

MATERIAL SAFETY DATA SHEET
4-FLUORO-1-INDANONE 98%

Section 1 - Chemical Product and Company Identification

MSDS Name:	4-FLUORO-1-INDANONE 98%
Catalog Numbers:	99.53
Synonyms:	4-Fluoro-2,3-dihydro-1-indenone
Relevant identified uses of substance or mixture and uses advised against	
Identified uses	Laboratory chemicals, Manufacture of substances
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
Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]
 Acute toxicity, Oral (Category 4)

Classification according to EU Directives 67/548/EEC or 1999/45/EC
 Harmful if swallowed.

Label elements

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

Pictogram	
Signal word	Warning
Hazard statement(s)	
H302	Harmful if swallowed.
Precautionary statement(s)	
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.
P302+P352	IF ON <u>SKIN</u> : Wash with plenty of soap and water.
P304+P340	IF <u>INHALED</u> : Remove victim to fresh <u>air</u> and keep at rest in a position comfortable for <u>breathing</u> .

According to European Directive 67/548/EEC as amended

Hazard symbol(s)



Xn

Harmful.

R-phrases(s)

R22

Harmful if swallowed.

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#
699-99-0	4-FLUORO-1-INDANONE	98	

Classification Acute Tox. 4
H302
Xn;R22

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: 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 chemical or carbon dioxide.

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

Further information: None

Section 6 – Accidental Release Measures

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

Section 7 – Handling and Storage

Precautions for safe handling:	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.
Conditions for safe storage:	Keep container tightly closed in a dry and well-ventilated place.

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:	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.
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:	Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
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:	Solid
Colour:	White to yellow
Safety data:	
pH	Not available
Melting Point:	72 - 76 °C
Boiling Point:	Not available

Flash Point:	Not available
Ignition temperature:	Not available
Solubility in water:	Not available
Refractive Index:	Not available
Partition coefficient: n-octanol/water	log Pow: 1,649
Density:	Not available
Molecular Formula:	C ₉ H ₇ FO
Molecular Weight:	150.15 g/mol

Section 10 – Stability and Reactivity

Chemical Stability:	Stable under recommended storage conditions. Moisture sensitive.
Conditions to avoid:	No data available.
Materials to avoid:	Strong oxidizing agents
Hazardous Decomposition Products	Hazardous decomposition products formed under fire conditions. - Carbon oxides, 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	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	No data available
Specific target organ toxicity – repeated exposure	No data available
Aspiration hazard	No data available
Potential health effect:	
Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion	Harmful if swallowed.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause 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: Not available

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	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.
Contaminated packaging	Dispose of as unused product.

Section 14 - Transport Information

	IATA	IMDG	RID/ADR
Shipping Name:	Not dangerous goods	Not dangerous goods	Not dangerous goods
Hazard Class:			
UN Number:			
Packing Group:			

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
H302	Harmful if swallowed.
Xn	Harmful.
R22	Harmful if swallowed.

MSDS Creation Date: 05/2/2007

Revision #1: 19/09/2011

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.