

20/06/2016

MATERIAL SAFETY DATA SHEET

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

Product name : **(+)-Borneol**

Catalogue number : **5421 S**

CAS NUMBER : [464-43-7]

EC Number : 207-352-6

Index number : -

Relevant identified uses of the substance / mixture and uses advised against

Reagent for research use only

Supplier : EXTRASYNTHÈSE
 Z.I Lyon Nord
 Impasse Jacquard - C.S 30062
 69727 GENAY CEDEX - FRANCE
 Phone. (33)(0)478-98-20-34
 Fax. (33)(0)478-98-19-45
 info@extrasynthese.com
 Emergency call number ORFILA (France) : Tel : (33)(0)145-42-59-59

2 . HAZARDS IDENTIFICATION

Classification of the substance / mixture

According to Regulation (EC) No1272/2008

Flammable Solids (Category 2) ; H228

Label elements

Warning



SGH02

Hazard statements

H228 Flammable solid

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P262 Do not get in eyes, on skin, or on clothing.

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Supplemental hazard information

None

Other hazards

None

3 . COMPOSITION / INFORMATION ON INGREDIENTS

Product name : (+)-Borneol

Empirical formula : C₁₀H₁₈O

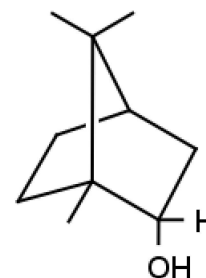
CAS NUMBER : [464-43-7]

Synonyms : -

EC Number : 207-352-6

Other hazardous ingredients

No data available.



4 . FIRST AID MEASURES

Inhalation

In case of inhalation, move the victim to fresh air. If breathing is difficult, put the victim on oxygen. If breathing stops, carry out artificial respiration.

In case of skin contact

Wash thoroughly with water and soap.

In case of eye contact

Rinse well with plenty of water for at least 15 minutes.

Ingestion

Do not make an unconscious person vomit or swallow anything. Rinse the mouth thoroughly with water.

5 . FIRE-FIGHTING MEASURES**Extinguishing media**

Carbon dioxide, dry powder.

Special hazards arising from the substance

Harmful/toxic vapours, carbon oxides may be released during the fire.

Advise for fire-fighters

Wear an autonomous breathing apparatus and suitable protection clothing against chemical agents.

6 . ACCIDENTAL RELEASE MEASURES**Personal precautions**

Use personal protective equipment. Evacuate the personnel from the contaminated zone. Ensure adequate ventilation.

Environmental precautions

Keeping away from drains, surface and ground waters.

Methods and materials for containment and cleaning up

Clean up without creating dust and place in adapted and sealed containers for elimination. Wash the contaminated area with water and soap. Confine washing water and dispose of it complying with the local regulations. After cleaning, quickly eliminate traces of water with a product absorbing liquids (for example : sand, sawdust, universal binder, Kieselguhr).

7 . HANDLING AND STORAGE**Precautions for safe handling**

Avoid formation of dust. Avoid contact with skin and eyes. During handling, wear suitable personal protective equipment (see section 8). Follow the normal measures for preventive fire protection.

Specific handling

No data available.

Specific end use(s)

No data available

Conditions for safe storage, including any incompatibilities

Store in a cool well-ventilated place.

Keep container tightly closed in a dry place away from light.

Store at <+8°C

8 . EXPOSURE CONTROL/PERSONAL PROTECTION**Respiratory protection**

Wear imperatively an appropriated mask/respirator, tested and approved by standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with protective gloves. The selected gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Eye protection

Wear safety glasses.

Skin protection

Wear suitable protective clothing according to the quantity and the level of activity of the substance at the workplace.

9 . PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

Physical state	: Solid
Color	: White
Solubility in	: Acetone (Soluble)
	: Ethyl alcohol (Soluble)
Initial boiling point	: No data available.
pH	: No data available.
Partition coefficient: n-octanol/water	: No data available.
Auto-ignition temperature	: No data available.
Decomposition temperature	: No data available.
Viscosity	: No data available.
Melting point	: 206 - 209°C
Flash point	: 65°C

Other information

No data available

10 . STABILITY AND REACTIVITY**Reactivity**

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No hazardous reactions during storage and handling complying with the instructions.

Conditions to avoid

No data available.

Incompatible materials

No data available.

Hazardous decomposition products

No hazardous decomposition products if the instructions for handling and storage are respected. During high overheating of the substance or during a fire, hazardous decomposition products may be produced.

11 . TOXICOLOGICAL INFORMATION**Acute oral toxicity**

No data available.

Acute dermal toxicity

No data available.

Acute inhalation toxicity

No data available.

Skin Corrosion

No data available.

Skin Irritation

No data available.

Serious Eye Damage

No data available.

Eye Irritation

No data available.

Respiratory Sensitisation

No data available.

Skin Sensitisation

No data available.

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.

12 . ECOLOGICAL INFORMATION**Toxicity**

No data available.

Persistence and degradability

No data available.

Bioaccumulative potential

No data available.

Mobility in soil

No data available.

Results of PBT and vPvB assessment

No data available.

Other adverse effects

No data available.

13 . DISPOSAL CONSIDERATIONS**Waste treatment methods**

Non-recyclable surplus and solutions must be sent to a licensed professional waste disposal service, while respecting the local statutory instructions. Contaminated packaging is to be eliminated in the same way as the product that is contained.

14 . TRANSPORT INFORMATION

IATA	Borneol	UN 1 312	Class 4.1	Packaging group 3
RID/ADR	Borneol	UN 1 312	Class 4.1	Packaging group 3

Environmental hazards

No

15 . REGULATORY INFORMATION**Safety, health and environmental regulations/legislation specific for the substance**

Directive 96/82/CE (SEVESO category/named substances) : not applicable.

Regulation CE 2037/2000 (substances that deplete the ozone layer) : not applicable.

Regulation 850/2004 (persistent organic pollutants) : not applicable.

Regulation REACH-Titre VII (authorisations) et Titre VIII (restrictions) : not applicable.

Chemical safety assessment

Not applicable.

16 . OTHER INFORMATION**Use**

The information contained in this safety data sheet are based on our experience and our current knowledge. The data may in no case be considered as product specifications. It is provided for information purposes only with no obligation on our part. In this respect, we shall not be held liable for the use which is made of our products and for the information given above.

Abbreviations and acronyms

ADR: Agreement on Dangerous Goods by Road

RID: Regulations concerning the International Transport of Dangerous Goods by Rail

IATA: International Air Transport Association

CAS: Chemical Abstract Service

PBT: Persistent, Bioaccumulative and Toxic

vPvB: Very Persistent and Very Bioaccumulative