

# Safety Data Sheet

according to 29 CFR 1910.1200(g)

## NATURAL BORNEOL

Revision date: 09/07/2023

Product code: 215700US

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### 1. Identification

#### Product identifier

NATURAL BORNEOL

Substance name: NATURAL BORNEOL  
CAS No: 507-70-0

#### Recommended use of the chemical and restrictions on use

##### Use of the substance/mixture

Manufacturing of: - Air care products - Perfumes, fragrances - Pharmaceuticals - Cosmetics, personal care products - Flavouring Substances - Other

#### Details of the supplier of the safety data sheet

Company name:	Axxence Aromatic GmbH	
Street:	Tackenweide 28	
Place:	D-46446 Emmerich am Rhein	
Telephone:	+ 49 2822 68561 0	Telefax: + 49 2822 68561 39
E-mail:	info@axxence.com	
Contact person:	Safety Team	Telephone: + 49 2822 68561 0
E-mail:	safety-documentation@axxence.com	
Internet:	www.axxence.de	
Responsible Department:	Safety Management	

**Emergency phone number:** +49 2822 68561 99

### 2. Hazard(s) identification

#### Classification of the chemical

##### **29 CFR Part 1910.1200**

Flammable solids: Flam. Sol. 1  
Skin corrosion/irritation: Skin Irrit. 2  
Serious eye damage/eye irritation: Eye Dam. 1  
Hazardous to the aquatic environment: Aquatic Acute 2  
Hazardous to the aquatic environment: Aquatic Chronic 2

#### Label elements

##### **29 CFR Part 1910.1200**

**Signal word:** Danger

**Pictograms:**



#### **Hazard statements**

Flammable solid  
Causes skin irritation  
Causes serious eye damage

#### **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
Ground/bond container and receiving equipment.  
Use explosion-proof electrical/ventilating/lighting equipment.  
Wash hands thoroughly after handling.  
Wear protective gloves/protective clothing/eye protection/face protection.  
If on skin: Wash with plenty of Water and soap.  
If skin irritation occurs: Get medical advice/attention.

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Take off contaminated clothing and wash it before reuse.  
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
Continue rinsing.  
Immediately call a poison center/doctor.  
In case of fire: Use Water spray jet / alcohol resistant foam / Extinguishing powder / Carbon dioxide (CO<sub>2</sub>) to extinguish.

### 3. Composition/information on ingredients

#### Substances

Sum formula: C<sub>10</sub> H<sub>18</sub> O  
Molecular weight: 154,25 g/mol

#### Relevant ingredients

CAS No	Components	Quantity
507-70-0	NATURAL BORNEOL	100 %

### 4. First-aid measures

#### Description of first aid measures

##### After inhalation

Provide fresh air.

##### After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

##### After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

#### Most important symptoms and effects, both acute and delayed

No information available.

#### Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

### 5. Fire-fighting measures

#### Extinguishing media

##### Suitable extinguishing media

Water spray jet, Carbon dioxide (CO<sub>2</sub>), Foam, Extinguishing powder.

#### Specific hazards arising from the chemical

Flammable. Vapors may form explosive mixtures with air.

#### Special protective equipment and precautions for fire-fighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

#### Additional information

Suppress gases/vapors/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

##### General advice

Remove all sources of ignition. Provide adequate ventilation. Avoid dust formation. Do not breathe dust. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

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### Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Explosion risk.

### Methods and material for containment and cleaning up

#### For cleaning up

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal.

#### Other information

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal.

### Reference to other sections

Safe handling: see section 7

Personal protection equipment (PPE): see section 8

Disposal: see section 13

## 7. Handling and storage

### Precautions for safe handling

#### Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Avoid dust formation. Do not breathe dust.

#### Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.

Vapors may form explosive mixtures with air.

#### Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat,

drink, smoke, sniff. Remove contaminated, saturated clothing immediately. Draw up and observe skin

protection programme. Wash hands and face before breaks and after work and take a shower if necessary.

When using do not eat, drink, smoke, sniff.

### Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

#### Hints on joint storage

Do not store together with: Oxidizing agent. Pyrophoric or self-heating substances.

## 8. Exposure controls/personal protection

### Control parameters

### Exposure controls



#### Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe dust.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Suitable eye protection: goggles.

#### Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the

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specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Suitable gloves type: Disposable gloves + NBR (Nitrile rubber)  
Suitable gloves type: Disposable gloves + NBR (Nitrile rubber)

### Skin protection

Use of protective clothing.

### Respiratory protection

In case of inadequate ventilation wear respiratory protection.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

Physical state:	crystalline
Color:	white
Melting point/freezing point:	206 °C
Boiling point or initial boiling point and boiling range:	194 °C
Flammability:	not determined
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Flash point:	Not determined.
Auto-ignition temperature:	not determined
Decomposition temperature:	not determined
pH-Value:	not determined
Water solubility: (at 20 °C)	0,01 g/l
Solubility in other solvents	not determined
Partition coefficient n-octanol/water:	3,6
Vapor pressure: (at 25 °C)	44,7 hPa
Density (at 20 °C):	1,01 g/cm³
Relative vapour density:	not determined

### Other information

#### Information with regard to physical hazard classes

Explosive properties

The product is not: Explosive.

Oxidizing properties

The product is not: oxidising.

#### Other safety characteristics

Evaporation rate:	not determined
Solvent content:	0%
Solid content:	100,00 %

## 10. Stability and reactivity

### Reactivity

Flammable.

### Chemical stability

The product is stable under storage at normal ambient temperatures.

### Possibility of hazardous reactions

No known hazardous reactions.

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### Conditions to avoid

none

### Incompatible materials

No information available.

### Hazardous decomposition products

No known hazardous decomposition products.

## 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Based on available data, the classification criteria are not met.

CAS No	Components				
	Exposure route	Dose	Species	Source	Method
507-70-0	NATURAL BORNEOL				
	oral	LD50 >2000 mg/kg	Rat	REACH registration	OECD 420
	dermal	LD50 >2000 mg/kg	Rat	REACH registration	OECD 402

#### Irritation and corrosivity

Skin corrosion/irritation: Causes skin irritation

Serious eye damage/eye irritation: Causes serious eye damage

#### Sensitizing effects

Based on available data, the classification criteria are not met.

#### Carcinogenic/mutagenic/toxic effects for reproduction

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

#### Specific target organ toxicity (STOT) - single exposure

Based on available data, the classification criteria are not met.

#### Specific target organ toxicity (STOT) - repeated exposure

Based on available data, the classification criteria are not met.

Carcinogenicity (OSHA): Not listed.

Carcinogenicity (IARC): Not listed.

Carcinogenicity (NTP): Not listed.

#### Aspiration hazard

Based on available data, the classification criteria are not met.

### Information on other hazards

#### Endocrine disrupting properties

No information available.

#### Other information

No information available.

### Further information

This substance is classified as hazardous according to Regulation (EC) No 1272 (2008).

## 12. Ecological information

### Ecotoxicity

Toxic to aquatic life with long lasting effects.

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CAS No	Components					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
507-70-0	NATURAL BORNEOL					
	Acute fish toxicity	LC50 mg/l	33,25	96 h	Danio rerio (zebrafish)	REACH registration
	Acute algae toxicity	ErC50 mg/l	1,71	72 h	Pseudokirchneriella subcapitata	REACH registration
	Acute crustacea toxicity	EC50 mg/l	4,23	48 h	Daphnia magna (Big water flea)	REACH registration
	Algae toxicity	NOEC mg/l	0,032	3 d	Pseudokirchneriella subcapitata	REACH registration
	Acute bacteria toxicity	EC50 mg/l ( )	>100	3 h	Activated sludge	REACH registration

### Persistence and degradability

The product has not been tested.

### Bioaccumulative potential

The product has not been tested.

### Partition coefficient n-octanol/water

CAS No	Components	Log Pow
507-70-0	NATURAL BORNEOL	3,6

### Mobility in soil

The product has not been tested.

### Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms.

### Other adverse effects

No information available.

### Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

## 13. Disposal considerations

### Waste treatment methods

#### **Disposal recommendations**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

#### **Contaminated packaging**

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

## 14. Transport information

### **U.S. DOT 49 CFR 172.101**

<b><u>UN number or ID number:</u></b>	UN 1312
<b><u>Proper shipping name:</u></b>	BORNEOL
<b><u>Transport hazard class(es):</u></b>	4.1
<b><u>Packing group:</u></b>	III
<b>Hazard label:</b>	4.1

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### Marine transport (IMDG)

**UN number or ID number:** UN 1312  
**UN proper shipping name:** BORNEOL  
**Transport hazard class(es):** 4.1  
**Packing group:** III  
Hazard label: 4.1



Special Provisions: -  
Limited quantity: 5 kg  
Excepted quantity: E1  
EmS: F-A, S-I

### Air transport (ICAO-TI/IATA-DGR)

**UN number or ID number:** UN 1312  
**UN proper shipping name:** BORNEOL  
**Transport hazard class(es):** 4.1  
**Packing group:** III  
Hazard label: 4.1



Special Provisions: A803  
Limited quantity Passenger: 10 kg  
Passenger LQ: Y443  
Excepted quantity: E1  
IATA-packing instructions - Passenger: 446  
IATA-max. quantity - Passenger: 25 kg  
IATA-packing instructions - Cargo: 449  
IATA-max. quantity - Cargo: 100 kg

### Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes



Danger releasing substance: NATURAL BORNEOL

### Special precautions for user

Warning: Flammable solids.

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

## 15. Regulatory information

### U.S. Regulations

#### National regulatory information

SARA Section 311/312 Hazards:

NATURAL BORNEOL (507-70-0): Fire hazard, Immediate (acute) health hazard

### State Regulations

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### Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)

This product can not expose you to chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

## 16. Other information

### Changes

Revision date: 09/07/2023

Revision No: 105

This data sheet contains changes from the previous version in section(s): 2.

### Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

DNEL: Derived No Effect Level

DMEL: Derived Minimal Effect Level

PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate

LL50: Lethal loading, 50%

EL50: Effect loading, 50%

EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate

NOEC: No Observed Effect Concentration

BCF: Bio-concentration factor

PBT: persistent, bioaccumulative, toxic

vPvB: very persistent, very bioaccumulative

RID: Regulations concerning the international carriage of dangerous goods by rail

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)

EmS: Emergency Schedules

MFAG: Medical First Aid Guide

ICAO: International Civil Aviation Organization

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container

VOC: Volatile Organic Compounds

SVHC: Substance of Very High Concern

For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

### Other data

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible



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for adhering to existing laws and regulations.