

## **Safety Data Sheet**

according to Regulation (EC) No 1907/2006 (REACH) Classifications according to Regulation (EC) No 1272/2008. Printdate 01 Jun 2023

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1. Product name:

gamma-Terpinene

## 1.1. Catalog No.:

680379

## 1.2. Relevant identified uses of the substance or mixture

Identified: Laboratory chemical uses: R&D

uses:

## 1.3. Uses advised against:

HPC Standards GmbH Am Wieseneck 7

04451 Cunnersdorf Deutschland

Tel. +49 34291 3372-36 Fax. +49 34291 3372-39 contact@hpc-standards.com

## 1.4. Emergency telephone number

HPC Standards Tel. +49 34291 3372-36 This number is only available during office hours.

#### 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 Flammable liquids (Category 3), H226 Aspiration hazard (Category 1), H304

## 2.2. Label elements

## 2.2.1. Pictogram







# 2.2.2.

2.2 Label elements Labelling according Regulation (EC) No 1272/2008
Pictogram Signal word Danger
Hazard statement(s) H226 Flammable liquid and vapour.



H304 May be fatal if swallowed and enters airways Precautionary statement(s) P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331 Do NOT induce vomiting.
P370 + P378 In case of fire: Use dry powder or dry sand to extinguish.

Supplemental Hazard

Statements

none

2.3 Other hazards
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances
Synonyms: 1-Isopropyl-4-methyl-1,4-cyclohexadienep-Mentha-1,4-diene
Formula: C10H16
Molecular weight: 136,23 g/mol
CAS-No.: 99-85-4
EC-No.: 202-794-6
Hazardus ingredients according to Regulation (EC) No. 1272/2008

Hazardous ingredients according to Regulation (EC) No 1272/2008 Component Classification Concentration

p-Mentha-1,4-diene CAS-No. EC-No. 99-85-4 202-794-6

Flam. Liq. 3; Asp. Tox. 1; H226, H304

<= 100 %

### 3.1.1. Formula

C10H16

## 3.1.2. Molecular Weight (g/mol)

136.23



99-85-4

#### 4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution. If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in

4.3 Indication of any immediate medical attention and special treatment needed

No data available

## 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media Suitable extinguishing media Dry powder Dry sand Unsuitable extinguishing media

Do NOT use water jet.
5.2 Special hazards arising from the substance or mixture

No data available

5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.
5.4 Further information

Use water spray to cool unopened containers.

## 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

For personal protection see section 8.

6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up
Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). 6.4 Reference to other sections

For disposal see section 13



#### 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic

For precautions see section 2.2.
7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be Recommended storage temperature 2 - 8 °C
Store under inert gas. Air sensitive.
7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove \$\\$#039;\$ outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains

## 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties a) Appearance Form: clear, liquid

Colour: colourless

b) Odour No data available c) Odour Threshold No data available

d) pH No data available e) Melting point/freezing

point No data available

f) Initial boiling point and

boiling range 182 °C - lit.

g) Flash point 50 °C - closed cup h) Evaporation rate No data available

i) Flammability (solid, gas) No data available



j) Upper/lower flammability or explosive limits No data available
k) Vapour pressure 0,9 hPa at 20 °C
l) Vapour density 4,7 - (Air = 1.0)
m) Relative density 0,85 g/mL at 25 °C
n) Water solubility No data available o) Partition coefficient: noctanol/ water No data available p) Auto-ignition temperature No data available q) Decomposition temperature temperature
No data available
r) Viscosity No data available
s) Explosive properties No data available
t) Oxidizing properties No data available
9.2 Other safety information
Relative vapour density 4,7 - (Air = 1.0)

#### 10. STABILITY AND REACTIVITY

10.1 Reactivity No data available 10.2 Chemical stability Stable under recommended storage conditions. 10.3 Possibility of hazardous reactions No data available 10.4 Conditions to avoid Heat, flames and sparks. 10.5 Incompatible materials Strong oxidizing agents 10.6 Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides
Other decomposition products - No data available In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects Acute toxicity LD50 Oral - Rat - 3.650 mg/kg Skin corrosion/irritation Serious eye damage/eye irritation Respiratory or skin sensitisation No data available Germ cell mutagenicity No data available

Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. Reproductive toxicity

No data available

Specific target organ toxicity - single exposure Specific target organ toxicity - repeated exposure No data available

Aspiration hazard

May be fatal if swallowed and enters airways.



Additional Information RTECS: OS8070000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 12. ECOLOGICAL INFORMATION

12.1 Toxicity No data available 12.2 Persistence and degradability No data available 12.3 Bioaccumulative potential No data available 12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

No data available

## 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned

containers like the product itself.
Contaminated packaging
Dispose of as unused product

## 14. TRANSPORT INFORMATION

14.1 UN number ADR/RID: 2319 IMDG: 2319 IATA: 2319 14.2 UN proper shipping name
ADR/RID: TERPENE HYDROCARBONS, N.O.S.
IMDG: TERPENE HYDROCARBONS, N.O.S.
IATA: Terpene hydrocarbons, n.o.s. 14.3 Transport hazard class(es) ADR/RID: 3 IMDG: 3 IATA: 3 14.4 Packaging group ADR/RID: III IMDG: III IATA: III 14.5 Environmental hazards ADR/RID: no IMDG Marine pollutant: no IATA: no 14.6 Special precautions for user No data available



# 15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006. 15.2 Chemical safety assessment For this product a chemical safety assessment was not carried out

## 16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. For lab use only!