

## Safety Data Sheet

according to 29 CFR 1910.1200(g)

### NATURAL TRANS-2-NONENAL 1% IN ETHANOL

Revision date: 02/28/2024

Product code: 321300US

Page 1 of 10

#### 1. Identification

##### Product identifier

NATURAL TRANS-2-NONENAL 1% IN ETHANOL

##### 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 liquids: Flam. Liq. 2  
 Serious eye damage/eye irritation: Eye Irrit. 2A  
 Respiratory or skin sensitization: Skin Sens. 1

##### Label elements

###### 29 CFR Part 1910.1200

**Signal word:** Danger

**Pictograms:**



##### **Hazard statements**

Highly flammable liquid and vapor  
 May cause an allergic skin reaction  
 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.  
 Avoid breathing dust/fume/gas/mist/vapors/spray.  
 Wash hands thoroughly after handling.  
 Contaminated work clothing must not be allowed out of the workplace.  
 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.

## Safety Data Sheet

according to 29 CFR 1910.1200(g)

### NATURAL TRANS-2-NONENAL 1% IN ETHANOL

Revision date: 02/28/2024

Product code: 321300US

Page 2 of 10

If skin irritation or rash occurs: Get medical advice/attention.  
 Wash contaminated clothing before reuse.  
 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.  
 In case of fire: Use Water spray jet to extinguish.  
 Store in a well-ventilated place. Keep cool.  
 Dispose of contents/container to Organic waste.

### 3. Composition/information on ingredients

#### Mixtures

##### Relevant ingredients

CAS No	Components	Quantity
64-17-5	ethanol, ethyl alcohol	98,5 - 99,0 %
18829-56-6	NATURAL TRANS-2-NONENAL	1,0 - 1,5 %

### 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**

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**

Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink 1 glass 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 (CO<sub>2</sub>), Foam, Extinguishing powder.

#### Specific hazards arising from the chemical

Highly flammable. Vapors may form explosive mixtures with air. Heating causes rise in pressure with risk of bursting.

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

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

#### **Additional information**

Use water spray jet to protect personnel and to cool endangered containers. 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

## Safety Data Sheet

according to 29 CFR 1910.1200(g)

### NATURAL TRANS-2-NONENAL 1% IN ETHANOL

Revision date: 02/28/2024

Product code: 321300US

Page 3 of 10

#### General advice

Remove all sources of ignition.

#### For emergency responders

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

#### 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

Ventilate affected area.

##### 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

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 limits

CAS No	Substance	ppm	mg/m <sup>3</sup>	Category	Origin
64-17-5	Ethanol	1000	1880	STEL (15 min)	ACGIH-2024
64-17-5	Ethyl alcohol (Ethanol)	1000	1900	TWA (8 h)	PEL
64-17-5	Ethyl alcohol	1000	1900	TWA (8 h)	REL

#### Exposure controls

## Safety Data Sheet

according to 29 CFR 1910.1200(g)

### NATURAL TRANS-2-NONENAL 1% IN ETHANOL

Revision date: 02/28/2024

Product code: 321300US

Page 4 of 10



#### 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.

##### 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	
Odor:	characteristic	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		78 °C
Flammability:		not determined
Lower explosion limits:		3,1 vol. %
Upper explosion limits:		27,7 vol. %
Flash point:		12 °C
Auto-ignition temperature:		363 °C
Decomposition temperature:		not determined
pH-Value:		not determined
Viscosity / kinematic:		not applicable
Water solubility:		completely miscible
Solubility in other solvents		
not determined		
Partition coefficient n-octanol/water:		not determined
Vapor pressure:		58 hPa
(at 20 °C)		
Vapor pressure:		293 hPa
(at 50 °C)		
Density:		0,79 g/cm <sup>3</sup>
Relative vapour density:		not determined
Particle characteristics:		not applicable

### Other information

#### Information with regard to physical hazard classes

## Safety Data Sheet

according to 29 CFR 1910.1200(g)

### NATURAL TRANS-2-NONENAL 1% IN ETHANOL

Revision date: 02/28/2024

Product code: 321300US

Page 5 of 10

**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:	99,00 %
Solid content:	0%

## 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.

**ATEmix calculated**

ATE (oral) > 2000 mg/kg; ATE (dermal) > 5000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Components				
	Exposure route	Dose	Species	Source	Method
64-17-5	ethanol, ethyl alcohol				
	oral	LD50 10470 mg/kg	Rat	REACH Dossier	OECD 401
	dermal	LD50 17100 mg/kg	Rabbit	REACH Dossier	
	inhalation (4 h) vapour	LC50 121 mg/l	Rat	REACH Dossier	OECD 403
18829-56-6	NATURAL TRANS-2-NONENAL				
	oral	LD50 >5000 mg/kg	Rat	Food and Chem. Tox., 20 (775), 1982	
	dermal	LD50 3700 mg/kg	Rabbit	Food and Chem. Tox., 20 (775), 1982	

**Irritation and corrosivity**

Serious eye damage/eye irritation: Causes serious eye irritation

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

## Safety Data Sheet

according to 29 CFR 1910.1200(g)

### NATURAL TRANS-2-NONENAL 1% IN ETHANOL

Revision date: 02/28/2024

Product code: 321300US

Page 6 of 10

#### **Sensitizing effects**

May cause an allergic skin reaction (NATURAL TRANS-2-NONENAL)

#### **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):

No ingredient of this mixture is listed.

Carcinogenicity (IARC):

Ethanol in alcoholic beverages (CAS 64-17-5) is listed in group 1.

Carcinogenicity (NTP):

No ingredient of this mixture is listed.

#### **Aspiration hazard**

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

#### **Information on other hazards**

##### **Other information**

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

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

No information available.

#### **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 number or ID number:**

UN 1170

##### **Proper shipping name:**

ETHANOL SOLUTIONS

## Safety Data Sheet

according to 29 CFR 1910.1200(g)

### NATURAL TRANS-2-NONENAL 1% IN ETHANOL

Revision date: 02/28/2024

Product code: 321300US

Page 7 of 10

**Transport hazard class(es):** 3  
**Packing group:** II  
 Hazard label: 3



#### Marine transport (IMDG)

**UN number or ID number:** UN 1170  
**UN proper shipping name:** ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)  
**Transport hazard class(es):** 3  
**Packing group:** II  
 Hazard label: 3



Special Provisions: 144  
 Limited quantity: 1 L  
 Excepted quantity: E2  
 EmS: F-E, S-D

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

**UN number or ID number:** UN 1170  
**UN proper shipping name:** ETHANOL SOLUTION  
**Transport hazard class(es):** 3  
**Packing group:** II  
 Hazard label: 3



Special Provisions: A3 A58 A180  
 Limited quantity Passenger: 1 L  
 Passenger LQ: Y341  
 Excepted quantity: E2  
 IATA-packing instructions - Passenger: 353  
 IATA-max. quantity - Passenger: 5 L  
 IATA-packing instructions - Cargo: 364  
 IATA-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:

ethanol, ethyl alcohol (64-17-5): Fire hazard, Immediate (acute) health hazard

NATURAL TRANS-2-NONENAL (18829-56-6): Immediate (acute) health hazard

**Safety Data Sheet**

according to 29 CFR 1910.1200(g)

**NATURAL TRANS-2-NONENAL 1% IN ETHANOL**

Revision date: 02/28/2024

Product code: 321300US

Page 8 of 10

**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****Changes**

Revision date: 02/28/2024

Revision No: 103

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



**Safety Data Sheet**

according to 29 CFR 1910.1200(g)

**NATURAL TRANS-2-NONENAL 1% IN ETHANOL**

Revision date: 02/28/2024

Product code: 321300US

Page 9 of 10

**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>  
EC/EEC: European Community/European Economic Community  
EU: European Union  
M-factor: Multiplication factor  
IATA: International Air Transport Association  
DGR: Dangerous Goods Regulations  
ICAO: International Civil Aviation Organization  
TI: Technical Instructions  
VOC: volatile organic compound  
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.

**Safety Data Sheet**

according to 29 CFR 1910.1200(g)

**NATURAL TRANS-2-NONENAL 1% IN ETHANOL**

Revision date: 02/28/2024

Product code: 321300US

Page 10 of 10

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