

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH) Classifications according to Regulation (EC) No 1272/2008. Printdate 02 Jun 2023

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

1.1. Product name:

(-)-alpha-Bisabolol

1.1. Catalog No.:

673038

1.2. Relevant identified uses of the substance or mixture

Identified: Laboratory chemical uses: R&D

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
 Long-term (chronic) aquatic hazard (Category 3), H412
 For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2. Label elements

2.2.1. Pictogram

2.2.2.

2.2 Label elements Labelling according Regulation (EC) No 1272/2008 Pictogram none Signal word none Hazard statement(s) H412 Harmful to aquatic life with long lasting effects. Precautionary statement(s) P273 Avoid release to the environment. P501 Dispose of contents/ container to an approved waste disposal plant. Supplemental Hazard Statements none Reduced Labeling (<= 125 ml)



Pictogram none Signal word none Hazard statement(s) H412 Harmful to aquatic life with long lasting effects. Precautionary statement(s) none 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 : (-)-6-Methyl-2-(4-methyl-3-cyclohexen-1-yl)-5-hepten-2-ol Lévomenol (-)-alpha-Bisabolol Formula : C15H26O C15H26O Molecular weight : 222,37 g/mol CAS-No. : 23089-26-1 EC-No. : 208-205-9 Component levomenol CAS-No. 23089-26-1 EC-No. : 208-205-9 Classification Aquatic Chronic 3; H412 Concentration <= 100 % For the full text of the H-Statements mentioned in this Section, see Section 16.

3.1.1. Formula

C15H26O

3.1.2. Molecular Weight (g/mol)

222.37

3.1.3. CAS-No.

23089-26-1

4. FIRST AID MEASURES

4.1 Description of first-aid measures

If inhaled

After inhalation: fresh air. In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with

water/ shower. In case of eye contact

After eye contact: rinse out with plenty of water. Remove contact lenses.

If swallowed

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

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 section 11

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 Foam Carbon dioxide (CO2) Dry powder Unsuitable extinguishing média For this substance/mixture no limitations of extinguishing agents are given. 5.2 Special hazards arising from the substance or mixture Carbon oxides Combustible. Vapors are heavier than air and may spread along floors. Forms explosive mixtures with air on intense heating.



Development of hazardous combustion gases or vapours possible in the event of fire. 5.3 Advice for firefighters In the event of fire, wear self-contained breathing apparatus. 5.4 Further information Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures Advice for non-emergency personnel: Do not breathe vapors, aerosols. Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.
6.2 Environmental precautions Do not let product enter drains.
6.3 Methods and materials for containment and cleaning up Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb®).
Dispose of properly. Clean up affected area.
6.4 Reference to other sections For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling
For precautions see section 2.2.
7.2 Conditions for safe storage, including any incompatibilities
Storage conditions
Tightly closed.
Storage class
Storage class (TRGS 510): 10: Combustible liquids
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 Ingredients with workplace control parameters 8.2 Exposure controls Personal protective equipment Eye/face protection Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses Skin protection not required Respiratory protection Not required; except in case of aerosol formation. Control of environmental exposure Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance Form: liquid, clear
Color: colorless
b) Odor No data available
c) Odor Threshold No data available
d) pH No data available
e) Melting
point/freezing point
Melting point/freezing point: < -20 °C - OECD Test Guideline
102
f) Initial boiling point
and boiling range
300,2 °C at 1.013 hPa - OECD Test Guideline 103
g) Flash point 143 °C - closed cup - ISO 3679
h) Evaporation rate No data available
i) Flammability (solid, gas)
No data available
j) Upper/lower
flammability or
explosive limits
No data available
k) Vapor pressure < 0,1 hPa at 20 °C - OECD Test Guideline 104
l) Vapor density No data available



m) Density 0,93 g/cm3 at 20 °C - OECD Test Guideline 109 Relative density No data available n) Water solubility 0,022 g/l at 20 °C - OECD Test Guideline 105- partly soluble o) Partition coefficient: n-octanol/water log Pow: 5,5 at 25 °C - OECD Test Guideline 117 - Potential bioaccumulation p) Autoignition temperature 245 °C at 1.012 - 1.020 hPa - DIN 51794 q) Decomposition temperature No data available r) Viscosity Viscosity, kinematic: No data available Viscosity dynamic: No data available s) Explosive properties No data available t) Oxidizing properties none 9.2 Other safety information Surface tension 57,3 mN/m at 20 °C - OECD Test Guideline 115

10. STABILITY AND REACTIVITY

10.1 Reactivity
Forms explosive mixtures with air on intense heating.
A range from approx. 15 Kelvin below the flash point is to be rated as critical.
10.2 Chemical stability
The product is chemically stable under standard ambient conditions (room temperature) .
10.3 Possibility of hazardous reactions
No data available
10.4 Conditions to avoid
Strong heating.
10.5 Incompatible materials
Strong oxidizing agents
10.6 Hazardous decomposition products
In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects LD50 Oral - Rat - male and female - > 2.000 mg/kg (OECD Test Guideline 423) Inhalation: No data available Dermal: No data available Skin corrosion/irritation Skin - Rabbit Result: No skin irritation (OECD Test Guideline 404) Serious eye damage/eye irritation No data available Respiratory or skin sensitization Sensitisation test: - Guinea pig Result: negative (OECD Test Guideline 406) Germ cell mutagenicity No data available Carcinogenicity No data available Reproductive toxicity No data available Specific target organ toxicity - single exposure No data available Specific target organ toxicity - repeated exposure No data available Aspiration hazard No data available 11.2 Additional Information Endocrine disrupting properties Product: Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. To the best of our knowledge, the chemical, physical, and toxicological properties have not



been thoroughly investigated. Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately. Handle in accordance with good industrial hygiene and safety practice.

12. ECOLOGICAL INFORMATION

12.1 Toxicity Toxicity to daphnia and other aquatic invertebrates static test EC50 - Daphnia magna (Water flea) - 2,2 mg/l - 48 h (OECD Test Guideline 202) Toxicity to algae ErC50 - Pseudokirchneriella subcapitata (green algae) - 3,8 mg/l -72 h EC10 - Pseudokirchneriella subcapitata (green algae) - 0,76 mg/l -72 h (OECD Test Guideline 201) (OECD Test Guideline 201) (OECD Test Guideline 201) Toxicity to bacteria Remarks: No data available 12.2 Persistence and degradability Biodegradability aerobic - Exposure time 28 d Result: 70 - 80 % - Readily biodegradable. (OECD Test Guideline 301F) 12.3 Bioaccumulative potential 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 Endocrine disrupting properties Product: Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. 12.7 Other adverse effects No data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
 Product
 See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

14. TRANSPORT INFORMATION

14.1 UN number ADR/RID: 3082 IMDG: 3082 IATA: 3082 14.2 UN proper shipping name ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (levomenol) IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (levomenol) IATA: Environmentally hazardous substance, liquid, n.o.s. (levomenol) 14.3 Transport hazard class(es) ADR/RID: 9 IMDG: 9 IATA: 9 14.4 Packaging group ADR/RID: 11I IMDG: 11I IATA: 11I 14.5 Environmental hazards ADR/RID: yes IMDG Marine pollutant: yes IATA: yes 14.6 Special precautions for user Further information Packages smaller than or equal to 5 kg / L, not dangerous goods of Class 9

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006. Other regulations Take note of Dir 94/33/EC on the protection of young people at work.



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!