



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

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

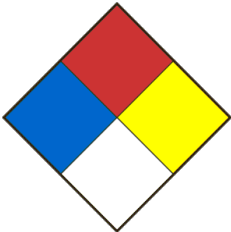
Fax. (Qc): (418) 660-8998

SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier DIÉTHANOLAMINE		Product Use Laboratory use	
Chemical formula (HOCH ₂ CH ₂) ₂ NH		Product code DR-0160; DR-0989	Molar weight 105,14
Chemical name / Commercial name / Synonymous DIETHANOLAMINE, 2,2'- IMINOBISETHANOL, 2,2'- IMINODIETHANOL, DIETHYLOLAMINE, BIS(HYDROXYETHYL) AMINE, 2,2'- DIHYDROXYDIETHYLAMINE, DIOLAMINE, DEA, ETHANOL 2,2'-IMINODI-			
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 8/25/2021	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Skin corrosion/irritation - Skin irritation category 2 Serious eye damage/eye irritation - Serious eye damage category 1 Carcinogenicity category 2 Reproductive toxicity category 2 Specific Target Organ Toxicity - Repeated exposure category 2 Acute toxicity - Oral category 4	
Signal Word	DANGER	
Hazards statements (H)	H302 Harmful if swallowed. H315 Causes skin irritation. H318 Causes serious eye damage. H351 Suspected of causing cancer. H361 Suspected of damaging fertility or the unborn child. H373 May cause damage to organs through prolonged or repeated exposure.	
Precautionary statements (P)	P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P260 Do not breathe dust / fume / gas / mist / vapors / spray. 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. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308 + P313 IF exposed or concerned: Get medical advice/attention. P310 Immediately call a POISON CENTER or doctor/physician. P314 Get medical advice/attention if you feel unwell. P321 Specific treatment (see section 4 of the SDS and on this label). P330 Rinse mouth. P332 + P313 If skin irritation occurs: Get medical advice/attention. P362 + P364 Take off contaminated clothing and wash it before reuse. P405 Store locked up. 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=Signifiant; 4=Extreme)	
	Health 3 Fire 1 Reactivity 0 Special danger	

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Diéthanolamine	111-42-2	<=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	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: Skin, eye and respiratory system irritation. Nausea. Headaches. Cough. Skin sensitizer. Respiratory sensitizer. 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.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Note: the use of water spray or alcohol foam can produce scum.
Unsuitable extinguishing media	Data not available.
Hazardous combustion products	Hazardous decomposition products formed under fire conditions. Carbon oxides, Nitrogen oxides (NOx).
Special fire and explosion hazards	Moderate fire hazard in the presence of heat or flame. 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. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. 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. Do NOT use absorbents composed with minerals, clay, or cellulose. Do not let product enter drains.
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SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage	Keep container tightly closed in a dry and well-ventilated place. Keep container tightly closed and store away from heat, moisture, and incompatible products. Store in cool place. Protect from the sun's rays. Air sensitive. Hygroscopic.
Methods of handling	Bottle in glass containers only. Avoid contact with the skin, eyes and clothes. Avoid inhalation of vapor or mist. 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	No.-CAS	Control parameters	Value	Basis
DIETHANOLAMINE	111-42-2	TWAEV	2.000000 mg/m3	Canada. Ontario OELs
		TWA	2.000000 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
Remarks: The substance can be easily absorbed through the intact skin.				
		VEMP	3.000000 ppm 13.000000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
Skin (percutaneous)				
		VEMP	3 ppm 13 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
Skin (percutaneous)				
		TWA	2.000000 mg/m3	Canada. British Columbia OEL
IARC "2B" applies to substances that are considered to be possibly carcinogenic in humans. Contributes significantly to overall dermal exposure.				
		TWA	1.000000 mg/m3	Canada. British Columbia OEL
Contributes significantly to overall dermal exposure. Steam and aerosol.				

Data source	Sigma-Aldrich.
Ventilation	Use 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	Use 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	Ammoniaque.
Odour threshold	0.27ppm
pH	Solution aqueuse 0.1 N = pH 11.0.
Melting point / Freezing point	27-30°C
Initial boiling point	269°C
Boiling range	Data not available
Flash point	138°C
Evaporation rate	> 5 000,00 (éter=1).
Flammability	No
Lower flammable / Explosive limit	1.6%
Upper flammable / Explosive limit	10.6%
Vapour pressure	<0.01 mmHg @ 20°C.
Vapour density	3.63 - (Air = 1.0).
Relative density	1.097g/cm ³
Solubility	Miscible avec l'eau, le méthanol et l'acétone.
Partition coefficient water/n-octanol	log Pow: -2.18.
Auto-ignition temperature	370°C
Decomposition temperature	259°C
Viscosity	351.9 cP à 30 °C.

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. Absorbs carbon dioxide from the air.
Possibility of hazardous reactions	May react violently with incompatible substances.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	This product quickly absorbs moisture from the air. Avoid excessive heat. Light sensitive.
Incompatible material	Oxidizing agents and strong acids, copper and its alloys, galvanized iron, zinc, heat and moisture. Aluminum. Zinc. Halogens. Strong reducing agents. Isocyanates. Halogenated organic compounds. Phenols (acids). Epoxies. Anhydrides of acid.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. Carbon oxides, Nitrogen oxides (NOx).

SECTION 11 - TOXICOLOGICAL INFORMATION

DIÉTHANOLAMINE

Routes of exposure	Ingestion, inhalation, skin contact.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Severe irritation and burning of the eye tissue that may lead to corneal ulceration and blindness.
- Skin	Severe irritation. May cause an allergic and inflammatory reaction of the skin.
- Inhalation	Spasms, irritation and inflammation of the nose, throat and lungs. Edema of the larynx and bronchi. Chemical pneumonia and pulmonary edema. May cause hypersensitivity in some individuals resulting in bronchial constriction, hypotension and urticaria.
Acute toxicity (Ingestion)	Burns and ulcerations of the mouth, throat, esophagus and abdominal wall. Dysphagia, liver lesions, abdominal pain, cramps, diarrhea, melena, diaphoresis, convulsions, nausea and vomiting. May be fatal if the amount ingested is important.
Chronic exposure effects / symptoms	Is recognized as a possible carcinogen for humans (class 2B) by IARC. Burning sensation, respiratory and skin allergies, nervous disorders, liver, eye and kidney damage, chest pain, cough, dyspnoea, laryngitis, headache, dizziness, salivation, fatigue, weight loss, loss of weight appetite, convulsions, nausea and vomiting.
DL50 (specify species and route of entry)	LD50 Oral - Rat - Male et female - 710 mg/L. LD50 Dermal - Rabbit - 12200 mg/kg.
CL50 (specify species and route of entry)	CL50 inhalation - Rat > 1.7 mg/L - 4 h.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	EC50 - Daphnia magna (Water flea) - Static test: 30.1 mg/L - 48 h. EC50 - Pseudokirchneriella subcapitata (green algae) - 2.1 - 2.3 mg/L - 96 h. EC50 - Desmodesmus subspicatus (green algae) - 7.8 mg/L - 72 h. LC50 - Pimephales promelas (fathead minnow) - 1460 mg/L - 96 h.
Persistence and degradability	Aerobic biodegradability Result: 93% - Readily biodegradable. Method: OECD Guideline 301F.
Bioaccumulative potential	Data not available.
Mobility in soil	Soluble in water. Probable mobility in the environment due to its solubility in water.
Other adverse effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life with long lasting effects.

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	3259
UN Proper shipping name	AMINES SOLIDES CORROSIVES, N.S.A
Transport hazard class(es)	8 Corrosive substances
Packing group	III
Limited quantity index	5kg
ERAP Index	-
Special precautions	16 (Diethanolamine)

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Skin corrosion/irritation - Skin irritation category 2 Serious eye damage/eye irritation - Serious eye damage category 1 Carcinogenicity category 2 Reproductive toxicity category 2 Specific Target Organ Toxicity - Repeated exposure 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.

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