

Centre Anti-Poison pour le Québec: (800) 463-5060 Tél. (Qc): (418) 660-8666 / 800-890-8666 Fax. (Qc): (418) 660-8998

SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier			Product Use			
TRIETHANOLAMINE			Laboratory use			
Chemical formula				Product code	Molar weight	
C ₆ H ₁₅ NO ₃				TP-0187	149,	,19
Chemical name / Commercial name / Synonymous TRIETHANOLAMINE, 2,2',2"-NITRILOTRIETHANOL, TRIHYDROXYTRIETHYLAMINE, TROLAMINE, DALTOGEN, STEROLAMIDE, THIOFACO T-35			TRIETHYLAMINE, TR	RIS (HYDROXYETHYL) AMINE,	TRIETHYLOLAMINE,	
Supplier's name			Address-Street			
Laboratoire MAT			610, Adanac Street			
City		Province				
Québec		Québec				
Postal code	Internet		Phone number			
G1C 7B7	www.labmat.com		418-660-8666 / 800-890-8666			
Emergency phone	CANUTEC: 613-996-6666		CENTRE ANTI-POISON DU QUÉBEC 800-463-5060			
Date SDS	SDS Prepared by			E-Mail		
10/12/2022	Laboratoire MA		ΛT	labmat@labmat.com		

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Skin corrosion/irri	ration - Skin irritation category 2
	Respiratory or skir	sensitization - Skin sensitize category 1B
	Serious eye dama	ge/eye irritation - Eye irritation category 2
	Specific target org	gan toxicity - Single exposure category 3
Signal Word	WARNING	
Hazards statements (H)	H315 Causes skin	irritation.
	H317 May cause	an allergic skin reaction.
	H319 Causes serie	ous eye irritation.
	H335 May cause	respiratory irritation.
Precautionary statements (P)	P264	Wash the areas of the body that have been in contact with the product after handling.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
	P321	Specific treatment (see section 4 of the SDS and on this label).
	P332 + P313	If skin irritation occurs: Get medical advice/attention.
	P362 + P364	Take off contaminated clothing and wash it before reuse.
	P261	Avoid breathing dust / fume / gas / mist / vapors / spray.
	P272	Contaminated work clothing should not be allowed out of the workplace.
	P305 + P351 + P	338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
	P337 + P313	If eye irritation persists: Get medical advice/attention.
	P501	Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company.
	P271	Use only outdoors or in a well-ventilated area.
	P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P312	Call a POISON CENTER or doctor/physician if you feel unwell.
	P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
	P405	Store locked up.
PICTOGRAMS	<u>(i)</u>	
Other dangers	N	FPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	Health 2	
	Fire 1	
	Reactivity 1	
	Special danger	
<u>. </u>		

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

Eye contact	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.
Skin contact	Wash skin with plenty of water for at least 15 minutes. Remove soiled clothing. If irritation persists, seek medical attention.
Inhalation	Move the unwell person to the fresh air. If breathing is difficult, give oxygen. Consult a physician.
Ingestion	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.
Most important symptoms and effects (acute and delayed)	Main symptoms of high exposure: Headaches. Skin, eye and respiratory system irritation. Vomiting. Redness. Ref. section 11.
Immediate medical attention and special treatment, if necessary	In case of medical consultation, keep this sheet available.
General advice	Show this safety data sheet to the doctor in attendance.

SECTION 05 - FIREFIGHTING MEASURES

Flammability	No
Ignition conditions	Non flammable. But remains combustible. Strong oxidizing agents, heat, sparks and open flame.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, or dry chemical.
Unsuitable extinguishing media	Data not available.
	Hazardous decomposition products formed under fire conditions. Carbon oxides, Nitrogen oxides (NOx). Hydrogen cyanide (hydrocyanic acid). Formaldehyde.
Special fire and explosion hazards	May react violently with incompatible products (Ref Section 10).
precautions for firefighters	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

Methods and materials for	Evacuate personnel to safe areas. Absorb the product with sand or vermiculite. Dilute residues with water,
containment and cleaning up /	clean and rinse. Ensure a good ventilation of the premises. Dispose of residues in a container for disposal
Personnal precautions, protective	of hazardous materials. When handling, wear suitable safety equipment. Use breathing apparatus if
equipment	necessary. Avoid breathing vapors, mist or gas. Discharge into the environment must be avoided.

SECTION 07 - HANDLING AND STORAGE

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.
Keep away from moisture. Avoid ingestion and inhalation. Provide appropriate exhaust ventilation at places where dust or vapor is formed. Avoid contact with the skin, eyes and clothes. 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

Composants	NoCAS	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.		

Data source	Sigma-Aldrich.
Ventilation	Fan.
Respiratory	If the permissible levels are exceeded, use a mechanical filter / cartridge against NIOSH vapors or a respirator with air supply.
Gloves	Handle with gloves.
Eyes	Safety goggles with safety shutters.
Shoes	Safety shoes.
Clothing	Labcoat. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Engineering control	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 kPα.
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	Basic product, reacts violently with strong acids.		
Chemical stability	Stable under recommended storage conditions. Hygroscopic.		
Possibility of hazardous reactions	May react violently with incompatible substances.		
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Avoid exposure to air, light and moisture. Avoid contact with incompatible materials. Avoid excessive heat.		
Incompatible material	Halogenated organic compounds. Strong oxidizing agents, metals. Isocyanates. Acids. Peroxides. Halogens. Anhydrides of acid. Strong reducing agents. Hydrides. The acid halides.		
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

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

SECTION 13 - DISPOSAL CONSIDERATIONS

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

SECTION 14 - TRANSPORT INFORMATION

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

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Skin corrosion/irritation - Skin irritation category 2
	Respiratory or skin sensitization - Skin sensitize category 1B
	Serious eye damage/eye irritation - Eye irritation category 2
	Specific target organ toxicity - Single exposure category 3

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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