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

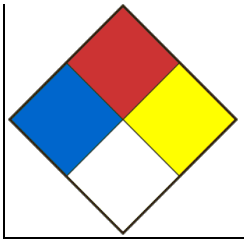
SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier 2-AMINOETHANOL		**Product Use** Laboratory use	
Chemical formula $H_2NCH_2CH_2OH$		**Product code** AR-0139; AP-0139	**Molar weight** 61,08
Chemical name / Commercial name / Synonymous 2-AMINOETHANOL, AMINO-2-ETHANOL, ÉTHANOLAMINE, MONOÉTHANOLAMINE, 2-HYDROXYETHYLAMINE, BETA-AMINOETHANOL, ETHYLOLAMINE, COLAMINE, GLYCINOL, OLAMINE			
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 7/7/2020	**SDS Prepared by** Laboratoire MAT	**E-Mail** labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Skin corrosion/irritation - Skin corrosion category 1B Serious eye damage/eye irritation - Serious eye damage category 1 Liquides inflammables category 4 Acute toxicity - Oral category 4 Acute toxicity - Dermal category 4 Acute toxicity - Inhalation category 4 Specific target organ toxicity - Single exposure category 3
Signal Word	DANGER
Hazards statements (H)	H227 Combustible liquid. H302 Harmful if swallowed. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H332 Harmful if inhaled. H335 May cause respiratory irritation.
Precautionary statements (P)	P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking. P260 Do not breathe dust / fume / gas / mist / vapours / spray. 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. P270 Do no eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. 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. P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. 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. P310 Immediately call a POISON CENTER or doctor/physician. 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). P330 Rinse mouth. P362 + P364 Take off contaminated clothing and wash it before reuse. P363 Wash contaminated clothing before reuse. P370 + P378 In case of fire: Use water spray or alcohol-resistant foam, or dry powder or carbon dioxide for extinction. P403 Store in a well-ventilated place. 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.
PICTOGRAMS	
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)



Health	2
Fire	2
Reactivity	0
Special danger	

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
2-aminoéthanol	141-43-5	<=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)	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	Yes
Ignition conditions	Keep away from heat/sparks/open flame/hot surface. Flammable in the presence of a source of ignition when the temperature is above the flash point. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	Do not use a concentrated stream of water that could spread fire.
Hazardous combustion / decomposition products	Hazardous decomposition products formed under fire conditions. Carbon oxides, Nitrogen oxides (NOx).
Special fire and explosion hazards	Closed containers exposed to fire can explode. Contact with strong oxidizing agents may cause fire. 2-Aminoethanol can react violently with acids, acrolein, acetic anhydride, acrylonitrile, cellulose, epichlorohydrin, mesityl oxide, oleum, beta-propiolactone and vinyl acetate. Vapors may travel a great distance and ignite on sources of ignition such as heaters, electrical appliances, cigarettes, sparks, etc.
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 / Personnal precautions, protective equipment	Evacuate personnel to safe areas. Cut off all sources of ignition. Avoid the accumulation of charges electrostatic. 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. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Do not let product enter drains.

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. Protect from the sun's rays. Hygroscopic.
Methods of handling	Avoid contact with the skin, eyes and clothes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. Use a hood preferably. 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
2-AMINOETHANOL	141-43-5	TWA	3.000000 ppm	Canada. British Columbia OEL)
		STEL	6.000000 ppm	Canada. British Columbia OEL)
		TWAEV	3.000000 ppm 7.500000 mg/m3	Canada. Ontario OELs
		STEV	6.000000 ppm 15.000000 mg/m3	Canada. Ontario OELs
		TWA	3.000000 ppm 7.500000 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		STEL	6.000000 ppm 15.000000 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
Remarks: Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required				
		VEMP	3.000000 ppm 7.500000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		VECD	6.000000 ppm 15.000000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants

Data source	Sigma-Aldrich.
Ventilation	Fan.
Respiratory	If work under the hood is not possible, or 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	Clair et incolore.
Odour	Type amine.
Odour threshold	2.6ppm
pH	Solution aqueuse 1% = pH 11.5 Solution aqueuse 25% = pH 12.1.
Melting point / Freezing point	10.5°C
Initial boiling point	170°C
Boiling range	Data not available
Flash point	91°C
Evaporation rate	> 1 (butyl acetate = 1.0)%
Flammability	Yes
Lower flammable / Explosive limit	2.5%
Upper flammable / Explosive limit	17%
Vapour pressure	0.2 mmHg @ 20°C.
Vapour density	2.11 (Air = 1.0).
Relative density	1.012g/cm³
Solubility	Miscible avec l'eau en toutes proportions. Miscible avec l'alcool et l'acétone.
Partition coefficient water/n-octanol	log Pow : -2.299 à 25°C.
Auto-ignition temperature	450°C
Decomposition temperature	Data not available
Viscosity	24 cP à 20°C.

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	Non-reactive under normal conditions.
Chemical stability	Stable under recommended storage conditions. Hygroscopic. Air sensitive.
Possibility of hazardous reactions	Stable under normal conditions.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Heat, flames and sparks. Avoid moisture. This product absorbs carbon dioxide from the air and slowly oxidizes to yellow or brown.
Incompatible material	Strong oxidizing agents, acrylonitrile, aluminum, cellulose, epichlorohydrin, mesityl oxide, oleum, beta-propiolactone, vinyl acetate, heat, air and things . Brass, rubber.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. Carbon oxides, Nitrogen oxides (NOx).

SECTION 11 - TOXICOLOGICAL INFORMATION

2-AMINOETHANOL

Routes of exposure	Ingestion, inhalation, skin and eyes.
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 and tissue burn.
- Inhalation	Spasms, irritation and inflammation of the nose, throat and lungs. Edema of the larynx and bronchi. Chemical pneumonitis and pulmonary edema that can lead to death. The product is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
Acute toxicity (Ingestion)	Irritation and burning of the mouth, throat, esophagus and abdominal wall. Dysphagia, abdominal pain, cramps, diarrhea, melena, headache, tremors, nausea and vomiting, salivation and convulsions.
Chronic exposure effects / symptoms	Burning sensation, cough, asthmatiform, laryngitis, Respiratory insufficiency, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pulmonary congestion, pulmonary edema, The product is extremely destructive of tissues of the mucous membranes, upper respiratory tract, eyes and skin.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 1089 mg/kg LD50 Dermal - Rabbit - 1015 mg/kg
CL50 (specify species and route of entry)	LC50 Inhalation - Rat - 4h - > 0,180 mg/L.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	LC50 - Cyprinus carpio (Carp) - 150 mg/L - 96 h - semi-static. LC50 - Leuciscus idus (Golden orfe) - >200 mg/L - 48 h EC50 - Daphnia magna (Water flea) - 65 mg/L -48 h EC50 - Selenastrum capricornutum (green algae): 2.5 mg/L - 72 h - static test. CE50 - Pseudomonas putida (Bacille Pseudomonas putida) - 110 mg/L - 17 h
Persistence and degradability	Aerobic biodegradability Result:> 70% - Readily biodegradable. Method: OECD Guideline 301F
Bioaccumulative potential	Data not available.
Mobility in soil	Probable mobility due to its solubility in water.
Other adverse effects	Toxic to aquatic life. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

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	2491
UN Proper shipping name	ÉTHANOLAMINE ou ÉTHANOLAMINE EN SOLUTION
Transport hazard class(es)	8 Corrosive substances
Packing group	III
Limited quantity index	5L
ERAP Index	-
Special precautions	-

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Skin corrosion/irritation - Skin corrosion category 1B Serious eye damage/eye irritation - Serious eye damage category 1 Liquides inflammables category 4 Acute toxicity - Oral category 4 Acute toxicity - Dermal category 4 Acute toxicity - Inhalation category 4 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.

Last Update: 7/7/2020