



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 N-METHYLDIETHANOLAMINE		Product Use Laboratory use	
Chemical formula C ₅ H ₁₃ NO ₂		Product code MR-0283	Molar weight 119,19
Chemical name / Commercial name / Synonymous N-Méthyl-diéthanolamine; MDEA; Méthyl diéthanolamine; 2,2' - (méthylimino) diéthanol; 2,2'-Methyliminodiethanol; Methyldiethanolamine; Ethanol, 2,2'-(methylimino)bis-			
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 5/18/2021	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Serious eye damage/ Eye irritation category 2A Acute toxicity - Oral category 4		
Signal Word	WARNING		
Hazards statements (H)	H302 Harmful if swallowed. H319 Causes serious eye irritation.		
Precautionary statements (P)	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. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P330 Rinse mouth. 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.		
PICTOGRAMS			
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Significant; 4=Extreme)		
	Health 2 Fire 1 Reactivity 0 Special danger		

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
N-Méthyl-diéthanolamine N-Méthyléthanolamine	105-59-9 109-83-1	>=99 <=1

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	If the person is conscious, give water to drink. Do NOT induce vomiting. 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: Irritation of the nose and throat. Eyes irritation. 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	† is not considered flammable, but can burn at high temperatures. It can ignite if heated moderately in the presence of an ignition source. It can also ignite on contact with strong oxidizing materials.
Suitable extinguishing media	Use dry chemical powder, dry ice or foam.
Unsuitable extinguishing media	Do not use water.
Hazardous combustion products	Hazardous combustion products formed under fire conditions: Carbon oxides, Nitrogen oxides (NOx).
Special fire and explosion hazards	May react violently with incompatible products (Ref Section 10).
Special protective equipment and 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 containment and cleaning up / Personnel precautions, protective equipment	Evacuate personnel to safe areas. Remove all sources of ignition. Ensure adequate ventilation. Absorb the product with sand or vermiculite. Do NOT use absorbents composed with minerals, clay, or cellulose. When handling, wear appropriate safety equipment. Use a respirator as needed. Dispose of residues in a container provided for the disposal of hazardous materials. Do not let product enter drains.
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SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage	Hygroscopic. Store in a cool, dry place. Store in a well-ventilated area. Keep container tightly closed and store away from heat, moisture, and incompatible products. Protect from light and sunlight.
Methods of handling	Keep away from moisture. Avoid inhalation of vapor or mist. 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

Components	CAS-No.	Control parameters	Value	Basis
N-Méthyl-diéthanolamine	105-59-9	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

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	Liquide incolore à jaune pâle.
Odour	Ammoniacque.
Odour threshold	Data not available
pH	10.4 à 10g/L; 11.5 à 100g/L.
Melting point / Freezing point	-21.3°C
Initial boiling point	245°C
Boiling range	246-248°C
Flash point	137°C
Evaporation rate	Data not available
Flammability	No
Lower flammable / Explosive limit	0.9% v/v
Upper flammable / Explosive limit	8.4% v/v
Vapour pressure	0.026 mbar @ 40 °C.
Vapour density	4.11 (Air=1)-
Relative density	1.038g/ml à 25°C
Solubility	Soluble dans l'eau..
Partition coefficient water/n-octanol	log Pow: -1.08-
Auto-ignition temperature	280°C
Decomposition temperature	Data not available
Viscosity	Data not available

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	Basic product, reacts violently with strong acids. May react violently with incompatible substances.
Chemical stability	Stable under recommended storage conditions. Moisture sensitive. Sensitive to heat.
Possibility of hazardous reactions	May react violently with incompatible substances.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Avoid excessive heat. Avoid contact with incompatible materials.
Incompatible material	Strong acids, strong oxidants. Isocyanates. Acid chloride. Peroxides. The acid halides. Aluminum, copper. Halogenated organic compounds. Epoxies. Phenols (acids). Reducing agents. Release of flammable hydrogen gas by amines in combination with strong reducing agents, such as hydrides.
Hazardous decomposition products	Toxic vapors of nitrogen oxides, monoxide and carbon dioxide.

SECTION 11 - TOXICOLOGICAL INFORMATION

N-METHYLDIETHANOLAMINE

Routes of exposure	Ingestion.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Severe irritation May cause severe lesions to the cornea.
- Skin	Redness. Irritation and tissue burns.
- Inhalation	May cause respiratory tract irritation. Cough. Headache. Nausea.
Acute toxicity (Ingestion)	Gastrointestinal complaints, nausea, vomiting. Diarrhea. Irritation of the mucous membranes.
Chronic exposure effects / symptoms	Cough, Shortness of breath, Migraine, Nausea. Vomiting. To our knowledge, the chemical, physical and toxicological properties have not been fully investigated.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 4680 mg/kg. LD50 Dermal - Rabbit - 5590 mg/kg.
CL50 (specify species and route of entry)	CL50 inhalation - Rat 6 hres. >6.5 mg/m3.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	Toxicity to fish: Static test LC50 - Leuciscus idus(Ide) - 1 mg/L - 48 h. 1466 mg/l - 96 h. Toxicity to daphnia and other aquatic invertebrates: Static test EC50 - Daphnia magna (Water flea): 233 mg/l - 48 h. Toxicity to algae: Static test EC50 - Desmodesmus subspicatus (green algae) - 100 mg/l - 72 h.
Persistence and degradability	Biodegradability aerobic - Duration of exposure 28 days - Result: 7 % - Not biodegradable.
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

Waste Disposal Method	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	Serious eye damage/ Eye irritation category 2A 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.

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