# SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2020/878)

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

### |> 1.1. Product identifier

CAS: 498-15-7
EC: 207-856-6
REACH: 01-2119520252-55

Product name : DELTA 3 CARENE 90% 937866

Product code : T04200.

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

Use of the substance/mixture: Raw material used in perfumery preparations.

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

Registered company name : Firmenich Grasse SAS.

Address : Parc Industriel Les Bois de Grasse 106 Avenue Louison Bobet.06130.GRASSE.FRANCE.

Telephone : Tel: +33 (0)4 93 70 80 80. Fax : .

GRS.EU.FRAGRANCE.EXPERTS@firmenich.com

Distributor : BLH s.a.s.

Address : ZAC du Pilon - 06460 SAINT VALLIER DE THIEY

Tèl : 04 92 60 35 60 - Fax : 04 92 60 35 69

Website : www.blhsas.com

### 1.4. Emergency telephone number : +33 (0)1 45 42 59 59.

Association/Organisation : INRS / ORFILA http://www.centres-antipoison.net.

## |>SECTION 2 : HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

### |> In compliance with EC regulation No. 1272/2008 and its amendments.

Flammable liquid, Category 3 (Flam. Liq. 3, H226).

Acute inhalation toxicity, Category 4 (Acute Tox. 4, H332).

Skin irritation, Category 2 (Skin Irrit. 2, H315).

Skin sensitisation, Category 1 (Skin Sens. 1, H317).

Aspiration hazard, Category 1 (Asp. Tox. 1, H304).

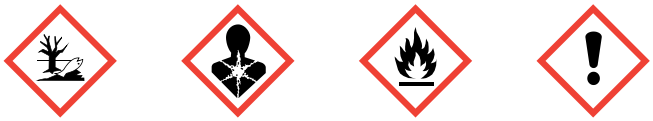
Hazardous to the aquatic environment - Acute hazard, Category 1 (Aquatic Acute 1, H400).

Hazardous to the aquatic environment - Chronic hazard, Category 1 (Aquatic Chronic 1, H410).

### 2.2. Label elements

### |> In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms :



GHS09 GHS08 GHS02 GHS07

Signal Word :

DANGER

Product identifiers :

| | |
|---|---|
| EC 207-856-6 | BICYCLO[4.1.0]HEPT-3-ENE, 3,7,7-TRIMETHYL-, (1S,6R)- |
| EC 204-622-5 | 1,6-OCTADIENE, 7-METHYL-3-METHYLENE- |
| EC 227-813-5 | D-LIMONENE |
| EC 202-792-5 | ALPHA-PHELLANDRENE |
| EC 202-796-7 | 1-ISOPROPYL- 4-METHYLBENZENE |
| EC 202-795-1 | P-MENTHA-1,3-DIENE |
| EC 242-060-2 | BICYCLO[3.1.1]HEPTANE, 6,6-DIMETHYL-2-METHYLENE-, (1S)- |
| EC 209-081-9 | BETA-PHELLANDRENE |

Additional labeling :

Hazard statements :

| | |
|---|---|
| H226 | Flammable liquid and vapour. |
| H304 | May be fatal if swallowed and enters airways. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H332 | Harmful if inhaled. |
| H410 | Very toxic to aquatic life with long lasting effects. |

Precautionary statements - Prevention :

| | |
|---|---|
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P264 | Wash thoroughly after handling. |

Precautionary statements - Response :

| | |
|---|---|
| P301 + P310 | IF SWALLOWED: Immediately call a POISON CENTER or doctor. |
| P303 + P361 + P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. |

Precautionary statements - Storage :

| | |
|---|---|
| P405 | Store locked up. |

### 2.3. Other hazards

The substance does not fulfil the PBT or vPvP criteria in accordance with annexe XIII of the REACH regulations EC 1907/2006.

## |>SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substances

**|> Composition :**

| Identification | Classification (EC) 1272/2008 | Note | % |
|---|---|---|---|
| CAS: 498-15-7<br>EC: 207-856-6<br>REACH: 01-2119520252-55<br><br>BICYCLO[4.1.0]HEPT-3-ENE,<br>3,7,7-TRIMETHYL-, (1S,6R)- | GHS07, GHS09, GHS08, GHS02<br>Dgr<br>Flam. Liq. 3, H226<br>Asp. Tox. 1, H304<br>Skin Irrit. 2, H315<br>Skin Sens. 1, H317<br>Acute Tox. 4, H332<br>Aquatic Acute 1, H400<br>M Acute = 1<br>Aquatic Chronic 1, H410<br>M Chronic = 1 | | 90-99 |
| CAS: 123-35-3<br>EC: 204-622-5<br><br>1,6-OCTADIENE,<br>7-METHYL-3-METHYLENE- | GHS07, GHS09, GHS08, GHS02<br>Dgr<br>Flam. Liq. 3, H226<br>Asp. Tox. 1, H304<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Aquatic Chronic 2, H411<br>Aquatic Acute 1, H400<br>M Acute = 1 | | 1-2.5 |
| CAS: 5989-27-5<br>EC: 227-813-5<br><br>D-LIMONENE | GHS02, GHS07, GHS08, GHS09<br>Dgr<br>Flam. Liq. 3, H226<br>Asp. Tox. 1, H304<br>Skin Irrit. 2, H315<br>Skin Sens. 1B, H317<br>Aquatic Chronic 3, H412<br>Aquatic Acute 1, H400<br>M Acute = 1 | [i] | 2.5-5 |
| CAS: 99-83-2<br>EC: 202-792-5<br><br>ALPHA-PHELLANDRENE | GHS02, GHS07, GHS08, GHS09<br>Dgr<br>Flam. Liq. 3, H226<br>Asp. Tox. 1, H304<br>Skin Sens. 1, H317<br>Aquatic Acute 1, H400<br>M Acute = 1<br>Aquatic Chronic 1, H410<br>M Chronic = 1 | | 1-2.5 |

| | | | |
|---|---|---|---|
| CAS: 99-87-6<br>EC: 202-796-7<br><br>1-ISOPROPYL- 4-METHYLBENZENE | GHS06, GHS09, GHS08, GHS02<br>Dgr<br>Flam. Liq. 3, H226<br>Asp. Tox. 1, H304<br>Acute Tox. 3, H331<br>Repr. 2, H361<br>Aquatic Chronic 2, H411 | [ii] | 1-2.5 |
| CAS: 99-86-5<br>EC: 202-795-1<br><br>P-MENTHA-1,3-DIENE | GHS07, GHS09, GHS08, GHS02<br>Dgr<br>Flam. Liq. 3, H226<br>Acute Tox. 4, H302<br>Asp. Tox. 1, H304<br>Skin Sens. 1, H317<br>Eye Irrit. 2, H319<br>Aquatic Chronic 2, H411 | | 1-2.5 |
| CAS: 18172-67-3<br>EC: 242-060-2<br><br>BICYCLO[3.1.1]HEPTANE,<br>6,6-DIMETHYL-2-METHYLENE-, (1S)- | GHS02, GHS07, GHS08, GHS09<br>Dgr<br>Flam. Liq. 3, H226<br>Asp. Tox. 1, H304<br>Skin Irrit. 2, H315<br>Skin Sens. 1B, H317<br>Aquatic Acute 1, H400<br>M Acute = 1<br>Aquatic Chronic 1, H410<br>M Chronic = 1 | | 1-2.5 |
| CAS: 555-10-2<br>EC: 209-081-9<br><br>BETA-PHELLANDRENE | GHS02, GHS07, GHS08<br>Dgr<br>Flam. Liq. 3, H226<br>Asp. Tox. 1, H304<br>Skin Sens. 1, H317 | | 0.5-1 |
| CAS: 99-85-4<br>EC: 202-794-6<br><br>GAMMA TERPINENE | GHS09, GHS08, GHS02<br>Dgr<br>Flam. Liq. 3, H226<br>Asp. Tox. 1, H304<br>Repr. 2, H361<br>Aquatic Chronic 2, H411 | [ii] | 0.1-0.5 |
| CAS: 29350-67-2<br>EC: 249-579-3<br><br>4-ISOPROPYL-1-METHYLCYCLOHEXENE | GHS02, GHS08, GHS09<br>Dgr<br>Flam. Liq. 3, H226<br>Asp. Tox. 1, H304<br>Aquatic Acute 1, H400<br>M Acute = 1<br>Aquatic Chronic 1, H410<br>M Chronic = 1 | | 0.1-0.5 |

**Information on ingredients :**

[i] Substance for which maximum workplace exposure limits are available.

[ii] Carcinogenic, mutagenic or reprotoxic (CMR) substance.

## |>SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

### 4.1. description of first aid measures

**|> In the event of exposure by inhalation :**

In the event of massive inhalation, remove the person exposed to fresh air. Keep warm and at rest.

If breathing is irregular or has stopped, effect mouth-to-mouth resuscitation and call a doctor.

Do not proceed with mouth-to-mouth or mouth-to-nose resuscitation.Use the appropriate equipment.

**In the event of splashes or contact with skin :**

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

In the event of an allergic reaction, seek medical attention.

If the contaminated aera is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

**In the event of swallowing :**

Do not give the patient anything orally.

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Seek medical attention immediately, showing the label.

If swallowed accidentally, do not allow to drink, do not induce vomiting and transfer to hospital immediately by ambulance. Show the label to the doctor.

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

No data available.

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

No data available.

## SECTION 5 : FIREFIGHTING MEASURES

Flammable.

Chemical powders, carbon dioxide and other extinguishing gas are suitable for small fires.

**5.1. Extinguishing media**

Keep packages near the fire cool, to prevent pressurised containers from bursting.

**Suitable methods of extinction**

Prevent the effluent of fire-fighting measures from entering drains or waterways.

**5.2. Special hazards arising from the substance or mixture**

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO2)

**5.3. Advice for firefighters**

Fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

## |>SECTION 6 : ACCIDENTAL RELEASE MEASURES

**6.1. Personal precautions, protective equipment and emergency procedures**

Consult the safety measures listed under headings 7 and 8.

**|> For non first aid worker**

Avoid inhaling the vapors.

Avoid any contact with the skin and eyes.

If a large quantity has been spilt, evacuate all personnel and only allow intervention by trained operators equipped with safety apparatus.

**For first aid worker**

First aid workers will be equipped with suitable personal protective equipment (See section 8).

**6.2. Environmental precautions**

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

If the product contaminates waterways, rivers or drains, alert the relevant authorities in accordance with statutory procedures

Use drums to dispose of collected waste in compliance with current regulations (see section 13).

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

Clean preferably with a detergent, do not use solvents.

**6.4. Reference to other sections**

No data available.

## |>SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the substance is handled.

Individuals with a history of skin sensitisation should not, under any circumstance, handle this substance.

**7.1. Precautions for safe handling**

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Remove contaminated clothing and protective equipment before entering eating areas.

**Fire prevention :**

Handle in well-ventilated areas.

Prevent the formation of flammable or explosive concentrations in air and avoid vapor concentrations higher than the occupational exposure limits.

Never inhale this substance.
Prevent the accumulation of electrostatic charges with connections to earth.
Use the mixture in premises free of naked flames or other sources of ignition and ensure that electrical equipment is suitably protected.
Keep packages tightly closed and away from sources of heat, sparks and naked flames.
Do not use tools which may produce sparks. Do not smoke.
Prevent access by unauthorised personnel.

**|> Recommended equipment and procedures :**

For personal protection, see section 8.
Observe precautions stated on label and also industrial safety regulations.
Avoid inhaling vapors.
Avoid inhaling vapors. Carry out any industrial operation which may give rise to this in a sealed apparatus.
Provide vapor extraction at the emission source and also general ventilation of the premises.
Also provide breathing apparatus for certain short tasks of an exceptional nature and for emergency interventions.
In all cases, recover emissions at source.

**Prohibited equipment and procedures :**

No smoking, eating or drinking in areas where the substance is used.
Never open the packages under pressure.

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

No data available.

**Storage**

Keep the container tightly closed in a dry, well-ventilated place.
Keep away from food and drink, including those for animals.
Keep away from all sources of ignition - do not smoke.
Keep well away from all sources of ignition, heat and direct sunlight.
Avoid accumulation of electrostatic charges.

**Packaging**

Always keep in packaging made of an identical material to the original.

### 7.3. Specific end use(s)

No data available.

## |>SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

**|> Occupational exposure limits :**

- Germany - AGW (BAuA - TRGS 900, 02/2022) :

| CAS | VME : | VME : | Excess | Notes |
|---|---|---|---|---|
| 5989-27-5 | | 5 ppm<br>28 mg/m3 | | 4(II) |

- Spain (Instituto Nacional de Seguridad e Higiene en el Trabajo (INSHT), 2019) :

| CAS | TWA : | STEL : | Ceiling : | Definition : | Criteria : |
|---|---|---|---|---|---|
| 5989-27-5 | 30 ppm<br>168 mg/m3 | | | Sen. via dermica | |

**|> Derived no effect level (DNEL) or derived minimum effect level (DMEL):**

BICYCLO[4.1.0]HEPT-3-ENE, 3,7,7-TRIMETHYL-, (1S,6R)- (CAS: 498-15-7)

| **Final use:** | **Workers.** |
|---|---|
| Exposure method: | Dermal contact. |
| Potential health effects: | Long term systemic effects. |
| DNEL : | 2.45 mg/kg body weight/day |
| Exposure method: | Inhalation. |
| Potential health effects: | Long term systemic effects. |
| DNEL : | 8.63 mg of substance/m3 |

| **Final use:** | **Consumers.** |
|---|---|
| Exposure method: | Ingestion. |
| Potential health effects: | Long term systemic effects. |
| DNEL : | 0.875 mg/kg body weight/day |

| | |
|---|---|
| Exposure method: | Dermal contact. |
| Potential health effects: | Long term systemic effects. |
| DNEL : | 0.875 mg/kg body weight/day |
| Exposure method: | Inhalation. |
| Potential health effects: | Long term systemic effects. |
| DNEL : | 1.52 mg of substance/m3 |

**|> Predicted no effect concentration (PNEC):**

BICYCLO[4.1.0]HEPT-3-ENE, 3,7,7-TRIMETHYL-, (1S,6R)- (CAS: 498-15-7)

| | |
|---|---|
| Environmental compartment: | Soil. |
| PNEC : | 47.3 µg/kg |
| Environmental compartment: | Fresh water. |
| PNEC : | 1 µg/l |
| Environmental compartment: | Sea water. |
| PNEC : | 0.1 µg/l |
| Environmental compartment: | Fresh water sediment. |
| PNEC : | 237 µg/kg |
| Environmental compartment: | Marine sediment. |
| PNEC : | 23.7 µg/kg |
| Environmental compartment: | Waste water treatment plant. |
| PNEC : | 47.3 µg/kg |

### 8.2. Exposure controls

**Personal protection measures, such as personal protective equipment**

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :

Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

**- Eye / face protection**

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles in accordance with standard EN166.

**- Hand protection**

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

**- Body protection**

Avoid skin contact.

Wear suitable protective clothing.

Suitable type of protective clothing :

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605/A1 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034/A1 to prevent skin contact.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

|> **- Respiratory protection**

Avoid inhaling vapors.

If the ventilation is insufficient, wear appropriate breathing apparatus.

When workers are confronted with concentrations that are above occupational exposure limits, they must wear a suitable, approved, respiratory protection device.

Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387 :

- A1 (Brown)

## |>SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

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

**Physical state**

| | |
|---|---|
| Physical state : | Fluid liquid. |

**Colour**

Unspecified

**Odour**

| | |
|---|---|
| Odour threshold : | Not stated. |

|> **Melting point**

| | |
|---|---|
| Melting point/melting range : | <-80°C |

**Freezing point**

| | |
|---|---|
| Freezing point / Freezing range : | Not stated. |

|> **Boiling point or initial boiling point and boiling range**

| | |
|---|---|
| Boiling point/boiling range : | 169.7 °C |

**Flammability**

| | |
|---|---|
| Flammability (solid, gas) : | Not stated. |

**Lower and upper explosion limit**

| | |
|---|---|
| Explosive properties, lower explosivity limit (%) : | Not stated. |
| Explosive properties, upper explosivity limit (%) : | Not stated. |

**Flash point**

| | |
|---|---|
| Flash Point : | 47.00 °C. |

**Auto-ignition temperature**

| | |
|---|---|
| Self-ignition temperature : | 260 °C. |

**Decomposition temperature**

| | |
|---|---|
| Decomposition point/decomposition range : | Not specified. |

**pH**

| | |
|---|---|
| pH : | Not relevant. |
| pH (aqueous solution) : | Not stated. |

**Kinematic viscosity**

| | |
|---|---|
| Viscosity : | Not stated. |
| Viscosity: | v < 7 mm2/s (40°C) |

**Solubility**

| | |
|---|---|
| Water solubility : | Insoluble. 3,70 mg/L |
| Fat solubility : | Not stated. |

|> **Partition coefficient n-octanol/water (log value)**

| | |
|---|---|
| Partition coefficient: n-octanol/water : | log Kow = 4,38 (OECD 117) |

**Vapour pressure**

| | |
|---|---|
| Vapour pressure (50°C) : | Not relevant. |

**Density and/or relative density**

| | |
|---|---|
| Density : | CoA |

**Relative vapour density**

| | |
|---|---|
| Vapour density : | Not stated. |

|> **Particle characteristics**

The substance does not contain nanoforms.

### 9.2. Other information

No data available.

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

No data available.

**9.2.2. Other safety characteristics**

No data available.

## SECTION 10 : STABILITY AND REACTIVITY

**10.1. Reactivity**

No data available.

**10.2. Chemical stability**

This substance is stable under the recommended handling and storage conditions in section 7.

**10.3. Possibility of hazardous reactions**

No data available.

**10.4. Conditions to avoid**

Any apparatus likely to produce a flame or to have a metallic surface at high temperature (burners, electric arcs, furnaces etc.) must not be allowed on the premises.

Avoid :

- accumulation of electrostatic charges.
- heating
- heat
- flames and hot surfaces

**10.5. Incompatible materials**

No data available.

**10.6. Hazardous decomposition products**

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO2)

## |>SECTION 11 : TOXICOLOGICAL INFORMATION

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

Harmful by inhalation.

May cause irreversible damage to the skin; namely inflammation of the skin or the formation of erythema and eschar or oedema following exposure up to four hours.

May cause an allergic reaction by skin contact.

Aspiration toxicity includes severe acute effects such as chemical pneumonia, varying degrees of pulmonary injury or death following aspiration.

**11.1.1. Substances**

**|> Acute toxicity :**

BICYCLO[4.1.0]HEPT-3-ENE, 3,7,7-TRIMETHYL-, (1S,6R)- (CAS: 498-15-7)

| | |
|---|---|
| Oral route : | LD50 > 2000 mg/kg bodyweight/day<br>Species : Rat |
| Dermal route : | LD50 > 2000 mg/kg bodyweight/day<br>Species : Rabbit |

**|> Germ cell mutagenicity :**

BICYCLO[4.1.0]HEPT-3-ENE, 3,7,7-TRIMETHYL-, (1S,6R)- (CAS: 498-15-7)

| | |
|---|---|
| Ames test (in vitro) : | Negative. |

**Aspiration hazard :**

May be fatal if swallowed and enters airways.

Aspiration toxicity includes severe acute effects such as chemical pneumonia, varying degrees of pulmonary injury or death following aspiration.

**11.2. Information on other hazards**

**|> Endocrine disrupting properties**

The substance has not been evaluated as an endocrine disruptor with effects on human health.

|> **Monograph(s) from the IARC (International Agency for Research on Cancer) :**

CAS 5989-27-5 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

CAS 123-35-3 : IARC Group 2B : The agent is possibly carcinogenic to humans.

## |>SECTION 12 : ECOLOGICAL INFORMATION

Very toxic to aquatic life with long lasting effects.

The product must not be allowed to run into drains or waterways.

### 12.1. Toxicity

#### |> 12.1.1. Substances

BICYCLO[4.1.0]HEPT-3-ENE, 3,7,7-TRIMETHYL-, (1S,6R)- (CAS: 498-15-7)

| | |
|---|---|
| Fish toxicity : | LC50 = 0.32 mg/l<br>Duration of exposure : 96 h |
| Crustacean toxicity : | EC50 = 0.80 mg/l<br>Species : Daphnia sp.<br>Duration of exposure : 48 h<br>OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Algae toxicity : | ECr50 = 0.45 mg/l<br>Duration of exposure : 72 h |

### 12.2. Persistence and degradability

#### |> 12.2.1. Substances

GAMMA TERPINENE (CAS: 99-85-4)

| | |
|---|---|
| Biodegradability : | no degradability data is available, the substance is considered as not degrading quickly. |

P-MENTHA-1,3-DIENE (CAS: 99-86-5)

| | |
|---|---|
| Biodegradability : | no degradability data is available, the substance is considered as not degrading quickly. |

1-ISOPROPYL- 4-METHYLBENZENE (CAS: 99-87-6)

| | |
|---|---|
| Biodegradability : | no degradability data is available, the substance is considered as not degrading quickly. |

1,6-OCTADIENE, 7-METHYL-3-METHYLENE- (CAS: 123-35-3)

| | |
|---|---|
| Biodegradability : | no degradability data is available, the substance is considered as not degrading quickly. |

BICYCLO[4.1.0]HEPT-3-ENE, 3,7,7-TRIMETHYL-, (1S,6R)- (CAS: 498-15-7)

| | |
|---|---|
| Biodegradability : | Rapidly degradable. |

### 12.3. Bioaccumulative potential

#### |> 12.3.1. Substances

BICYCLO[4.1.0]HEPT-3-ENE, 3,7,7-TRIMETHYL-, (1S,6R)- (CAS: 498-15-7)

| | |
|---|---|
| Octanol/water partition coefficient : | log Koe = 4.38<br>OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method) |

### 12.4. Mobility in soil

No data available.

### 12.5. Results of PBT and vPvB assessment

No data available.

### |> 12.6. Endocrine disrupting properties

The substance has not been evaluated as an endocrine disruptor with environmental effects.

### 12.7. Other adverse effects

No data available.

## SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the substance and/or its container must be determined in accordance with Directive 2008/98/EC.

### 13.1. Waste treatment methods

Do not pour into drains or waterways.

**Waste :**

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

**Soiled packaging :**

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

## |>SECTION 14 : TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2023 - IMDG 2022 [41-22] - ICAO/IATA 2024 [65]).

### 14.1. UN number or ID number

1993

### |> 14.2. UN proper shipping name

UN1993=FLAMMABLE LIQUID, N.O.S.

(bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethyl-, (1s,6r)-)

### 14.3. Transport hazard class(es)

- Classification :


3

### 14.4. Packing group

III

### 14.5. Environmental hazards

- Environmentally hazardous material :

### 14.6. Special precautions for user

| ADR/RID | Class | Code | Pack gr. | Label | Ident. | LQ | Provis. | EQ | Cat. | Tunnel |
|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | F1 | III | 3 | 30 | 5 L | 274 601 | E1 | 3 | D/E |

|>

| IMDG | Class | 2°Label | Pack gr. | LQ | EMS | Provis. | EQ | Stowage Handling | Segregation |
|---|---|---|---|---|---|---|---|---|---|
| | 3 | - | III | 5 L | F-E. S-E | 223 274 955 | E1 | Category A | - |

| IATA | Class | 2°Label | Pack gr. | Passager | Passager | Cargo | Cargo | note | EQ |
|---|---|---|---|---|---|---|---|---|---|
| | 3 | - | III | 355 | 60 L | 366 | 220 L | A3 | E1 |
| | 3 | - | III | Y344 | 10 L | - | - | A3 | E1 |

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

Marine pollutant (IMDG 3.1.2.9):(bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethyl-, (1s,6r)-)

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

No data available.

## |>SECTION 15 : REGULATORY INFORMATION

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

**|> Classification and labelling information included in section 2:**

The following regulations have been used:

**Container information:**

No data available.

**Restrictions applied under Title VIII of Regulation (EC) No. 1907/2006 (REACH):**

Substance not restricted under Annex XVII of Regulation (EC) no. 1907/2006 (REACH): https://echa.europa.eu/substances-restricted-under-reach.

**|> Explosives precursors :**

The substance is not subject to Regulation (EU) 2019/1148 on the marketing and use of explosives precursors.

**Particular provisions :**

No data available.

### 15.2. Chemical safety assessment

No data available.

## |>SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the substance and not as a guarantee of the properties thereof.

**|> Wording of the phrases mentioned in section 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. |
| H331 | Toxic if inhaled. |
| H332 | Harmful if inhaled. |
| H361 | Suspected of damaging fertility or the unborn child . |
| 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. |

**|> Abbreviations and acronyms :**

LD50 : The dose of a test substance resulting in 50% lethality in a given time period.
LC50 : The concentration of a test substance resulting in 50% lethality in a given period.
EC50 : The effective concentration of substance that causes 50% of the maximum response.
ECr50 : The effective concentration of substance that causes 50% reduction in growth rate.
REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.
DNEL : Derived No-Effect Level
PNEC : Predicted No-Effect Concentration
CMR: Carcinogenic, mutagenic or reprotoxic.
STEL : Short-term exposure limit
TWA : Time Weighted Averages
TLV : Threshold Limit Value (exposure)
AEV : Average Exposure Value.
ADR : European agreement concerning the international carriage of dangerous goods by Road.
IMDG : International Maritime Dangerous Goods.
IATA : International Air Transport Association.
ICAO : International Civil Aviation Organisation
RID : Regulations concerning the International carriage of Dangerous goods by rail.
WGK : Wassergefahrdungsklasse (Water Hazard Class).

GHS02 : Flame
GHS07 : Exclamation mark
GHS08 : Health hazard
GHS09 : Environment
PBT: Persistent, bioaccumulable and toxic.
vPvB : Very persistent, very bioaccumulable.
SVHC : Substances of very high concern.
|> Modification compared to the previous version