

MATERIAL SAFETY DATA SHEET  
2-FLUORO-5-METHYLPHENYL ISOCYANATE 99%

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

<b>MSDS Name:</b>	2-FLUORO-5-METHYLPHENYL ISOCYANATE 99%
<b>Catalog Numbers:</b>	11.85
<b>Synonyms:</b>	Benzene, 1-fluoro-2-isocyanato-4-methyl- (9CI)
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**

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 Regulation (EC) No 1272/2008**

Harmful by inhalation, contact with skin and if swallowed.  
Irritating to eyes, respiratory system and skin.

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

Pictogram



Signal word

Warning

Hazard statement(s)

H302

Harmful if swallowed.

H312


Harmful in contact with skin.

H315

Causes skin irritation.

H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
Precautionary statement(s)	
P261	Avoid breathing dust/foam/mist/spray.
P280	Wear protective gloves/protective clothing.
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)	
Xn	Harmful.
R-phrase(s)	
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed.
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.
S36	Wear suitable protective clothing.
<b>Other hazards</b>	Lachrymator.

### Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name:	%	EINECS#
190774-50-6	2-FLUORO-5-METHYLPHENYL ISOCYANATE	99	-

**Classification** Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; STOT SE 3  
H302, H312, H315, H319, H332, H335  
Xn, R20/21/22 - 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 breathing vapors, mist or gas. Ensure adequate ventilation.
<b>Environmental precautions:</b>	Do not let product enter drains.
<b>Methods and materials for containment and cleaning up:</b>	Soak up with inert absorbent material and dispose of as hazardous waste. 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 inhalation or vapor or mist. Keep away from sources of ignition – No smoking. Take measures to prevent the built up of electrostatic charge.
<b>Conditions for safe storage:</b>	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 -20°C.

## Section 8 – Exposure Controls, Personal Protection

### Personal protective equipment:

<b>Respiratory protection:</b>	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).
<b>Hand protection</b>	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.
<b>Eye protection:</b>	Face shield and safety glasses.
<b>Skin and body protection:</b>	Choose 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: Liquid  
Colour: Colourless

### Safety data:

pH Not available  
Melting Point: Not available  
Boiling Point: 192 °C – lit.  
Flash Point: 85 °C closed cup  
Ignition temperature: Not available  
Explosion Limits: Lower: Not available  
Explosion Limits: Upper: Not available  
Solubility in water: Not available  
Density: 1.159 g/cm<sup>3</sup> at 25°C  
Molecular Formula: C<sub>8</sub>H<sub>6</sub>FNO  
Molecular Weight: 151.14 g/mol

## Section 10 – Stability and Reactivity

Chemical Stability: Stable under recommended storage conditions.  
Conditions to Avoid: Avoid moisture.  
Materials to avoid: Strong oxidizing agents.  
Hazardous Decomposition Products: Hazardous decomposition products under fire conditions – Carbon oxides, Nitrogen oxides (NO<sub>x</sub>), Hydrogen fluoride.

## Section 11 – Toxicological Information

Acute toxicity No data available  
Skin corrosion/irritation No data available  
Serious eye damage/eye irritation No data available  
Respiratory or skin sensitization Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.  
Germ cell mutagenicity No data available  
Carcinogenicity:  
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:**

<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>	Causes eye irritation

**Signs and Symptoms of Exposure**

Burning sensation, Cough, Wheezing, Laryngitis, Shortness of breath, Headache, Nausea, Vomiting. Repeated exposure may cause asthma. To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

**Additional Information**

RTECS: Data not 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>	This combustive 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

	IATA	IMDG	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.
Eye Irrit.	Eye irritation.
Skin Irrit.	Skin irritation.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
Xn	Harmful.
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed.
R36/37/38	Irritating to eyes, respiratory system and skin.

**MSDS Creation Date:** 27/2/2007

**Revision #1 Date:** 16/6/2010

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.