

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### NATURAL ALPHA-TERPINEOL

Revision: 04.12.2025

Product code: 304520

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

##### 1.1. Product identifier

NATURAL ALPHA-TERPINEOL

Substance name:	NATURAL ALPHA-TERPINEOL
CAS No:	98-55-5
EC No:	202-680-6

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

###### **Use of the substance/mixture**

For Flavour use for food and feed only

##### 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 number:

+49 2822 68561 99

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

###### **Regulation (EC) No 1272/2008**

Skin Irrit. 2; H315  
Eye Irrit. 2; H319

Full text of hazard statements: see SECTION 16.

##### 2.2. Label elements

###### **Regulation (EC) No 1272/2008**

**Signal word:** Warning

**Pictograms:**



###### **Hazard statements**

H315	Causes skin irritation.
H319	Causes serious eye irritation.

###### **Precautionary statements**

P264	Wash hands thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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P337+P313                      If eye irritation persists: Get medical advice/attention.

#### **2.3. Other hazards**

This substance is not listed as Substance of Very High Concern (SVHC) in the Candidate List according to REACH, Article 59.

This substance is not identified as SVHC (substance of very high concern) and is not subject to authorisation according to Annex XIV of REACH.

### **SECTION 3: Composition/information on ingredients**

#### **3.1. Substances**

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

#### **Relevant ingredients**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
98-55-5	NATURAL ALPHA-TERPINEOL			100 %
	202-680-6			
	Skin Irrit. 2, Eye Irrit. 2; H315 H319			

Full text of H and EUH statements: see section 16.

#### **Specific Conc. Limits, M-factors and ATE**

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
98-55-5	202-680-6	NATURAL ALPHA-TERPINEOL	100 %
	dermal: LD50 = >2000 mg/kg; oral: LD50 = 4300 mg/kg		

### **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. If skin irritation occurs: Get medical advice/attention.

##### **After contact with eyes**

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

##### **After ingestion**

Rinse mouth immediately and drink 1 glass of water.

#### **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.

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**5.2. Special hazards arising from the substance or mixture**

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

**5.3. Advice for firefighters**

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**

No special measures are necessary.

**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.

**Hints on joint storage**

No special measures are necessary.

**7.3. Specific end use(s)**

For Flavour use for food and feed only

**SECTION 8: Exposure controls/personal protection**

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#### 8.1. Control parameters

##### PNEC values

CAS No	Name of agent	
Environmental compartment		Value
98-55-5	NATURAL ALPHA-TERPINEOL	
Freshwater		0,068 mg/l
Marine water		0,0068 mg/l
Freshwater sediment		1,85 mg/kg
Marine sediment		0,185 mg/kg
Micro-organisms in sewage treatment plants (STP)		2,6 mg/l
Soil		0,329 mg/kg

#### 8.2. Exposure controls



##### 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 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: NBR (Nitrile rubber) + Natural fibres (e.g. cotton)

###### 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:

Melting point/freezing point:

33 °C

Boiling point or initial boiling point and boiling range:

219 °C

Flammability:

not applicable

not applicable

Lower explosion limits:

not determined

Upper explosion limits:

not determined

Flash point:

91 °C ASTM D 3278

Auto-ignition temperature:

278 °C

Decomposition temperature:

not determined

pH-Value (at 20 °C):

7

##### Test method

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Water solubility: (at 23 °C)	2,87 g/l
Solubility in other solvents not determined	
Partition coefficient n-octanol/water:	2,67
Vapour pressure: (at 20 °C)	not determined
Density (at 20 °C):	0,93 g/cm <sup>3</sup>
Relative vapour density: (at 20 °C)	5,3

#### **9.2. Other information**

##### **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%
Viscosity / dynamic: (at 25 °C)	37,9 mPa·s

### 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 hazard classes as defined in Regulation (EC) No 1272/2008**

##### **Acute toxicity**

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

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
98-55-5	NATURAL ALPHA-TERPINEOL				
	oral	LD50 mg/kg	4300	Rat	REACH Dossier OECD 401
	dermal	LD50 mg/kg	>2000	Rat	REACH Dossier OECD 402

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#### **Irritation and corrosivity**

Skin corrosion/irritation: Causes skin irritation.  
 Serious eye damage/eye irritation: Causes serious eye irritation.

#### **Sensitising 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.

#### **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**

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

### **11.2. Information on other hazards**

#### **Endocrine disrupting properties**

No information available.

#### **Further information**

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

## **SECTION 12: Ecological information**

### **12.1. Toxicity**

The product is not: Ecotoxic.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
98-55-5	NATURAL ALPHA-TERPINEOL					
	Acute fish toxicity	LC50 70 mg/l	96 h	Danio rerio (zebrafish)	REACH Registration	OECD 203
	Acute algae toxicity	ErC50 68 mg/l	72 h	Pseudokirchneriella subcapitata	REACH Registration	OECD 201
	Acute crustacea toxicity	EC50 73 mg/l	48 h	Daphnia magna (Big water flea)	REACH Registration	OECD 202

### **12.2. Persistence and degradability**

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
98-55-5	NATURAL ALPHA-TERPINEOL			
	OECD 310	80%	28	REACH Registration
	Readily biodegradable (according to OECD criteria).			
	OECD 310	60%	12	REACH Registration
	Readily biodegradable (according to OECD criteria).			
	OECD 310	10%	5	REACH Registration
	Readily biodegradable (according to OECD criteria).			

### **12.3. Bioaccumulative potential**

The product has not been tested.

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#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
98-55-5	NATURAL ALPHA-TERPINEOL	2,67

#### BCF

CAS No	Chemical name	BCF	Species	Source
98-55-5	NATURAL ALPHA-TERPINEOL	32,4		

#### 12.4. Mobility in soil

The product has not been tested.

#### 12.5. Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

The product has not been tested.

#### 12.6. Endocrine disrupting properties

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

No information available.

#### 12.7. Other adverse effects

No information available.

#### Further information

Avoid release to the environment.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

##### Disposal recommendations

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

##### List of Wastes Code - residues/unused products

160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes containing hazardous substances; hazardous waste

##### List of Wastes Code - used product

160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes containing hazardous substances; hazardous waste

##### List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

##### Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

### SECTION 14: Transport information

#### Land transport (ADR/RID)

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

#### Inland waterways transport (ADN)

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

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#### Marine transport (IMDG)

<b><u>14.1. UN number or ID number:</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.2. UN proper shipping name:</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.3. Transport hazard class(es):</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.4. Packing group:</u></b>	No dangerous good in sense of this transport regulation.

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

<b><u>14.1. UN number or ID number:</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.2. UN proper shipping name:</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.3. Transport hazard class(es):</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.4. Packing group:</u></b>	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 IMO instruments**

not applicable

### SECTION 15: Regulatory information

#### **15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

##### **EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3

Directive 2004/42/EC on VOC in paints and varnishes: 100 % (930 g/l)

Information according to Directive 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

##### **Additional information**

To follow: 850/2004/EC, 79/117/EEC, 689/2008/EC

##### **National regulatory information**

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D): 1 - slightly hazardous to water

#### **15.2. Chemical safety assessment**

For this substance a chemical safety assessment has not been carried out.

### SECTION 16: Other information

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#### Abbreviations and acronyms

Skin Irrit. 2: Skin irritation, hazard category 2  
 Eye Irrit. 2: Eye irritation, hazard category 2  
 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).

#### Relevant H and EUH statements (number and full text)

H315 Causes skin irritation.  
 H319 Causes serious eye irritation.

#### 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.

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**Identified uses**

No	Short title	LCS	SU	PC	PROC	ERC	AC	TF	Specification
1		-	4	28	-	-	-	-	Flavour

LCS: Life cycle stages

PC: Product categories

ERC: Environmental release categories

TF: Technical functions

SU: Sectors of use

PROC: Process categories

AC: Article categories