

MATERIAL SAFETY DATA SHEET
HEXYL ISOCYANATE 99%

Section 1 - Chemical Product and Company Identification

MSDS Name: HEXYL ISOCYANATE 99%
Catalog Numbers: 9.152
Synonyms: 1-Hexyl isocyanate
 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

Acute Toxicity (Category 4)
 Skin irritation (Category 2)
 Eye damage (Category 1)
 Respiratory Sensitization (Category 1)
 Specific target organ toxicity – single exposure (Category 3)

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

Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin. Risk of serious damage to eyes. May cause sensitization by inhalation. Moisture sensitive.

Label elements

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



Pictogram

Signal word

Danger.

Hazard statement(s)

H302

Harmful if swallowed.

H312

Harmful in contact with skin.

H332

Harmful if inhaled.

H318

Causes serious eye damage.

H335

May cause respiratory irritation.

H334

May cause allergy or asthma symptoms or breathing difficulties if

inhaled.

Precautionary statement(s)

P261
P305+P351+P338

P302+P352
P304+P341

P501

Avoid breathing dust/fume/gas/mist/vapours/spray.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF ON SKIN: Wash with plenty of soap and water.
IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
Dispose of contents/container in accordance with local/regional/national/international regulation.

Hazard symbol(s)

Xn Harmful

R-phrase(s)

R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
R 36/37/38 Irritating to eyes, respiratory system and skin.
R 41 Risk of serious damage to eyes.
R 42 May cause sensitization by inhalation.

S-phrase(s)

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S 45 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#
2525-62-4	HEXYL ISOCYANATE	99	219-763-8

Classification Acute Tox. 4; Skin Irrit. 2; Eye Dam. 1; STOT SE 3; H302;H312, H318, H332; H334;H335, Xn; R20/21/22-R36/37/38-R41-R42

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 dry chemical 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: Use personal protective equipment. Avoid breathing of vapours or mist. Ensure adequate ventilation.
Environmental precautions: Do not let product enter drains.
Methods and materials for containment and cleaning up: Absorb with inert material (vermiculite, sand or earth) and place into suitable container. Dispose as hazardous waste. Remove all sources of ignition.

Section 7 - Handling and Storage

Precautions for safe handling: Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Keep away from sources of ignition – No smoking. Take measures to prevent the built up of electrostatic charge.
Conditions for safe storage: Store in a cool, dry place. Store in a tightly closed container. Containers, which were opened must be carefully resealed to prevent leakage. Flammables area. 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.

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

Appearance

Form:	Liquid (product may develop some turbidity or precipitate)
Colour:	Colourless or slight yellow
Odour:	Sharp

Safety data:

pH	Not available
Melting point:	Not available
Boiling Point:	162 - 164 °C / 760 mm Hg
Flash Point:	59 °C – closed cup
Ignition temperature:	Not available
Explosion Limits: Lower:	Not available
Explosion Limits: Upper:	Not available
Solubility in water:	Decomposes
Specific density:	0.878 g/cm ³
Refractive Index:	1.4190 – 1.4210
Molecular Formula:	C ₇ H ₁₃ NO
Molecular Weight:	127.19 g/mol

Section 10 - Stability and Reactivity

Chemical Stability:	Moisture sensitive. Stable under recommended storage conditions.
Conditions to avoid:	Incompatible materials, ignition sources, excess heat, exposure to moist air or water.
Materials to avoid:	Strong oxidizing agents, strong acids, strong bases, alcohols, amines.
Hazardous Decomposition Products	Hazardous decomposition products under fire conditions. – Carbon oxides, nitrogen oxides.

Section 11 - Toxicological Information

Acute toxicity	No data available
	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
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Specific target organ toxicity – single exposure	Inhalation – Harmful if inhaled. Causes respiratory tract irritation. May cause respiratory sensitization.
Specific target organ toxicity – repeated exposure	Prolonged or repeated exposure may cause nausea, dizziness and headache.
Aspiration hazard	No data available
Potential health effect:	
Inhalation	Harmful if inhaled. Causes respiratory tract irritation.
Ingestion	Harmful if swallowed. May cause irritation of the digestive tract.
Skin	Harmful if absorbed through skin. Causes skin irritation.
Eyes	Causes eye damage.
Signs and Symptoms of Exposure	
	Prolonged or repeated exposure may cause nausea, dizziness and headache.
	To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.
Additional Information	
	RTECS: No data 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	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
Shipping Name:	ISOCYANATES, TOXIC, FLAMMABLE, N.O.S.	ISOCYANATES, TOXIC, FLAMMABLE, N.O.S.	ISOCYANATES, TOXIC, FLAMMABLE, N.O.S.
Hazard Class:	6.1 (3)	6.1 (3)	6.1 (3)
UN Number:	3080	3080	3080
Packing Group:	II	II	II
EMS-No:		F-E, S-E	
Marine		No	

pollutant:

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

Eye Dam.	Eye damage.
Skin Irrit.	Skin Irritation.
Acute Tox.	Acute toxicity.
STOT SE	Specific target organ toxicity – single exposure
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Xn	Harmful.

MSDS Creation Date: 11/8/2008

Revision #1: 22/11/2010

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.