

20/06/2016

**MATERIAL SAFETY DATA SHEET**

Edition	Revision date	Creation date
10.00.00	01/06/2016	01/06/2016

**1 . IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY****Product name** : (-)-Borneol**Catalogue number** : 5006 S**CAS NUMBER** : [464-45-9]**EC Number** : 207-353-1**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

Skin Sensitisation (Category 1) ; H317

**Label elements**

Warning



SGH07 SGH02

Hazard statements

H228 Flammable solid

H317 May cause an allergic skin reaction

Precautionary statements

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

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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

Supplemental hazard information

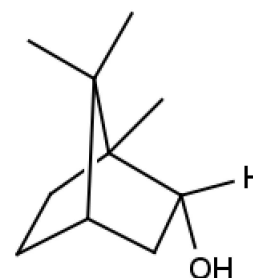
None

**Other hazards**

None

**3 . COMPOSITION / INFORMATION ON INGREDIENTS****Product name** : (-)-Borneol**Empirical formula** : C<sub>10</sub>H<sub>18</sub>O**CAS NUMBER** : [464-45-9]**Synonyms** : -**EC Number** : 207-353-1**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.

**Environnemental 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	: No data available.
Solubility in	: Acetone (Soluble)
	: Ethyl alcohol (Soluble)
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.
Initial boiling point	: 210°C
Flash point	: 65°C
Melting point	: 207 - 208°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**

LC50 - Pimephales promelas - 67,8 mg/l - 96h

**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**

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