

according to UN GHS (ST/SG/AC.10/11/Rev.10)

NATURAL BETA-CARYOPHYLLENE

Revision date: 07.06.2024

Product code: 225210WW

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

NATURAL BETA-CARYOPHYLLENE

CAS No:

87-44-5

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture

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

1.3. 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	
1.4. Emergency telephone	+49 2822 68561 99	

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

UN GHS (ST/SG/AC.10/11/Rev.10) Aspiration hazard: Asp. Tox. 1 Respiratory or skin sensitisation: Skin Sens. 1

Danger

2.2. Label elements

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Hazard components for labelling NATURAL BETA-CARYOPHYLLENE

Signal word:

Pictograms:



Hazard statements

H304	May be fatal if swallowed and enters airways.
H317	May cause an allergic skin reaction.

Precautionary statements

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P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P301+P316	IF SWALLOWED: Get emergency medical help immediately.
P331	Do NOT induce vomiting.
P302+P352	IF ON SKIN: Wash with plenty of Water and soap.
P333+P317	If skin irritation or rash occurs: Get medical help.
P362+P364	Take off contaminated clothing and wash it before reuse.



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P405 Store locked up.

Dispose of contents/container to organic waste.

P501 2.3. Other hazards

Contains no substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH. Contains no substances of very high concern (SVHC) which are subject to authorisation according to Annex XIV of REACH.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Sum formula:	204,36
Molecular weight:	C15 H24 g/mol

Relevant ingredients

CAS No	Chemical name	
	Classification (UN GHS (ST/SG/AC.10/11/Rev.10))	
87-44-5	I-5 NATURAL BETA-CARYOPHYLLENE	
	Skin Sens. 1B, Asp. Tox. 1; H317 H304	
6753-98-6	alpha-HUMULENE	0 - 15 %
4630-07-3	NATURAL VALENCENE	0 - 6 %
	Asp. Tox. 1; H304	

SECTION 4: First aid measures

4.1. 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. Medical treatment necessary.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of eye irritation consult an ophthalmologist.

After ingestion

Observe risk of aspiration if vomiting occurs. If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

5.2. Special hazards arising from the substance or mixture

Non-flammable. Vapours can form explosive mixtures with air.

5.3. Advice for firefighters



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

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

For cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

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.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations.

Hints on joint storage

No special measures are necessary.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls



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Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye protection/face protection.

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 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.

Skin protection

Use of protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Colour:	Liquid
Odour:	characteristic
Melting point/freezing point:	~-100°C °C
Boiling point or initial boiling point and	258 °C
boiling range:	
Flammability:	not applicable
	not applicable
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Flash point:	>100 °C
Auto-ignition temperature:	215 °C
Decomposition temperature:	not determined
pH-Value:	not determined
Water solubility:	The study does not need to be conducted
2	because the substance is known to be
	insoluble in water.
Solubility in other solvents	
not determined	
Partition coefficient n-octanol/water:	not determined
Vapour pressure:	0,06 hPa
(at 20 °C)	
Vapour pressure:	0,45 hPa
(at 50 °C)	
Density (at 20 °C):	0,90 g/cm ³
Relative vapour density:	not determined
9.2. Other information	

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Information with regard to physical hazard classes

Explosive properties The product is not: Explosive. not explosive according to EU A.14 Oxidizing properties

The product is not: oxidising.

Other safety characteristics	
Evaporation rate:	not determined
Solvent content:	0%
Solid content:	0%

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

none

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

ATEmix calculated

ATE (oral) > 5000 mg/kg; ATE (dermal) > 5000 mg/kg; ATE (inhalation vapour) > 50 mg/l; ATE (inhalation dust/mist) > 12,5 mg/l

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
87-44-5	NATURAL BETA-CARYO	NATURAL BETA-CARYOPHYLLENE				
	oral	LD50 mg/kg	>5000	Mouse	REACH registration	
4630-07-3	NATURAL VALENCENE					
	oral	LD50 mg/kg	>5000	Rat		
	dermal	LD50 mg/kg	>5000	Rabbit		

Irritation and corrosivity

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Sensitising effects

May cause an allergic skin reaction. (NATURAL BETA-CARYOPHYLLENE)

Carcinogenic/mutagenic/toxic effects for reproduction



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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.

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

May be fatal if swallowed and enters airways.

11.2. Information on other hazards

Endocrine disrupting properties

No information available.

Further information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP]. Special hazards arising from the substance or mixture!

SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name					
	Method	Value	d	Source		
	Evaluation					
87-44-5	NATURAL BETA-CARYOPHYLLENE					
	OECD 310	56%	28	REACH registration		
	Readily biodegradable (according to OECD	criteria).				
	OECD 310	54%	7	REACH registration		
	Readily biodegradable (according to OECD	criteria).				
	OECD 310	3,2%	3	REACH registration		
	Readily biodegradable (according to OECD	criteria).	·			

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
87-44-5	NATURAL BETA-CARYOPHYLLENE	6,23
6753-98-6	alpha-HUMULENE	6,592
4630-07-3	NATURAL VALENCENE	6,494

12.4. Mobility in soil

The product has not been tested.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. 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.



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SECTION 13: Disposal considerations

13.1. 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

Hazardous waste according to Directive 2008/98/EC (waste framework directive). Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Marine transport (IMDG)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.
Air transport (ICAO-TI/IATA-DGR)	
14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.
14.5. Environmental hazards	
ENVIRONMENTALLY HAZARDOUS:	No
14.6. Special precautions for user	
No information available.	
14.7. Maritime transport in bulk according to	o IMO instruments
not applicable	
SECTION 15: Regulatory information	
National regulatory information	
Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile
	work protection guideline' (94/33/EC).
Skin resorption/Sensitization:	Causes allergic hypersensitivity reactions.

SECTION 16: Other information

Changes

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



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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 DMFL: 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). **Further Information** 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 for adhering to existing laws and regulations.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)