

**MATERIAL SAFETY DATA SHEET**  
**5-(4-CHLOROPHENYL)-2-FUROIC ACID 95%**

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

<b>MSDS Name:</b>	5-(4-CHLOROPHENYL)-2-FUROIC ACID 95%
<b>Catalog Numbers:</b>	4.96
<b>Synonyms:</b>	5-(4-Chlorophenyl)-2-furancarboxylic acid
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 2 44 457 645
<b>POISON CENTER:</b>	National Toxicological Information Centre Limbová 5, 833 05 Bratislava,
<b>Emergency Numbers Slovakia:</b>	Phone: +421 2 54 774 166 Fax: +421 2 54 774 605

**Section 2 – Hazards Identification**

**Classification of the substance or mixture**

**Classification according to Regulation (EC) No 1272/2008**

Skin Irritation (Category 2)

Eye Irritation (Category 2)

Specific target organ irritation – single exposure (Category 3)

According to European Directive 67/548/EEC as amended.

Irritating to eyes, respiratory system and skin.

**Label elements**

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



Pictogram

Signal word

Warning

Hazard statement(s)

H319

Causes serious eye irritation.

H315

Causes skin irritation.

H335

May cause respiratory irritation.

Precautionary statement(s)

P261

Avoid breathing dust/ fume/gas/mist/vapor/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.

**According to European Directive 67/548/EEC as amended**

Hazard symbol(s)



Xi

Irritating.

R-phrases(s)

R36/37/38

Irritating to eyes, respiratory system and skin.

S-phrases(s)

S26

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36

Wear suitable protective clothing.

**Other hazards**

None.

### Section 3 – Composition, Information on Ingredients

CAS#	Chemical Name:	%	EINECS#
41019-45-8	5-(4-CHLOROPHENYL)-2-FUROIC ACID	95	Unlisted

**Classification** Skin Irrit. 2; Eye Irrit. 2; STOT SE 3  
H315, H319, H335,  
Xi, 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.
<b>If swallowed:</b>	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### Section 5 – Fire Fighting Measures

<b>Suitable extinguishing media:</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Special protective equipment for fire-fighters:</b>	Wear self contained apparatus breathing apparatus for fire fighting if necessary.

### Section 6 – Accidental Release Measures

<b>Personal precautions:</b>	Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.
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<b>Environmental precautions:</b>	Evacuate personnel to safe areas. Avoid breathing dust. Do not let product enter drains.
<b>Methods and materials for containment and cleaning up</b>	Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

## Section 7 – Handling and Storage

<b>Precautions for safe handling:</b>	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.
<b>Conditions for safe storage:</b>	Keep container tightly closed in a dry and well-ventilated place. Store in cool place.

## Section 8 – Exposure Controls, Personal Protection

### Personal protective equipment:

<b>Respiratory protection:</b>	For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirator and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
<b>Hand protection:</b>	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.
<b>Eye protection:</b>	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)
<b>Skin and body protection:</b>	Impervious body protection according to the amount and concentration of the dangerous substance at the work place.
<b>Hygiene measures:</b>	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

### Appearance

Form:	Powder
Colour:	Yellow to pale brown

### Safety data:

<b>pH</b>	Not available
<b>Melting Point:</b>	198 - 201 °C - dec.
<b>Boiling Point:</b>	Not available
<b>Flash Point:</b>	Not available
<b>Ignition temperature:</b>	Not available
<b>Solubility in water:</b>	Not available

<b>Refractive Index:</b>	Not available
<b>Density:</b>	Not available
<b>Molecular Formula:</b>	C <sub>11</sub> H <sub>7</sub> ClO <sub>3</sub>
<b>Molecular Weight:</b>	223.63 g/mol

### Section 10 – Stability and Reactivity

<b>Chemical Stability:</b>	Stable under recommended storage conditions.
<b>Materials to avoid:</b>	Strong oxidizing agents
<b>Hazardous Decomposition Products</b>	Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas.

### Section 11 – Toxicological Information

<b>Acute toxicity</b>	No data available
	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>	No data available
<b>Germ cell mutagenicity</b>	No data available
<b>Carcinogenicity:</b>	
	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>Reproductive toxicity:</b>	No data available
<b>Specific target organ toxicity – single exposure</b>	Inhalation – May cause respiratory irritation.
<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>	May be harmful if inhaled. May cause respiratory tract irritation.
<b>Ingestion</b>	May be harmful if swallowed.
<b>Skin</b>	May be harmful if absorbed through skin. May cause skin irritation.
<b>Eyes</b>	Causes serious eye irritation.
<b>Signs and Symptoms of Exposure</b>	
	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
<b>Additional Information</b>	
	RTECS: No data available

### Section 12 – Ecological Information

<b>Toxicity:</b>	No data available
<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>	Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.
<b>Contaminated packaging</b>	Dispose of as unused product.

### Section 14 - Transport Information

	IATA	IMGD	RID/ADR
<b>Shipping Name:</b>	Not dangerous goods	Not dangerous goods	Not dangerous goods
<b>Hazard Class:</b>			
<b>UN Number:</b>			
<b>Packing Group:</b>			

### 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.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
Xi	Irritant.
R36/37/38	Irritating to eyes, respiratory system and skin.

**MSDS Creation Date:** 15/9/2009

**Revision #1:** 06/06/2011

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.