

SAFETY DATA SHEET
5-METHYLFURFURAL 98 %**Section 1 - Chemical Product and Company Identification****1.1 Product identifiers**

Product name: 5-METHYLFURFURAL 98 %
CAS-No. 620-02-0
EINECS-No. 210-622-6
INDEX-No. 616-001-00-X N,N-Dimethylformamide
Catalog Numbers: 4.42
Synonyms: 5-Methyl-2-furaldehyde

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

Identified uses Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company: TAU-CHEM, Ltd.
Nobelova 34, P.O. Box 29
836 05 Bratislava, Slovak Republic
Telephone +421 2 44 452 252
Fax +421 2 44 457 645

POISON CENTER: National Toxicological Information Centre
Limbová 5, 833 05 Bratislava,

1.4 Emergency telephone: +421 2 54 774 166

Section 2 - Hazards Identification**2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

Skin irritation (Category 2)
Eye irritation (Category 2)
Reproductive toxicity (Category 1B)
Specific target organ toxicity – single exposure (Category 3)

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Irritating to eyes, respiratory system and skin.

2.2 Label elements**Labeling according to Regulation (EC) No 1272/2008 [CLP]**

Pictogram




Signal word

Danger

Hazard statement(s)	
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H360D	May damage the unborn child.
Precautionary statement(s)	
P201	Obtain special instructions before use.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/ attention
Supplemental Hazard Statements	None
Restricted for professional users.	
Hazard symbol(s)	

According to European Directive 67/548/EEC as amended

Hazard symbol(s)	
Xi	Irritant
R-phrase(s)	
R36/37/38	Irritating to eyes, respiratory system and skin.
S-phrase(s)	
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
2.3 Other hazards	None.

Section 3 - Composition, Information on Ingredients

3.1 Substances

3.2 Mixtures

CAS#	Chemical Name:	%	EINECS#
620-02-0	5-METHYLFURFURAL	98	210-622-6
68-12-2	N,N-Dimethylformamide Index # 616-001-00-X	< 0,5	200-679-5
Formula	C ₆ H ₆ O ₂		
Molecular weight	110.11 g/mol		

Section 4 - First Aid Measures

4.1 Description of first aid measures

General advice:	Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled:	If breathed in, move person into fresh air. If not breathing give artificial respiration. Consult a physician.
In case of skin contact:	Wash off with soap and plenty of water. Consult a physician.

In case eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

4.3 Indication of any immediate medical attention and special treatment needed

No data available

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable extinguishing media:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

5.2 Special hazards arising from the substance or mixture

Carbon oxides.

5.3 Advice for firefighters

Wear self-contained apparatus breathing apparatus for firefighting if necessary.

5.4 Further information

Use water spray to cool unopened container.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

Section 7 - Handling and Storage

7.1 Precautions for safe handling:

Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the built up of electrostatic charge.

7.2 Conditions for safe storage

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which

are opened must be carefully resealed and kept upright to prevent leakage. Recommended storage temperature: 2 - 8 °C. Handle and store under inert gas. Air and moisture sensitive

7.3 Specific end uses

No data available

Section 8 - Exposure Controls, Personal Protection

8.1 Control parameters

Component with workplace control parameters

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eyeface protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU)

Skin and protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it

Body protection

Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)

Section 9 - Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

- | | |
|---------------------------------|------------------------------------|
| a) Appearance | Form: liquid
Colour: dark brown |
| b) Odour | No data available |
| c) Odour Threshold | No data available |
| d) pH | No data available |
| e) Melting point/freezing point | No data available |
| f) Initial boiling point and | 187 °C – lit. |

	boiling point range:	
g)	Flash Point:	72 °C – closed cup
h)	Evaporation rate	No data available
i)	Flammability (solid, gas)	No data available
j)	Upper/lower flammability or explosive limits	No data available
k)	Vapour pressure	No data available
l)	Vapour density	No data available
m)	Relative density	1.107 g/cm ³ at 25 °C
n)	Water solubility	No data available
o)	Partition coefficient: n-octanol/water	No data available
p)	Autoignition temperature	No data available
q)	Decomposition temperature	No data available
r)	Viscosity	No data available
s)	Explosives properties	No data available
t)	Oxidizing properties	No data available

9.2 Other safety information

No data available

Section 10 - Stability and Reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

No data available

10.3 Possibility of hazardous reaction

No data available

10.4 Conditions to Avoid

Heat, flames and sparks.

10.5 Incompatible materials

Strong oxidizing agents, Strong bases, Strong reducing agents.

10.6 Hazardous Decomposition Products

Other decomposition products – no data available

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Acute toxicity	LD50 Oral - rat - 2.200 mg/kg
Skin corrosion/irritation	No data available
Serious eye damage/eye irritation	No data available
Respiratory or skin sensitization	No data available
Germ cell mutagenicity	Genotoxicity in vitro - Hamster - ovary Cytogenetic analysis

Carcinogenicity: IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (N,N-Dimethylformamide).

IARC: No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity: No data available
Specific target organ toxicity – single exposure Inhalation - May cause respiratory irritation.

Specific target organ toxicity – repeated exposure No data available

Aspiration hazard No data available

Potential health effect:

Inhalation May be harmful if inhaled. Causes respiratory tract irritation.

Ingestion May be harmful if swallowed.

Skin May be harmful if absorbed through skin.

Causes skin irritation.

Eyes Causes serious eye irritation

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

Additional Information

RTECS: LT7032500

Section 12 – Ecological Information

12.1 Toxicity	No data available
12.2 Persistence and degradability	No data available
12.3 Bioaccumulative potential	No data available
12.4 Mobility in soil	No data available
12.5 PBT and vPvB assessment	No data available
12.6 Other adverse effects	No data available

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company

Contaminated packaging Dispose of as unused product.

Section 14 - Transport Information

14.1 UN number

ADR/RID: -

IMDG: -

IATA: -

14.2 UN proper shipping name

ADR/RID: NOT DANGEROUS GOODS

IMDG: NOT DANGEROUS GOODS

IATA: NOT DANGEROUS GOODS

14.3 Transport hazard class

ADR/RID: -

IMDG: -

IATA: -

14.4 Packaging group

ADR/RID: -

IMDG: -

IATA: -

14.5 Environmental hazards

ADR/RID: no

IMDG: Marine pollutant: no

IATA No

14.6 Special precautions for user

No data available

Section 15 - Regulatory Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006

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

No data available

15.6 Chemical Safety Assessment

No data available

Section 16 - Other Information

SDS version: 2

Creation Date: 08/02/2012

Further information

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Disclaimer:

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.