

according to 29 CFR 1910.1200(g)

#### **NATURAL DIMETHYL SULFIDE**

Revision date: 10/14/2022 Product code: 274600US Page 1 of 8

#### 1. Identification

## **Product identifier**

NATURAL DIMETHYL SULFIDE

Substance name: NATURAL DIMETHYL SULFIDE

CAS No: 75-18-3

# Recommended use of the chemical and restrictions on use

#### Use of the substance/mixture

For Flavour use for food and feed only

### 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: Andreas Goertz

Contact person: Andreas Goertz Telephone: + 49 2822 68561 37

e-mail: andreas.goertz@axxence.com

Internet: www.axxence.de
Responsible Department: QM - Regulatory Affairs

Emergency phone number: +49 2822 68561 99

## 2. Hazard(s) identification

# Classification of the chemical

## 29 CFR Part 1910.1200

Flammable liquids: Flam. Liq. 2

Serious eye damage/eye irritation: Eye Irrit. 2A

Hazardous to the aquatic environment: Aquatic Acute 3

#### Label elements

## 29 CFR Part 1910.1200

Signal word: Danger

Pictograms:





## **Hazard statements**

Highly flammable liquid and vapor Causes serious eye irritation

# **Precautionary statements**

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

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

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

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If eye irritation persists: Get medical advice/attention.





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In case of fire: Use Dry extinguishing powder / Carbon dioxide (CO2) to extinguish.

Store in a well-ventilated place. Keep cool.

Dispose of contents/container to Organic waste.

### Hazards not otherwise classified

No information available.

# 3. Composition/information on ingredients

# **Substances**

Sum formula: C2 H6 S Molecular weight: 62,14

## **Hazardous components**

CAS No	Components	Quantity
75-18-3	NATURAL DIMETHYL SULFIDE	100 %

#### 4. First-aid measures

### **Description of first aid measures**

#### After inhalation

Provide fresh air.

#### After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

# After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

# After ingestion

Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink 1 glass of of water.

# 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 (CO2), Foam, Extinguishing powder.

# Specific hazards arising from the chemical

Highly flammable. Vapors may form explosive mixtures with air.

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

In case of fire: Wear self-contained breathing apparatus.

# **Additional information**

Use water spray/stream to protect personnel and to cool endangered containers. 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.



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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

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.

## 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

No special measures are necessary.

#### 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

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat, drink, smoke, sniff. Take off contaminated clothing. Wash hands before breaks and after work. 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 limits**

CAS No	Substance	ppm	mg/m³	f/cc	Category	Origin
75-18-3	Dimethyl sulfide	10			TWA (8 h)	ACGIH-2022

# **Exposure controls**









## Individual protection measures, such as personal protective equipment

# Eye/face protection

Wear eye/face protection.



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### 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 FKM (fluoro rubber)

#### Skin protection

Flame-retardant protective clothing. Wear anti-static footwear and clothing . . .

## Respiratory protection

In case of inadequate ventilation wear respiratory protection.

#### Thermal hazards

Flame-retardant protective clothing. Wear anti-static footwear and clothing

## 9. Physical and chemical properties

# Information on basic physical and chemical properties

Physical state: Liquid

Color: Colourless to pale yellow

Melting point/freezing point:

Boiling point or initial boiling point and

37 °C

boiling range: Flammability

Solid/liquid: not applicable
Gas: not applicable

Lower explosion limits: 2,2 vol. %
Upper explosion limits: 19,7 vol. %
Flash point: -48 °C
Auto-ignition temperature: 215 °C

Decomposition temperature: 215 °C not determined pH-Value: not determined

Viscosity / kinematic: (at 20 °C)

Water solubility: 7,3 g/L

(at 20 °C)

Solubility in other solvents

not determined

Partition coefficient n-octanol/water: 0,84
Vapor pressure: 527 hPa

(at 20 °C)

Vapor pressure: 1356 hPa

(at 50 °C)

Density (at 20 °C): 0,85 g/cm³
Relative vapour density: 2,1

(at 20 °C)

# Other information

# Information with regard to physical hazard classes

Explosive properties

not hazard of explosion according to EU A.14

Oxidizing properties

The product is not: oxidising.

# Other safety characteristics

Evaporation rate: not determined Solvent content: 0%

0,82 mm<sup>2</sup>/s



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Solid content: 0% Viscosity / dynamic: 0,7 mPa·s (at 20 °C)

# 10. Stability and reactivity

#### Reactivity

Highly flammable.

#### **Chemical stability**

The product is stable under storage at normal ambient temperatures.

### Possibility of hazardous reactions

No known hazardous reactions.

#### **Conditions to avoid**

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapors may form explosive mixtures with air.

### **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				
75-18-3	NATURAL DIMETHYL SULFIDE								
	oral	LD50 >2000 mg/kg	Rat	REACH registration	OECD 423				
	dermal	LD50 >5000 mg/kg	Rabbit	GESTIS					
	inhalation (4 h) vapour	LC50 102 mg/	Rat	REACH registration	OECD 403				

# Irritation and corrosivity

Causes serious eye irritation

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

### Sensitizing effects

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

# Carcinogenic/mutagenic/toxic effects for reproduction

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.



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### Information on other hazards

## **Endocrine disrupting properties**

No information available.

### 12. Ecological information

# **Ecotoxicity**

The product is not: Ecotoxic.

## Persistence and degradability

The product has not been tested.

### **Bioaccumulative potential**

The product has not been tested.

# 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**

Avoid release to the environment.

# 13. Disposal considerations

### Waste treatment methods

## **Disposal recommendations**

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

### Contaminated packaging

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

### 14. Transport information

# U.S. DOT 49 CFR 172.101

UN 1164

Proper shipping name: DIMETHYL SULFIDE

Transport hazard class(es):

Packing group:

Hazard label:

3



# Marine transport (IMDG)

UN 1164

UN proper shipping name: DIMETHYL SULPHIDE

Transport hazard class(es):

Packing group:

Hazard label:

3



Special Provisions:

Limited quantity: 1 L



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Excepted quantity: E2
EmS: F-E, S-D

Air transport (ICAO-TI/IATA-DGR)

UN number or ID number: UN 1164

UN proper shipping name: DIMETHYL SULPHIDE

Transport hazard class(es):

Packing group:

Hazard label:

3



Limited quantity Passenger: 1 L
Passenger LQ: Y341
Excepted quantity: E2

IATA-packing instructions - Passenger:353IATA-max. quantity - Passenger:5 LIATA-packing instructions - Cargo:364IATA-max. quantity - Cargo:60 L

**Environmental hazards** 

ENVIRONMENTALLY HAZARDOUS: No

Special precautions for user

Warning: Combustible liquid.

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 DIMETHYL SULFIDE (75-18-3): Fire hazard, Immediate (acute) health hazard

#### **State Regulations**

### 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

Revision date: 14.10.2022 Revision No: 103

# 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





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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 for adhering to existing laws and regulations.