

**MATERIAL SAFETY DATA SHEET**  
**3-FURANMETHANOL, 99%**

**Section 1 - Chemical Product and Company Identification**

<b>MSDS Name:</b>	3-FURANMETHANOL, 99%
<b>Catalog Numbers:</b>	4.82
<b>Synonyms:</b>	3-Hydroxymethylfuran
Relevant identified uses of substance or mixture and uses advised against	
Identified uses	Laboratory chemicals, Manufacture of substances
<b>Company Identification:</b>	Tau-Chem, Ltd. Nobelova 34, P.O. Box 29 836 05 Bratislava, Slovak Republic Phone: +421 2 44 452 252 Fax: +421 244 457 645
<b>POISON CENTER:</b>	National Toxicological Information Centre Limbová 5, 833 05 Bratislava,
<b>Emergency Numbers Slovakia:</b>	Phone: +42 2 54 774 166 Fax: +42 2 54 774 605

**Section 2 - Hazards Identification**

**Classification of the substance or mixture**

**Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]**


Flammable liquid (Category 3)  
 Acute toxicity, Inhalation (Category 4)  
 Acute toxicity, Dermal (Category 4)  
 Acute toxicity, Oral (Category 4)  
 Skin irritation (Category 2)  
 Eye irritation (Category 2)  
 Specific target organ toxicity – single exposure (Category 3)

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

Flammable. Irritating to eyes, respiratory system and skin.

**Labelling according Regulation (EC) No 1272/2008 [CLP]**

**Label elements**

Pictogram	
Signal word	Warning
Hazard statement(s)	
H226	<u>Flammable</u> liquid and vapor.
H315	Causes skin irritation.
H319	Causes serious eyes irritation.
H335	May cause respiratory irritation.
H242	Use only non-sparking tools.

Precautionary statement(s)	
P210	Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
P241	Use <u>explosion</u> -proof electrical/ <u>ventilating</u> /lighting/equipment.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulation (to be specified).
Hazard symbol(s)	
F	Flammable.
Xi	Irritant.
R-phrases(s)	
R10	Flammable.
R36/37/38	Irritating to eyes, respiratory system and skin.
S-phrases(s)	
S16	Keep away from sources of ignition – No smoking.
S23	Do not breathe gas/fumes/vapor/spray.
S26	In case of contact with eyes rinse immediately with plenty of water and seek for medical advice.
S36/37	Wear suitable protective gloves and eye/face protection.
<b>Other hazards</b>	None

### Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name:	%	EINECS#
4412-91-3	3-FURANMETHANOL	99	224-570-7
<b>Classification</b>	Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H226,H315, H319,H335, H242; F;Xi; R10 - R36/37/38;		

For the full text of the H-Statements mentioned in this Section, see Section 16.

### Section 4 - First Aid Measures

<b>General advice:</b>	Consult a physician. Show this safety data sheet to the doctor in attendance.
<b>If inhaled:</b>	If breathed in, move person into fresh air. If not breathing give artificial respiration. Consult a physician.
<b>In case of skin contact:</b>	Wash off with soap and plenty of water. Consult a physician.
<b>In case eye contact:</b>	Rinse thoroughly with plenty of water for at least 15 minutes and consult a

physician.

**If swallowed:** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### Section 5 - Fire Fighting Measures

**Suitable extinguishing media:** Use carbon dioxide, dry chemical or water jet.

**Special protective equipment for fire-fighters:** Wear self contained apparatus breathing apparatus for fire fighting if necessary.

**Further information:** Use water spray to cool unopened containers.

### Section 6 - Accidental Release Measures

**Personal precautions:** Use personal protective equipment. Avoid breathing dust, mist or gas. Ensure adequate ventilation.  
Keep away from sources of ignition.

**Environmental precautions:** Do not let product enter drains.

**Methods and materials for containment and cleaning up** Absorb with liquid-binding material (sand, diatomite, universal binders). Ensure adequate ventilation.

### Section 7 - Handling and Storage

**Precautions for safe handling:** Avoid contact with skin and eyes. Avoid inhalation of vapor. Keep container tightly sealed. Keep ignition sources away – Do not smoke. Protect against electrostatic charges. Air sensitive.

**Conditions for safe storage:** Keep away from sources of ignition. Store in a cool, dry place. Keep containers tightly closed in a dry and well ventilated place. Air sensitive.

### Section 8 - Exposure Controls, Personal Protection

**Personal protective equipment:**

**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).

**Hand protection** The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Handle with gloves.

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

**Skin and body protection:** Impervious body protection according to the amount and concentration of the dangerous substance at the work place.

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

## Section 9 - Physical and Chemical Properties

<b>Physical State:</b>	Clear liquid
<b>Colour:</b>	Colourless to slight yellow
<b>Odour:</b>	Not available
<b>pH:</b>	Not available
<b>Vapour Pressure:</b>	Not available
<b>Viscosity:</b>	Not available
<b>Boiling Point:</b>	79 - 80 °C / 17 mm Hg – lit.
<b>Freezing/Melting Point:</b>	Not available
<b>Autoignition Temperature:</b>	Not available
<b>Flash Point:</b>	38 °C – closed cup
<b>Explosion Limits: Lower:</b>	Not available
<b>Explosion Limits: Upper:</b>	Not available
<b>Decomposition Temperature:</b>	Not available
<b>Solubility in water:</b>	Slightly soluble
<b>Specific Gravity/Density:</b>	1.139 g/cm <sup>3</sup>
<b>Refractive Index:</b>	1.4845
<b>Molecular Formula:</b>	C <sub>5</sub> H <sub>6</sub> O <sub>2</sub>
<b>Molecular Weight:</b>	98.10 mg/l

## Section 10 - Stability and Reactivity

<b>Chemical Stability:</b>	Stabile under recommended conditions. Product darkens on storage. Air sensitive.
<b>Conditions to Avoid:</b>	Air, heat, flames, sparks.
<b>Incompatibilities with Other Materials</b>	Strong oxidizing agents, acid chlorides, acid anhydrides.
<b>Hazardous Decomposition Products</b>	Carbon monoxides.

## Section 11 - Toxicological Information

<b>Acute toxicity</b>	No data available
<b>Skin corrosion/irritation</b>	No data available
<b>Serious eye damage/eye irritation</b>	No data available
<b>Respiratory or skin sensitization</b>	Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals. The preceding data, or interpretation of data was determined using Quantitative structure activity relationship (QSAR) modeling.
<b>Germ cell mutagenicity</b>	No data available
<b>Carcinogenicity:</b>	No data available 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.

<b>RTECS#:</b>	Not listed.
<b>Reproductive toxicity:</b>	No data available
<b>Specific target organ toxicity – single exposure</b>	No data available
<b>Specific target organ toxicity – repeated exposure</b>	No data available
<b>Aspiration hazard</b>	No data available
<b>Potential health effect:</b>	
<b>Inhalation</b>	Harmful if inhaled. Causes respiratory tract irritation.
<b>Ingestion</b>	Harmful if swallowed.
<b>Skin</b>	Harmful if absorbed through skin. Causes skin irritation.
<b>Eyes</b>	Risk of serious damage to eyes.

**Signs and Symptoms of Exposure**

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

**Additional Information**

No data available

**Section 12 – Ecological Information**

<b>Toxicity:</b>	Ecotoxicity effects Toxicity to fish: LC50-Pimephales promelas (Fathead minnow) – 508 mg/L – 96 h
<b>Persistence and degradability</b>	No data available
<b>Bioaccumulative potential</b>	No data available
<b>Mobility in soil</b>	No data available
<b>PBT and vPvB assessment</b>	No data available
<b>Other adverse effects</b>	No data available

**Section 13 - Disposal Considerations**

<b>Product</b>	This combustible material may be burned in a chemical incinerator equipped with an afterburner and a scrubber. Observe all federal, state and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.
<b>Contaminated packaging</b>	Dispose of as unused product.

**Section 14 - Transport Information**

	<b>IATA</b>	<b>IMDG</b>	<b>RID/ADR</b>
<b>Shipping Name:</b>	ALCOHOLS, N.O.S.	ALCOHOLS, N.O.S.	ALCOHOLS, N.O.S.
<b>Hazard Class:</b>	3	3	3
<b>UN Number:</b>	1987	1987	1987

Packing Group:

III

III

III

EMS No. F-E; S-D  
Marine pollutant: No

### Section 15 - Regulatory Information

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

### Section 16 – Other Information

#### Text of H-code(s) and R-phrase(s) mentioned in Section 3

Acute Tox.	Acute Toxicity.
Skin Irrit.	Skin irritation.
Eye Irrit.	Eye irritation.
STOT SE	Specific target organ toxicity – single exposure
H226	Flammable.
H242	Use only non-sparking tools.
H315	Causes skin irritation.
H319	Causes serious eyes irritation.
H335	May cause respiratory irritation.
Xi	Irritant.
R10	Flammable.
R36/37/38	Irritating to eyes, respiratory system and skin.

**MSDS Creation Date:** 12/4/2007

**Revision #1:**04/08/2010

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.