



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

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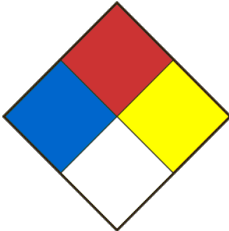
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## SAFETY DATA SHEET

### SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier TRIETHANOLAMINE		Product Use Laboratory use	
Chemical formula C <sub>6</sub> H <sub>15</sub> NO <sub>3</sub>		Product code TP-0187	Molar weight 149,19
Chemical name / Commercial name / Synonymous TRIETHANOLAMINE, 2,2',2''-NITRILOTRIETHANOL, TRIHYDROXYTRIETHYLAMINE, TRIS (HYDROXYETHYL) AMINE, TRIETHYLOLAMINE, TROLAMINE, DALTOGEN, STEROLAMIDE, THIOFACO T-35			
Supplier's name Laboratoire MAT		Address-Street 610, Adanac Street	
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Emergency phone	CANUTEC: 613-996-6666		CENTRE ANTI-POISON DU QUÉBEC 800-463-5060
Date SDS 7/23/2019	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

## SECTION 02 - HAZARDS IDENTIFICATION

<b>Classification WHIMS / GHS</b>	Skin corrosion/irritation - Skin irritation category 2 Serious eye damage/ Eye irritation category 2A Specific target organ toxicity - Single exposure category 3
<b>Signal Word</b>	WARNING
<b>Hazards statements (H)</b>	H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation.
<b>Precautionary statements (P)</b>	P261 Avoid breathing dust / fume / gas / mist / vapours / spray. P264 Wash the areas of the body that have been in contact with the product after handling. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/protective clothing/eye protection/face protection. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P312 Call a POISON CENTER or doctor/physician if you feel unwell. P321 Specific treatment (see section 4 of the SDS and on this label). P332 + P313 If skin irritation occurs: Get medical advice/attention. P337 + P313 If eye irritation persists: Get medical advice/attention. P362 + P364 Take off contaminated clothing and wash it before reuse. P403 + P233 Store in a well-ventilated place. Keep container tightly closed. 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> 2 <b>Fire</b> 1 <b>Reactivity</b> 1 <b>Special danger</b>

## SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Triéthanolamine	102-71-6	<=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>	Do NOT induce vomiting. If the person is conscious, rinse the mouth with water. Never give anything by mouth to an unconscious person. Consult a physician.
<b>Most important symptoms and effects (acute and delayed)</b>	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>	Strong oxidizing agents, heat, sparks and open flame.
<b>Suitable extinguishing media</b>	Use water spray, alcohol-resistant foam, or dry chemical.
<b>Unsuitable extinguishing media</b>	Data not available.
<b>Hazardous combustion / decomposition products</b>	Hazardous decomposition products formed under fire conditions. Carbon oxides, Nitrogen oxides (NO <sub>x</sub> ). Hydrogen cyanide (hydrocyanic acid). Formaldehyde.
<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 / Personnel precautions, protective equipment</b>	Evacuate personnel to safe areas. Absorb the product with sand or vermiculite. Dilute residues with water, clean and rinse. Ensure a good ventilation of the premises. Dispose of residues in a container for disposal of hazardous materials. When handling, wear suitable safety equipment. Use breathing apparatus if necessary. Avoid breathing vapours, mist or gas. Discharge into the environment must be avoided.
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## SECTION 07 - HANDLING AND STORAGE

<b>Conditions for safe storage</b>	Hygroscopic. Store in a well-ventilated area. Store in a cool, dry place. Keep container tightly closed and store away from heat, moisture, and incompatible products. Protect from light and sunlight.
<b>Methods of handling</b>	Keep away from moisture. Avoid inhalation of vapour or mist. Provide appropriate exhaust ventilation at places where dust or vapor is formed. Avoid contact with the skin, eyes and clothes.

## SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

### Workplace control parameters

Composants	No.-CAS	Valeur	Paramètres de contrôle	Base
2,2',2''-Nitrilotriethanol	102-71-6	TWAEV	0.500000 ppm 3.100000 mg/m3	Canada. Ontario OELs
		TWA	5.000000 mg/m3	Canada. LEP Colombie Britannique
		TWA	5.000000 mg/m3	Canada. Alberta, Code de santé et de sécurité au travail (tableau 2 : VLE)
Remarques	La limite d'exposition professionnelle est basée sur les effets de l'irritation et son ajustement pour compenser les emplois du temps de travail inhabituels n'est pas nécessaire			
		VEMP	5.000000 mg/m3	Québec. Règlement sur la santé et la sécurité du travail, Annexe 1 Partie 1: Valeurs d'exposition admissibles des contaminants de l'air
	Sensibilisant			
	VEMP 5 mg/m3 Québec. Règlement sur la santé et la sécurité du travail, Annexe 1 Partie 1: Valeurs d'exposition admissibles des contaminants de l'air			
	Sensibilisant			
		LMPT	0.500000 ppm 3.100000 mg/m3	Tableau de l'Ontario: Limites d'exposition professionnelle pris en vertu de la loi sur la santé et la sécurité au travail.
		LMPT	0.5 ppm 3.1 mg/m3	Tableau de l'Ontario: Limites d'exposition professionnelle pris en vertu de la loi sur la santé et la sécurité au travail.

<b>Data source</b>	Sigma-Aldrich.
<b>Ventilation</b>	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	Liquid.
Appearance	visqueux incolore.
Odour	Odeur légèrement d'ammoniac.
Odour threshold	Data not available
pH	Solution aqueuse 0.1N = pH 10.5.
Melting point / Freezing point	17.9-21°C
Initial boiling point	335°C (dec)
Boiling range	Data not available
Flash point	179 - 193 °C @ 101.3 - 101.325 kPa.
Evaporation rate	Data not available
Flammability	No
Lower flammable / Explosive limit	1.3%
Upper flammable / Explosive limit	8.5%
Vapour pressure	0.01 mmHg @ 20°C.
Vapour density	5.15 (Air 1.0)-
Relative density	1.124 g/ml à 25 °C.
Solubility	Miscible avec l'eau en toutes proportions.
Partition coefficient water/n-octanol	log Kow = -1.00-
Auto-ignition temperature	325°C
Decomposition temperature	Data not available
Viscosity	600 mPa.s à 25°C.

## SECTION 10 - STABILITY AND REACTIVITY

Reactivity	Non-reactive under normal conditions.
Chemical stability	Stable under recommended storage conditions. Hygroscopic.
Possibility of hazardous reactions	Stable under normal conditions.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Avoid exposure to air, light and moisture.
Incompatible material	Acids Strong oxidizing agents, metals.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. Carbon oxides, Nitrogen oxides (NOx). Hydrogen cyanide (hydrocyanic acid). Formaldehyde.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### TRIETHANOLAMINE

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Severe irritation.
- Skin	Irritation and dermatitis.
- Inhalation	Irritation of the mucous membranes and respiratory tract.
Acute toxicity (Ingestion)	Irritation of the mucous membranes. Dysphagia, abdominal pain, cramps, diarrhea, headache, dizziness, diaphoresis, convulsions, nausea and vomiting.
Chronic exposure effects / symptoms	Burning sensation, dermatitis, conjunctivitis, nervous disorders, liver and kidney damage, chest pain, cough, dyspnea, laryngitis, headache, dizziness, diaphoresis, asthenia, weight loss and loss of appetite, nausea and vomiting. Is recognized as an unclassifiable agent for its carcinogenicity (Group 3 according to IARC).
DL50 (specify species and route of entry)	LD50 Oral - Rat - 6400 mg/kg. LD50 Dermal - Rat - > 16 mL/kg LD50 Dermal - Rabbit - 2000 mg/kg.
CL50 (specify species and route of entry)	LC50 - Inhalation - Data not available.

## SECTION 12 - ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	EC50 - Daphnia (water flea) - 609.98 mg/l - 48 h LC50 - Pimephales promelas (fathead minnow) - 10600 - 13000 mg/L - 96 h
<b>Persistence and degradability</b>	Soluble in water. Persistence is unlikely based on information available.
<b>Bioaccumulative potential</b>	Data not available.
<b>Mobility in soil</b>	Probable mobility in the environment due to its solubility in water.
<b>Other adverse effects</b>	Data not available.

## 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>	N/R
<b>UN Proper shipping name</b>	
<b>Transport hazard class(es)</b>	
<b>Packing group</b>	
<b>Limited quantity index</b>	
<b>ERAP Index</b>	
<b>Special precautions</b>	

## SECTION 15 - REGULATORY INFORMATION

<b>WHIMS CANADA</b>	<p>Skin corrosion/irritation - Skin irritation category 2</p> <p>Serious eye damage/ Eye irritation category 2A</p> <p>Specific target organ toxicity - Single exposure category 3</p>
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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.

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