

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)
Classifications according to Regulation (EC) No 1272/2008.
Printdate 09 Sep 2024

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

1.1. Product name:

d-Borneol

1.1. Catalog No.:

684911

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
Flammable solids (Category 2), H228

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 Warning
Hazard statement(s)
H228 Flammable solid Precautionary statement(s)
P210 Keep away from heat/sparks/open flames/hot surfaces. No

smoking.
Supplemental Hazard
Statements
none
2.3 Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances
Formula : C₁₀H₁₈O
Molecular weight : 154,25 g/mol
CAS-No. : 464-43-7
EC-No. : 208-080-0
No components need to be disclosed according to the applicable regulations

3.1.1. Formula

C₁₀H₁₈O

3.1.2. Molecular Weight (g/mol)

154.25

3.1.3. CAS-No.

464-43-7

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 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
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide
5.2 Special hazards arising from the substance or mixture
Carbon oxides
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
Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.
Remove all sources of ignition. Evacuate personnel to safe 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
Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal. Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal according to local 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 formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed. Keep away from

sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature 2 - 8 °C

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

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance Form: crystalline, powder Colour: colourless, white

b) Odour No data available

c) Odour Threshold No data available

d) pH No data available

e) Melting

point/freezing point

Melting point/range: 206 - 209 °C - lit.

f) Initial boiling point

and boiling range

No data available

g) Flash point 65 °C - closed cup

h) Evaporation rate No data available

i) Flammability (solid,

gas)

The substance or mixture is a flammable solid with the category

2.

j) Upper/lower

flammability or

explosive limits

No data available

k) Vapour pressure No data available

l) Vapour density No data available

m) Relative density 1,011 g/cm³

n) Water solubility insoluble

o) Partition coefficient:

n-octanol/water

No data available

p) Auto-ignition

temperature

No data available

q) Decomposition

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

No data available

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. Extremes of temperature and direct sunlight.
- 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 - 5.800 mg/kg
Skin corrosion/irritation
No data available
Serious eye damage/eye irritation
No data available
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
No data available
Specific target organ toxicity - repeated exposure
No data available
Aspiration hazard
No data available
Additional Information
RTECS: Not available
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
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
- 12.6 Other adverse effects
No data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product

14. TRANSPORT INFORMATION

14.1 UN number

ADR/RID: 1312 IMDG: 1312 IATA: 1312

14.2 UN proper shipping name

ADR/RID: BORNEOL

IMDG: BORNEOL

IATA: Borneol

14.3 Transport hazard class(es)

ADR/RID: 4.1 IMDG: 4.1 IATA: 4.1

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.

International Chemical Weapons Convention

(CWC) Schedules of Toxic Chemicals and

Precursors

: Neither banned nor restricted

Restrictions on the marketing and use of certain dangerous substances and preparations

: Neither banned nor restricted

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals

REACH - Candidate List of Substances of Very

High Concern for Authorisation (Article 59).

: This product does not contain

substances of very high concern

(Regulation (EC) No

1907/2006 (REACH), Article 57).

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!