360FD | May damage fertility. May damage the unborn child. |
| H371 | May cause damage to organs. |
| 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. |
| Repr. 1A | Reproductive toxicity, Category 1A |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| Skin Sens. 1 | Skin sensitisation, Category 1 |
| Skin Sens. 1B | Skin sensitisation, category 1B |
| STOT SE 2 | Specific target organ toxicity – Single exposure, Category 2 |

The classification complies with : ATP 12

Safety Data Sheet (SDS), EU

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.