

**Safety Data Sheet**

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

**NATURAL 5-METHYL FURFURAL**

Revision date: 14.05.2024

Product code: 270210WW

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

NATURAL 5-METHYL FURFURAL

Substance name: NATURAL 5-METHYL FURFURAL  
CAS No: 620-02-0**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: Andreas Goertz                      Telephone: + 49 2822 68561 143  
E-mail: andreas.goertz@axxence.com  
Internet: www.axxence.de  
Responsible Department: QM - Regulatory Affairs - Safety Management**1.4. Emergency telephone number:**

+49 2822 68561 99

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****UN GHS (ST/SG/AC.10/11/Rev.10)**Flammable liquid: Flam. Liq. 4  
Acute toxicity: Acute Tox. 5 (oral)**2.2. Label elements****UN GHS (ST/SG/AC.10/11/Rev.10)**

Signal word: Warning

**Hazard statements**H227 Combustible liquid.  
H303 May be harmful if swallowed.**Precautionary statements**P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.  
P301+P317 IF SWALLOWED: Get medical help.  
P370+P378 In case of fire: Use Water spray / Extinguishing powder / Foam / Carbon dioxide (CO<sub>2</sub>) to extinguish.  
P403 Store in a well-ventilated place.  
P501 Dispose of contents/container to organic waste.**Additional advice on labelling**

Label elements: none.

**2.3. Other hazards**

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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>6</sub> H<sub>6</sub> O<sub>2</sub>

Molecular weight: 110,11

#### Relevant ingredients

CAS No	Chemical name	Quantity
	Classification (UN GHS (ST/SG/AC.10/11/Rev.10))	
620-02-0	NATURAL 5-METHYL FURFURAL	100 %
	Flam. Liq. 4, Acute Tox. 5; H227 H303	

### SECTION 4: First aid measures

#### 4.1. 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

Rinse mouth immediately and drink 1 glass of 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.

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

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

#### 5.3. Advice for firefighters

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

#### Additional information

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

Use personal protection equipment.

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#### **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**

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.

#### **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.

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

#### **8.1. Control parameters**

#### **8.2. Exposure controls**

##### **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.

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## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state:	Liquid	
Colour:		
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		187 °C
Flammability:		not determined
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Flash point:		72 °C
Auto-ignition temperature:		not determined
Decomposition temperature:		not determined
pH-Value:		not determined
Viscosity / kinematic:		not determined
Water solubility: (at 20 °C)		33 g/L
Solubility in other solvents		not determined
Partition coefficient n-octanol/water:		0,67
Vapour pressure:		not determined
Density (at 20 °C):		1,11 g/cm <sup>3</sup>
Relative vapour density: (at 20 °C)		3,7
Particle characteristics:		not applicable

### 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
Solid content:		not determined

## 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.

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#### SECTION 11: Toxicological information

##### 11.1. Information on toxicological effects

###### Acute toxicity

May be harmful if swallowed.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
620-02-0	NATURAL 5-METHYL FURFURAL				
	oral	LD50 mg/kg	2200	Rat	

###### 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

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.

###### Other information

The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

#### SECTION 12: Ecological information

##### 12.1. Toxicity

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

The product is not: Ecotoxic.

##### 12.2. Persistence and degradability

The product has not been tested.

##### 12.3. Bioaccumulative potential

The product has not been tested.

##### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
620-02-0	NATURAL 5-METHYL FURFURAL	0,67

##### 12.4. Mobility in soil

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.

##### 12.7. Other adverse effects

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No information available.

**Further information**

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

**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**

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

**SECTION 14: Transport information****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****National regulatory information****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  
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).  
EC/EEC: European Community/European Economic Community  
EU: European Union  
M-factor: Multiplying factor  
IATA: International Air Transport Association  
DGR: Dangerous Goods Regulations  
ICAO: International Civil Aviation Organization  
TI: Technical Instructions  
VOC: volatile organic compound

**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.