



Centre Anti-Poison pour le Québec: (800) 463-5060

Tél. (Qc): (418) 660-8666 / 800-890-8666


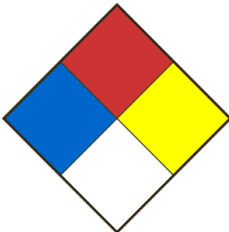
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## SAFETY DATA SHEET

### SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier THIOUREA		Product Use Laboratory use	
Chemical formula H <sub>2</sub> NCSNH <sub>2</sub>		Product code TR-0144; TR-0147	Molar weight 76,12
Chemical name / Commercial name / Synonymous THIOUREA, THIOCARBAMIDE, ISOTHIOUREA, PSEUDOTHIOUREA, 2-THIOUREA			
Supplier's name Laboratoire MAT		Address-Street 610, Adanac Street	
City Québec		Province Québec	
Postal code G1C 7B7	Internet www.labmat.com	Phone number 418-660-8666 / 800-890-8666	
Emergency phone	CANUTEC: 613-996-6666		CENTRE ANTI-POISON DU QUÉBEC 800-463-5060
Date SDS 11/25/2021	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

## SECTION 02 - HAZARDS IDENTIFICATION

<b>Classification WHIMS / GHS</b>	Carcinogenicity category 2 Reproductive toxicity category 2 Acute toxicity - Oral category 4
<b>Signal Word</b>	WARNING
<b>Hazards statements (H)</b>	H302 Harmful if swallowed. H351 Suspected of causing cancer. H361 Suspected of damaging fertility or the unborn child.
<b>Precautionary statements (P)</b>	P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P264 Wash the areas of the body that have been in contact with the product after handling. P270 Do not eat, drink or smoke when using this product. 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. P308 + P313 IF exposed or concerned: Get medical advice/attention. P330 Rinse mouth. P405 Store locked up. P501 Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company.
<b>PICTOGRAMS</b>	
<b>Other dangers</b>	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	<b>Health</b> 3 <b>Fire</b> 0 <b>Reactivity</b> 0 <b>Special danger</b>

## SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Thiourée	62-56-6	<=100

## SECTION 04 - FIRST AID MEASURES

<b>Eye contact</b>	Wash eyes with large amounts of water for at least 15 minutes while holding eyelids apart to rinse eyes. If irritation persists, seek medical attention.
<b>Skin contact</b>	Wash skin with plenty of water for at least 15 minutes. Remove soiled clothing. If irritation persists, seek medical attention.
<b>Inhalation</b>	Move the unwell person to the fresh air. If breathing is difficult, give oxygen. Consult a physician.
<b>Ingestion</b>	If the person is conscious, give water to drink. Never give anything by mouth to an unconscious person. Consult a physician.
<b>Most important symptoms and effects (acute and delayed)</b>	Main symptoms of high exposure: Rashes. Skin sensitizer. Eyes irritation. Cancer. Ref. section 11.
<b>Immediate medical attention and special treatment, if necessary</b>	In case of medical consultation, keep this sheet available.
<b>General advice</b>	Show this safety data sheet to the doctor in attendance.

## SECTION 05 - FIREFIGHTING MEASURES

<b>Flammability</b>	No
<b>Ignition conditions</b>	Not flammable or combustible.
<b>Suitable extinguishing media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Unsuitable extinguishing media</b>	Data not available.
<b>Hazardous combustion products</b>	Hazardous combustion products formed under fire conditions: Carbon oxides, Nitrogen oxides (NO <sub>x</sub> ). - Sulphur oxides
<b>Special fire and explosion hazards</b>	May react violently with incompatible products (Ref Section 10).
<b>Special protective equipment and precautions for firefighters</b>	Discard incompatible substances if this can be done without risk. Firefighters should be equipped with standard protective equipment, fireproof clothing, face mask, gloves, protective boots and, where appropriate, self-contained breathing apparatus.

## SECTION 06 - ACCIDENTAL RELEASE MEASURES

<b>Methods and materials for containment and cleaning up / Personal precautions, protective equipment</b>	Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment. Pick up with a shovel or broom, taking care not to scatter dust. Dispose of residues in a container provided for the disposal of hazardous materials. Do not let product enter drains. Discharge into the environment must be avoided.
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## SECTION 07 - HANDLING AND STORAGE

<b>Conditions for safe storage</b>	Keep container tightly closed in a dry and well-ventilated place. Protect from light and sunlight. Keep container tightly closed and store away from heat, moisture, and incompatible products.
<b>Methods of handling</b>	Avoid contact with the skin, eyes and clothes. Provide appropriate exhaust ventilation at places where dust is formed. Avoid formation of dust and aerosols. Avoid ingestion and inhalation. Wear personal protective equipment when handling. Always ensure good ventilation. Transport according to TDG (ref Section 14)

## SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

### Workplace control parameters

Components	CAS-No.	Control	Value	Basis
THIOUREA	62-56-6	TLV, TWA, STEL	No data available	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TLV, TWA, STEL	No data available	Canada. British Columbia OEL
		TLV, TWA, STEL	No data available	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants

<b>Ventilation</b>	Use fan.
<b>Respiratory</b>	If the permissible levels are exceeded, use a mechanical filter / cartridge against NIOSH vapors or a respirator with air supply.
<b>Gloves</b>	Handle with gloves.
<b>Eyes</b>	Safety goggles with safety shutters.
<b>Shoes</b>	Safety shoes.
<b>Clothing</b>	Labcoat. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
<b>Engineering control</b>	Have safety showers and eyewash stations in the workplace in case of an emergency and a ventilation system to maintain the level of concentrations in the air below the exposure limit values.

## SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Solid.
Appearance	Poudre cristalline blanche.
Odour	inodore.
Odour threshold	Data not available
pH	5-7 à 50 g/L à 20°C.
Melting point / Freezing point	176-178°C
Initial boiling point	Data not available
Boiling range	Data not available
Flash point	Data not available
Evaporation rate	Data not available
Flammability	No
Lower flammable / Explosive limit	Data not available
Upper flammable / Explosive limit	Data not available
Vapour pressure	2.5 mmHg à 25°C.
Vapour density	Data not available
Relative density	1.405g/cm <sup>3</sup>
Solubility	soluble dans l'eau,et l'alcool. Pratiquement insoluble dans l'éther..
Partition coefficient water/n-octanol	log Pow : -0.92 à 20°C
Auto-ignition temperature	440°C
Decomposition temperature	Data not available
Viscosity	Data not available

## SECTION 10 - STABILITY AND REACTIVITY

Reactivity	May react violently with incompatible substances.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	May react violently with incompatible substances.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Avoid excessive heat. Avoid dust formation.
Incompatible material	Strong oxidizing agents, strong acids. Strong bases. Hydrogen peroxide Sulfur oxides
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. Carbon oxides, Nitrogen oxides (NOx). - Sulphur oxides.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### THIOUREA

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Irritation.
- Skin	Harmful if absorbed through skin May cause skin irritation. May cause sensitization by skin contact.
- Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Acute toxicity (Ingestion)	Harmful if swallowed.
Chronic exposure effects / symptoms	Group 3: unclassifiable agent for its carcinogenicity (Group 3 IARC). Suspected toxic for reproduction for humans. If ingested: bone marrow depression (leukopenia, anemia, thrombocytopenia), goitrogenic effect. Prolonged exposure to this product may cause cancer and lead to reproductive abnormalities in humans. Skin sensitizer.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 1750 mg/kg LD50 Dermal - Rabbit - > 2800 mg/kg
CL50 (specify species and route of entry)	CL50 inhalation - Rat > 170 mg/m <sup>3</sup> - 4 h

## SECTION 12 - ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	LC50 - Danio rerio (zebra fish) - 10000 mg/L - 96 h EC50 - Daphnia magna (Water flea) - 5.6-18.0 mg/L - 48 h EC50 - Desmodesmus subspicatus (green algae) - 6.8 mg/L - 96 h
<b>Persistence and degradability</b>	Biodegradability Biotique / Aerobic Result: <1% - Not readily biodegradable.
<b>Bioaccumulative potential</b>	Data not available.
<b>Mobility in soil</b>	Probable mobility due to its solubility in water.
<b>Other adverse effects</b>	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

## SECTION 13 - DISPOSAL CONSIDERATIONS

<b>Waste Disposal Method</b>	Dispose of contents / container in accordance with local / regional / national / international regulations / or contact a specialist waste disposal company.
<b>Contaminated Packaging</b>	Dispose of as unused product.

## SECTION 14 - TRANSPORT INFORMATION

<b>UN Number</b>	3077
<b>UN Proper shipping name</b>	MATIÈRE DANGEREUSE DU POINT DE VUE DE L'ENVIRONNEMENT, N.S.A. (Thiourée)
<b>Transport hazard class(es)</b>	9 Miscellaneous dangerous goods/hazardous material
<b>Packing group</b>	III
<b>Limited quantity index</b>	5kg
<b>ERAP Index</b>	-
<b>Special precautions</b>	16

## SECTION 15 - REGULATORY INFORMATION

<b>WHIMS CANADA</b>	Carcinogenicity category 2 Reproductive toxicity category 2 Acute toxicity - Oral category 4
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## SECTION 16 - OTHER INFORMATION

### Further information

The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. It does not represent any guarantee of the properties of the product. Laboratoire MAT Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.

Last Update: 11/25/2021