

MATERIAL SAFETY DATA SHEET
3-FLUOROPHENYL ISOTHIOCAYNATE 99%

Section 1 - Chemical Product and Company Identification

MSDS Name:	3-FLUOROPHENYL ISOTHIOCAYNATE 99%
Catalog Numbers:	11.20
Synonyms:	1-fluoro-3-isothiocyanato-benzen; Isothiocyanic acid, m-fluorophenyl ester;
Company Identification:	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
POISON CENTER:	National Toxicological Information Centre Limbová 5, 833 05 Bratislava,
Emergency Numbers Slovakia:	Phone: +421 2 54 774 166 Fax: +421 2 54 774 605

Section 2 - Hazards Identification

Classification of the substance or mixture

According to Regulation (EC) No 1272/2008

Acute toxicity, Inhalation (Category 4)

Acute toxicity, Dermal (Category 4)

Acute toxicity, Oral (Category 4)

Skin corrosion,(Category 1B)

Specific target organ toxicity – single exposure (Category 3)

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

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

Label elements

Pictogram



Signal word

Danger

Hazard statement(s)

H302

Harmful if swallowed.

H312

Harmful in contact with skin,

H314

Causes severe skin burns and eye damage.

H332

Harmful if inhaled.

H335

May cause respiratory irritation.

Precautionary statement(s)

P261

Avoid breathing dust/fume/gas/mist/vapour/spray.

P280

Wear protective gloves/ protective clothing/ eye protection/face

	protection.
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
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.
P310	Immediately call a POISON CENTER or doctor/physician.
P405	Store locked up.
Hazard symbol(s)	
C	Corrosive.
R-phrases(s)	
R34	Causes burns.
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed.
R36/37	Irritating to eyes and respiratory system.
S-phrases(s)	
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S27	Take off immediately all contaminated clothing.
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
S45	In case of accident or if you feel unwell, seek medical advice immediately. (Show the label where possible)
Other hazards	Lachrymator.

Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name:	%	EINECS#
404-72-8	3-FLUOROPHENYLISOTHIOCYANATE	99	206-967-7

Classification Acute Tox. 4; Skin Corr. 1B; STOT SE 3; H302, H312; H314, H332; H335
C, R20/21/22- R34- R36/37

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

Section 4 - 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.

Section 5 - Fire Fighting Measures

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

Section 6 - Accidental Release Measures

Personal precautions:	Avoid breathing vapours, mist or gas. Use personal protective equipment. Ensure adequate ventilation. Evacuate personnel to safe areas.
Environmental precautions:	Do not let product enter drains.
Methods and materials for containment and cleaning up	Soak up with inert absorbent material and dispose of as a hazardous waste. Keep in suitable, closed containers for disposal.

Section 7 - Handling and Storage

Precautions for safe handling:	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. Normal measures of preventive fire protection.
Conditions for safe storage:	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 Moisture 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. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose off contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Eye protection:	Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU)
Skin and body protection:	Choose 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

Appearance

Form: Liquid
Color: yellow

Safety data:

pH: Not available
Melting Point: Not available
Boiling Point: 227 °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
Refractive Index: 1.620
Density: 1.27 g/cm³ at 25°C
Molecular Formula: C₇H₄FNS
Molecular Weight: 153.18 g/mol

Section 10 - Stability and Reactivity

Chemical Stability: Stable under recommended storage conditions.
Conditions to Avoid: Heat.
Materials to avoid: Water, alcohols, strong bases, amines, acids, strong oxidizing agents.
Hazardous Decomposition Products Hazardous decomposition products under fire conditions.
– Carbon oxides, nitrogen oxides (NO_x), Sulphur oxides, Hydrogen fluoride.

Section 11 - Toxicological Information

Acute toxicity LD50 Intravenous – mouse- 56 mg/kg
No data available
Skin corrosion/irritation No data available
Serious eye damage/eye irritation No data available
Respiratory or skin sensitization No data available
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:	
Inhalation	May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
Ingestion	Harmful if swallowed. Causes burns.
Skin	May be harmful if absorbed through skin. Causes skin burns.
Eyes	Causes eye irritation. Causes eye burns.
Signs and Symptoms of Exposure	
	Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes and skin. Spasm, inflammation and edema of the larynx; spasm, inflammation and edema of the bronchi; pneumonitis; pulmonary edema; burning sensation, Cough, wheezing, laryngitis, Shortness of breath, headache, nausea. To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.
Additional Information	
	RTECS: NX8750000

Section 12 – Ecological Information

Toxicity:	No data available
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
PBT and vPvB assessment	No data available
Other adverse effects	No data available

Section 13 - Disposal Considerations

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

Section 14 - Transport Information

	IATA	IMDG	RID/ADR
Proper shipping name:	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Hazard Class:	8	8	8
UN Number:	3265	3265	3265

Packing Group:

II

II

II

EMS-No: F-A, S-B
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 Corr.	Skin corrosion.
STOT SE	Specific target organ toxicity – single exposure.
H302	Harmful if swallowed.
H312	Harmful in contact with skin,
H314	Causes severe skin burns and eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
C	Corrosive.
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed.
R34	Causes burns.
R36/37	Irritating to eyes and respiratory system

MSDS Creation Date: 30/07/2010

Revision #0 Date

The information in this document 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.