



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

- 1.1 Product identifier:** RIPE PLUM - FR4590
Other means of identification:
Non-applicable
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
Relevant uses: Fragrance. For industrial user 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:**
FRAGRANCE SCIENCE S.L
POL.IND CAN SINGLA, C/CAN SINGLA Nº19
08640 OLESA DE MONTSERRAT - BARCELONA - SPAIN
Phone: +34 937 757 206 - Fax: +34 937 757 206
info@fragrancescience.com
www.fragrancescience.com
- 1.4 Emergency telephone number:** +34 937757206 (Mon-Thu: 8-17h, Fri:7-14h)

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 2: Hazardous to the aquatic environment, long-term hazard, Category 2, H411
Skin Sens. 1B: Sensitisation, skin, Category 1B, H317
- 2.2 Label elements:**
CLP Regulation (EC) No 1272/2008:
Warning

Hazard statements:
Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects.
Skin Sens. 1B: H317 - May cause an allergic skin reaction.
Precautionary statements:
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P272: Contaminated work clothing should not be allowed out of the workplace.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/respiratory protection/eye protection/protective footwear.
P302+P352: IF ON SKIN: Wash with plenty of water.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P391: Collect spillage.
P501: Dispose of contents/container in accordance with regulations on hazardous waste or packaging and packaging waste respectively.
Supplementary information:
Contains 4-TERT-BUTYLDIHYDROCINNAMALDEHYDE, DIHYDRO PENTAMETHYLINDANONE, HYDROXYCITRONELLAL, ROSE KETONE-3.
Substances that contribute to the classification
LINALOOL; TETRAMETHYL ACETYLOCTAHYDRONAPHTHALENES
- 2.3 Other hazards:**
Product fails to meet PBT/vPvB criteria

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

- 3.1 Substance:**
Non-applicable

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

3.2 Mixture:

Chemical description: Mixture of substances

Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

| Identification | Chemical name/Classification | | Concentration |
|---|--|--|-----------------------|
| CAS: 78-70-6 EC: 201-134-4 Index: Non-applicable REACH: 01-2119474016-42-XXXX | LINALOOL⁽¹⁾ | Self-classified | 2,5 - <10 % |
| | Regulation 1272/2008 | Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1B: H317 - Warning | |
| CAS: 54464-57-2 EC: 259-174-3 Index: Non-applicable REACH: 01-2119489989-04-XXXX | TETRAMETHYL ACETYLOCTAHYDRONAPHTHALENES⁽¹⁾ | Self-classified | 1 - <2,5 % |
| | Regulation 1272/2008 | Aquatic Chronic 1: H410; Skin Irrit. 2: H315; Skin Sens. 1B: H317 - Warning | |
| CAS: 103-05-9 EC: 203-074-4 Index: Non-applicable REACH: Non-applicable * | METHYL PHENYLBUTANOL⁽¹⁾ | Self-classified | 1 - <2,5 % |
| | Regulation 1272/2008 | Aquatic Chronic 3: H412; Eye Irrit. 2: H319 - Warning | |
| CAS: 1222-05-5 EC: 214-946-9 Index: Non-applicable REACH: 01-2119488227-29-XXXX | HEXAMETHYLINDANOPYRAN⁽¹⁾ | ATP ATP01 | 1 - <2,5 % |
| | Regulation 1272/2008 | Aquatic Acute 1: H400; Aquatic Chronic 1: H410 - Warning | |
| CAS: 107-75-5 EC: 203-518-7 Index: Non-applicable REACH: 01-2119973482-31-XXXX | HYDROXYCITRONELLAL⁽¹⁾ | Self-classified | <1 % |
| | Regulation 1272/2008 | Eye Irrit. 2: H319; Skin Sens. 1B: H317 - Warning | |
| CAS: 33704-61-9 EC: 251-649-3 Index: Non-applicable REACH: 01-2119977131-40-XXXX | DIHYDRO PENTAMETHYLINDANONE⁽¹⁾ | Self-classified | <1 % |
| | Regulation 1272/2008 | Aquatic Chronic 2: H411; Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1B: H317 - Warning | |
| CAS: 18127-01-0 EC: 242-016-2 Index: Non-applicable REACH: 01-2119983533-30-XXXX | 4-TERT-BUTYLDIHYDROCINNAMALDEHYDE⁽¹⁾ | Self-classified | <1 % |
| | Regulation 1272/2008 | Aquatic Chronic 3: H412; Repr. 2: H361; Skin Irrit. 2: H315; Skin Sens. 1B: H317; STOT RE 2: H373 - Warning | |
| CAS: 57378-68-4 EC: 260-709-8 Index: Non-applicable REACH: 01-2119535122-53-XXXX | ROSE KETONE-3⁽¹⁾ | Self-classified | <1 % |
| | Regulation 1272/2008 | Acute Tox. 4: H302; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Skin Irrit. 2: H315; Skin Sens. 1A: H317 - Warning | |

*There is not a registration number available for this substance due to the substance or its use are exempt from a registration number; According to article 2, article 15 of Regulation (CE) 1907/2006, the annual tonnage does not need to be registered

⁽¹⁾ Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2015/830

To obtain more information on the hazards of the substances consult sections 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 is not classified as hazardous through inhalation. However, in case of intoxication symptoms it is recommended to remove the person affected from the area of exposure, provide clean air and keep at rest. Request medical attention if symptoms persist.

By skin contact:

May cause an allergic skin reaction. In case of contact it is recommended to clean the affected area thoroughly with water and neutral soap. In case of changes on the skin (stinging, redness, rashes, blisters,...), seek medical advice with this Safety Data Sheet

By eye contact:

Rinse eyes thoroughly with water for at least 15 minutes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case removal could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS for the product.

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SECTION 4: FIRST AID MEASURES (continued)

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. 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

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media:

Product is non-flammable under normal conditions of storage, handling and use. In the case of combustion as a result of improper handling, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems.

Unsuitable extinguishing media:

Non-applicable

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 self-contained breathing apparatus (SCBA). 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. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, 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:

For non-emergency personnel:

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 spilt product (See section 8). Evacuate the area and keep out those who do not have protection.

For emergency responders:

See section 8.

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:

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SECTION 7: HANDLING AND STORAGE (continued)

A.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks with regards manually handling weights. Maintain order, cleanliness and destroy using safe methods (section 6).

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

Product is non-flammable under normal conditions of storage, handling 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 on general occupational hygiene

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 time: 24 Months

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 workplace (European OEL, not country-specific legislation):

There are no applicable occupational exposure limits for the substances contained in the product

DNEL (Workers):

| Identification | | Short exposure | | Long exposure | |
|---|------------|------------------------|------------------------|-------------------------|------------------------|
| | | Systemic | Local | Systemic | Local |
| LINALOOL CAS: 78-70-6 EC: 201-134-4 | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 3,5 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 24,58 mg/m ³ | Non-applicable |
| METHYL PHENYLBUTANOL CAS: 103-05-9 EC: 203-074-4 | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 0,175 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 2,19 mg/m ³ | Non-applicable |
| HEXAMETHYLINDANOPYRAN CAS: 1222-05-5 EC: 214-946-9 | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 36,7 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 13,5 mg/m ³ | Non-applicable |
| HYDROXYCITRONELLAL CAS: 107-75-5 EC: 203-518-7 | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 1,9 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 18 mg/m ³ | Non-applicable |
| DIHYDRO PENTAMETHYLINDANONE CAS: 33704-61-9 EC: 251-649-3 | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 0,42 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 1,47 mg/m ³ | Non-applicable |
| 4-TERT-BUTYLDIHYDROCINNAMALDEHYDE CAS: 18127-01-0 EC: 242-016-2 | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Dermal | 3,57 mg/kg | Non-applicable | 0,89 mg/kg | Non-applicable |
| | Inhalation | 0,88 mg/m ³ | 0,88 mg/m ³ | 0,308 mg/m ³ | 0,22 mg/m ³ |

DNEL (General population):

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

| Identification | | Short exposure | | Long exposure | |
|---|------------|------------------------|------------------------|--------------------------|------------------------|
| | | Systemic | Local | Systemic | Local |
| LINALOOL CAS: 78-70-6 EC: 201-134-4 | Oral | Non-applicable | Non-applicable | 2,49 mg/kg | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 1,25 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 4,33 mg/m ³ | Non-applicable |
| METHYL PHENYLBUTANOL CAS: 103-05-9 EC: 203-074-4 | Oral | Non-applicable | Non-applicable | 0,222 mg/kg | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 0,0208 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 0,386 mg/m ³ | Non-applicable |
| HEXAMETHYLINDANOPYRAN CAS: 1222-05-5 EC: 214-946-9 | Oral | Non-applicable | Non-applicable | 2,3 mg/kg | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 22 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 4 mg/m ³ | Non-applicable |
| HYDROXYCITRONELLAL CAS: 107-75-5 EC: 203-518-7 | Oral | Non-applicable | Non-applicable | 0,6 mg/kg | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 1,1 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 5,4 mg/m ³ | Non-applicable |
| DIHYDRO PENTAMETHYLINDANONE CAS: 33704-61-9 EC: 251-649-3 | Oral | Non-applicable | Non-applicable | 0,25 mg/kg | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 0,25 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 0,44 mg/m ³ | Non-applicable |
| 4-TERT-BUTYLDIHYDROCINNAMALDEHYDE CAS: 18127-01-0 EC: 242-016-2 | Oral | 26,88 mg/kg | Non-applicable | 0,03 mg/kg | Non-applicable |
| | Dermal | 1,79 mg/kg | Non-applicable | 0,45 mg/kg | Non-applicable |
| | Inhalation | 0,22 mg/m ³ | 0,22 mg/m ³ | 0,0544 mg/m ³ | 0,22 mg/m ³ |

PNEC:

| Identification | | | | |
|---|--------------|----------------|-------------------------|---------------|
| LINALOOL CAS: 78-70-6 EC: 201-134-4 | STP | 10 mg/L | Fresh water | 0,2 mg/L |
| | Soil | 0,327 mg/kg | Marine water | 0,02 mg/L |
| | Intermittent | 2 mg/L | Sediment (Fresh water) | 2,22 mg/kg |
| | Oral | 0,0078 g/kg | Sediment (Marine water) | 0,222 mg/kg |
| METHYL PHENYLBUTANOL CAS: 103-05-9 EC: 203-074-4 | STP | 7,09 mg/L | Fresh water | 0,0696 mg/L |
| | Soil | 0,225 mg/kg | Marine water | 0,00696 mg/L |
| | Intermittent | 0,696 mg/L | Sediment (Fresh water) | 1,33 mg/kg |
| | Oral | Non-applicable | Sediment (Marine water) | 0,133 mg/kg |
| HEXAMETHYLINDANOPYRAN CAS: 1222-05-5 EC: 214-946-9 | STP | 1 mg/L | Fresh water | 0,0068 mg/L |
| | Soil | 1,5 mg/kg | Marine water | 0,00044 mg/L |
| | Intermittent | Non-applicable | Sediment (Fresh water) | 2 mg/kg |
| | Oral | 20,4 g/kg | Sediment (Marine water) | 0,394 mg/kg |
| HYDROXYCITRONELLAL CAS: 107-75-5 EC: 203-518-7 | STP | 10 mg/L | Fresh water | 0,0316 mg/L |
| | Soil | 0,011 mg/kg | Marine water | 0,00316 mg/L |
| | Intermittent | 0,316 mg/L | Sediment (Fresh water) | 0,145 mg/kg |
| | Oral | Non-applicable | Sediment (Marine water) | 0,015 mg/kg |
| DIHYDRO PENTAMETHYLINDANONE CAS: 33704-61-9 EC: 251-649-3 | STP | 10 mg/L | Fresh water | 0,004 mg/L |
| | Soil | 0,0174 mg/kg | Marine water | 0 mg/L |
| | Intermittent | Non-applicable | Sediment (Fresh water) | 0,0991 mg/kg |
| | Oral | 0,00111 g/kg | Sediment (Marine water) | 0,00991 mg/kg |
| 4-TERT-BUTYLDIHYDROCINNAMALDEHYDE CAS: 18127-01-0 EC: 242-016-2 | STP | 3,16 mg/L | Fresh water | 0,00105 mg/L |
| | Soil | 0,0202 mg/kg | Marine water | 0,000105 mg/L |
| | Intermittent | 0,0105 mg/L | Sediment (Fresh water) | 0,104 mg/kg |
| | Oral | 0,00017 g/kg | Sediment (Marine water) | 0,0104 mg/kg |

8.2 Exposure controls:

A.- Individual protection measures, such as personal protective equipment

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Regulation (EU) 2016/425. For more information on Personal Protective 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

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|--|-----------------------------------|-------------|---------------------|--|
| Mandatory respiratory tract protection | Filter mask for gases and vapours | CAT III | EN 405:2002+A1:2010 | Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment. |

C.- Specific protection for the hands

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|-------------------------------|---------------------------------------|-----------|--------------|--|
| Mandatory hand protection | Protective gloves against minor risks | CAT I | | Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN 420:2004+A1:2010 and EN ISO 374-1:2016+A1:2018 |

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.

D.- Eye and face protection

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|-------------------------------|---|------------|---------------------------------|---|
| Mandatory face protection | Panoramic glasses against splash/projections. | CAT II | EN 166:2002 EN ISO 4007:2018 | Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing. |

E.- Body protection

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|-----------|----------------------|------------|-------------------|---|
| | Work clothing | CAT I | | Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 6529:2013, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994. |
| | Anti-slip work shoes | CAT II | EN ISO 20347:2012 | Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 20345:2012 y EN 13832-1:2007 |

F.- Additional emergency measures

| Emergency measure | Standards | Emergency measure | Standards |
|----------------------|---|----------------------|--|
| Emergency shower | ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011 | Eyewash stations | DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011 |

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): | 3,24 % weight |
| V.O.C. density at 20 °C: | 32,76 kg/m ³ (32,76 g/L) |
| Average carbon number: | 9,91 |
| Average molecular weight: | 153,57 g/mol |

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

*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 (continued)

For complete information see the product datasheet.

Appearance:

| | |
|--------------------------|------------------|
| Physical state at 20 °C: | Liquid |
| Appearance: | Transparent |
| Colour: | Colourless |
| Odour: | Characteristic |
| Odour threshold: | Non-applicable * |

Volatility:

| | |
|--|------------------|
| Boiling point at atmospheric pressure: | Non-applicable * |
| Vapour pressure at 20 °C: | Non-applicable * |
| Vapour pressure at 50 °C: | Non-applicable * |
| Evaporation rate at 20 °C: | Non-applicable * |

Product description:

| | |
|--|-------------------------------|
| Density at 20 °C: | 1001 - 1021 kg/m ³ |
| Relative density at 20 °C: | Non-applicable * |
| 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 * |
| Decomposition temperature: | Non-applicable * |
| Melting point/freezing point: | Non-applicable * |

Flammability:

| | |
|----------------------------|------------------------|
| Flash Point: | Non Flammable (>60 °C) |
| Flammability (solid, gas): | Non-applicable * |
| Autoignition temperature: | Non-applicable * |
| Lower flammability limit: | Non-applicable * |
| Upper flammability limit: | Non-applicable * |

Particle characteristics:

| | |
|-----------------------------|----------------|
| Median equivalent diameter: | Non-applicable |
|-----------------------------|----------------|

9.2 Other information:

Information with regard to physical hazard classes:

| | |
|--|------------------|
| Explosive properties: | Non-applicable * |
| Oxidising properties: | Non-applicable * |
| Corrosive to metals: | Non-applicable * |
| Heat of combustion: | Non-applicable * |
| Aerosols-total percentage (by mass) of flammable components: | Non-applicable * |

Other safety characteristics:

| | |
|---------------------------|------------------|
| Surface tension at 20 °C: | Non-applicable * |
| Refraction index: | 1,4451 - 1,4551 |

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

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SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

10.2 Chemical stability:

Chemically stable under the indicated 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 | Not applicable | Not applicable |

10.5 Incompatible materials:

| Acids | Water | Oxidising materials | Combustible materials | Others |
|--------------------|----------------|---------------------|-----------------------|-------------------------------|
| Avoid strong acids | Not applicable | Not applicable | Not applicable | Avoid alkalis or strong bases |

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 the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- 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 does contain substances classified as hazardous for this effect. For more information see section 3.

B- Inhalation (acute effect):

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

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous 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 does contain substances classified as hazardous for this effect. 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 hazardous for the effects mentioned. For more information see section 3.
IARC: BENZYL ACETATE (3); COUMARIN (3)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous 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 hazardous 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 hazardous with sensitising effects. For more information see section 3.
- Skin: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

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

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

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

Other information:

Non-applicable

Specific toxicology information on the substances:

| Identification | Acute toxicity | | Genus |
|---|-----------------|----------------|--------|
| LINALOOL CAS: 78-70-6 EC: 201-134-4 | LD50 oral | 3000 mg/kg | Rat |
| | LD50 dermal | 5610 mg/kg | Rabbit |
| | LC50 inhalation | Non-applicable | |
| DIHYDRO PENTAMETHYLINDANONE CAS: 33704-61-9 EC: 251-649-3 | LD50 oral | 2900 mg/kg | Rat |
| | LD50 dermal | Non-applicable | |
| | LC50 inhalation | Non-applicable | |
| 4-TERT-BUTYLDIHYDROCINNAMALDEHYDE CAS: 18127-01-0 EC: 242-016-2 | LD50 oral | 2500 mg/kg | Rat |
| | LD50 dermal | Non-applicable | |
| | LC50 inhalation | Non-applicable | |
| ROSE KETONE-3 CAS: 57378-68-4 EC: 260-709-8 | LD50 oral | 1600 mg/kg | Rat |
| | LD50 dermal | Non-applicable | |
| | LC50 inhalation | Non-applicable | |

SECTION 12: ECOLOGICAL INFORMATION

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

12.1 Toxicity:

Acute toxicity:



SECTION 12: ECOLOGICAL INFORMATION (continued)

| Identification | Concentration | Species | Genus |
|---|---------------|-------------------|---------------------------------|
| TETRAMETHYL ACETYLOCTAHYDRONAPHTHALENES CAS: 54464-57-2 EC: 259-174-3 | LC50 | >0.1 - 1 (96 h) | Fish |
| | EC50 | >0.1 - 1 (48 h) | Crustacean |
| | EC50 | >0.1 - 1 (72 h) | Algae |
| METHYL PHENYLBUTANOL CAS: 103-05-9 EC: 203-074-4 | LC50 | >10 - 100 (96 h) | Fish |
| | EC50 | >10 - 100 (48 h) | Crustacean |
| | EC50 | >10 - 100 (72 h) | Algae |
| HEXAMETHYLINDANOPYRAN CAS: 1222-05-5 EC: 214-946-9 | LC50 | 0,95 mg/L (96 h) | Oryzias latipes |
| | EC50 | 0,194 mg/L (48 h) | Daphnia magna |
| | EC50 | 0,723 mg/L (72 h) | Pseudokirchneriella subcapitata |
| DIHYDRO PENTAMETHYLINDANONE CAS: 33704-61-9 EC: 251-649-3 | LC50 | 2,12 mg/L (96 h) | Oryzias latipes |
| | EC50 | 1,5 mg/L (48 h) | Daphnia magna |
| | EC50 | 10 mg/L (72 h) | Desmodesmus subspicatus |
| 4-TERT-BUTYLDIHYDROCINNAMALDEHYDE CAS: 18127-01-0 EC: 242-016-2 | LC50 | >10 - 100 (96 h) | Fish |
| | EC50 | >10 - 100 (48 h) | Crustacean |
| | EC50 | >10 - 100 (72 h) | Algae |
| ROSE KETONE-3 CAS: 57378-68-4 EC: 260-709-8 | LC50 | >0.1 - 1 (96 h) | Fish |
| | EC50 | >0.1 - 1 (48 h) | Crustacean |
| | EC50 | >0.1 - 1 (72 h) | Algae |

12.2 Persistence and degradability:

| Identification | Degradability | Biodegradability |
|---|---------------|------------------|
| LINALOOL CAS: 78-70-6 EC: 201-134-4 | BOD5 | Non-applicable |
| | COD | Non-applicable |
| | BOD5/COD | Non-applicable |
| METHYL PHENYLBUTANOL CAS: 103-05-9 EC: 203-074-4 | BOD5 | Non-applicable |
| | COD | Non-applicable |
| | BOD5/COD | Non-applicable |
| DIHYDRO PENTAMETHYLINDANONE CAS: 33704-61-9 EC: 251-649-3 | BOD5 | Non-applicable |
| | COD | Non-applicable |
| | BOD5/COD | Non-applicable |

12.3 Bioaccumulative potential:

| Identification | Bioaccumulation potential |
|---|---------------------------|
| LINALOOL CAS: 78-70-6 EC: 201-134-4 | BCF |
| | Pow Log |
| | Potential |

- CONTINUED ON NEXT PAGE -



SECTION 12: ECOLOGICAL INFORMATION (continued)

| Identification | Bioaccumulation potential | |
|---|---------------------------|-----------|
| HEXAMETHYLINDANOPYRAN CAS: 1222-05-5 EC: 214-946-9 | BCF | 1584 |
| | Pow Log | 5.9 |
| | Potential | Very High |
| DIHYDRO PENTAMETHYLINDANONE CAS: 33704-61-9 EC: 251-649-3 | BCF | 82 |
| | Pow Log | 4.2 |
| | Potential | Moderate |

12.4 Mobility in soil:

| Identification | Absorption/desorption | | Volatility | |
|---|-----------------------|----------------|------------|----------------|
| METHYL PHENYLBUTANOL CAS: 103-05-9 EC: 203-074-4 | Koc | 154.8 | Henry | Non-applicable |
| | Conclusion | High | Dry soil | Non-applicable |
| | Surface tension | Non-applicable | Moist soil | Non-applicable |
| DIHYDRO PENTAMETHYLINDANONE CAS: 33704-61-9 EC: 251-649-3 | Koc | 200 | Henry | Non-applicable |
| | Conclusion | Moderate | Dry soil | Non-applicable |
| | Surface tension | Non-applicable | Moist soil | Non-applicable |

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

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) |
|------|---|--|
| | It is not possible to assign a specific code, as it depends on the intended use by the user | Dangerous |

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

HP14 Ecotoxic

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. Waste should not be disposed of to drains. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 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

Transport of dangerous goods by land:

With regard to ADR 2021 and RID 2021:



SECTION 14: TRANSPORT INFORMATION (continued)



- 14.1 UN number:** UN3082
14.2 UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TETRAMETHYL ACETYLOCTAHYDRONAPHTHALENES)
14.3 Transport hazard class(es): 9
Labels: 9
14.4 Packing group: III
14.5 Environmental hazards: Yes
14.6 Special precautions for user
Special regulations: 274, 335, 375, 601
Tunnel restriction code: -
Physico-Chemical properties: see section 9
Limited quantities: 5 L
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code: Non-applicable

Transport of dangerous goods by sea:

With regard to IMDG 40-20:



- 14.1 UN number:** UN3082
14.2 UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TETRAMETHYL ACETYLOCTAHYDRONAPHTHALENES)
14.3 Transport hazard class(es): 9
Labels: 9
14.4 Packing group: III
14.5 Marine pollutant: Yes
14.6 Special precautions for user
Special regulations: 335, 969, 274
EmS Codes: F-A, S-F
Physico-Chemical properties: see section 9
Limited quantities: 5 L
Segregation group: Non-applicable
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code: Non-applicable

Transport of dangerous goods by air:

With regard to IATA/ICAO 2022:



- 14.1 UN number:** UN3082
14.2 UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TETRAMETHYL ACETYLOCTAHYDRONAPHTHALENES)
14.3 Transport hazard class(es): 9
Labels: 9
14.4 Packing group: III
14.5 Environmental hazards: Yes
14.6 Special precautions for user
Physico-Chemical properties: see section 9
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code: Non-applicable

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) No 1907/2006 (REACH): Non-applicable

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

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

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SECTION 15: REGULATORY INFORMATION (continued)

Article 95, 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

Seveso III:

| Section | Description | Lower-tier requirements | Upper-tier requirements |
|---------|-----------------------|-------------------------|-------------------------|
| E2 | ENVIRONMENTAL HAZARDS | 200 | 500 |

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

Shall not be used in:

- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
- tricks and jokes,
- games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, 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:

The SDS shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (Regulation (EC) No 2015/830).

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

Non-applicable

Texts of the legislative phrases mentioned in section 2:

H317: May cause an allergic skin reaction.

H411: Toxic 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) No 1272/2008:

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.

Repr. 2: H361 - Suspected of damaging fertility or the unborn child.

Skin Irrit. 2: H315 - Causes skin irritation.

Skin Sens. 1A: H317 - May cause an allergic skin reaction.

Skin Sens. 1B: H317 - May cause an allergic skin reaction.

STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure.

Classification procedure:

Skin Sens. 1B: Calculation method

Aquatic Chronic 2: Calculation method

Advice related to training:

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

Principal bibliographical sources:

<http://echa.europa.eu>

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

Abbreviations and acronyms:

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SECTION 16: OTHER INFORMATION (continued)

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: 5day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
LC50: Lethal Concentration 50
EC50: Effective concentration 50
LogPOW: Octanolwater partition coefficient
Koc: Partition coefficient of organic carbon
UFI: unique formula identifier
IARC: International Agency for Research on Cancer

The information contained in this safety 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 safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -