

SECTION 1: IDENTIFICATION**Product Identifier****Product Form:** Liquid**Product Name:** 1 M Ethanolamine**Synonyms:** 1 M Ethanolamine hydrochloride, 1M 2- Hydroxyethylammonium Chloride**Company**

Carterra Inc.

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Emergency Number: 1-800-535-5053 for domestic USA, 1-352-323-3500 for International.**Account Number:** 114962**SECTION 2: HAZARDS IDENTIFICATION****Classification of the Substance or Mixture**

This Substance is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**Mixture**

Name	CAS No.	%	Classification
Ethanolamine Hydrochloride	2002-24-6	8-10%	None Specified
Water	7732-18-5	87-92%	None Specified
pH Adjusters	N/A	0-3%	None Specified

SECTION 4: FIRST AID MEASURES**Description of First-aid Measures****First-aid Measures General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice**First-aid Measures After Inhalation:** Move to fresh air. If not breathing, give artificial respiration.**First-aid Measures After Skin Contact:** Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes**First-aid Measures After Eye Contact:** Rinse thoroughly with plenty of water for at least 15 minutes. Consult a physician**First-aid Measures After Ingestion:** Rinse mouth**Most Important Symptoms and Effects Both Acute and Delayed****Symptoms/Injuries:** No information available**Symptoms/Injuries After Inhalation:** No information available **Symptoms/Injuries After Skin Contact:** No information available**Symptoms/Injuries After Eye Contact:** No information available **Symptoms/Injuries After Ingestion:** No information available**Chronic Symptoms:** No information available**SECTION 5: FIRE-FIGHTING MEASURES****Suitable Extinguishing Media:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.**Unsuitable Extinguishing Media:** No information available**Special Hazards Arising from the Substance or Mixture:** None**Advice for Firefighters****Precautionary Measures:** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.**Firefighting Instructions:** Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide**Protection During Firefighting:** No information available**Hazardous Combustion Products:** Carbon oxides, Ammonia, Nitrogen oxides**Other Information:** No information available

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

General Measures: Ensure adequate ventilation, especially in confined areas

For Non-Emergency Personnel Protective Equipment: Safety Glasses. Gloves.

Emergency Procedures: No information available

For Emergency Personnel Protective Equipment: No information available

Emergency Procedures: No information available

Methods and Materials for Containment and Cleanup

For Containment: Prevent further leakage or spillage if safe to do so

Methods for Cleanup: Pick up and transfer to properly labeled containers

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Handle in accordance with good industrial hygiene and safety practice. Hygroscopic

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions: Hygroscopic. Keep container tightly closed in a dry and well-ventilated place

Incompatible Products: Strong oxidizing agents

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

Component	CAS-No.	Value	Control Parameters
Ethanolamine	2002-24-6	No information available	No information available
Water	7732-18-5	Not Established	Not Established

Exposure Controls and Risk Management Measures

Appropriate Engineering Controls	: Showers Eyewash stations Ventilation systems
Materials for Protective Clothing	: No information available
Hand Protection	: Wear protective gloves
Eye Protection	: Avoid contact with eyes. Safety glasses with side-shields
Skin and Body Protection	: Wear protective clothing
Respiratory Protection	: If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
Environmental Exposure Controls	: No information available
Other Information	: No information available

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	: Solid
Appearance	: White
Odor	: No information available
Odor Threshold	: No information available
pH	: 8.45-8.55
Evaporation Rate	: No information available
Melting Point	: 82 - 84 °C (180 - 183 °F)
Freezing Point	: No information available
Boiling Point	: No information available
Flash Point	: No information available
Auto Ignition Temperature	: No information available

Decomposition Temperature	: No information available
Flammability (solid, gas)	: No information available
Vapor Pressure	: No information available
Relative Vapor Density at 20° C	: No information available
Relative Density	: No information available
Specific Gravity	: No information available
Solubility	: Miscible with water
Partition Coefficient: N-Octanol/Water	: No information available
Viscosity	: No information available

SECTION 10: STABILITY AND REACTIVITY

Reactivity: No information available

Chemical Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: None under normal processing

Conditions to Avoid: Extremes of temperature and direct sunlight

Incompatible Materials: Strong oxidizing agents

Hazardous Decomposition Products: Carbon oxides, Ammonia, Nitrogen oxides

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity:

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Glycine	= 7930 mg/kg (rat)	None specified	None Specified

Skin Corrosion/Irritation: No information available

pH: No information available

Serious Eye Damage/Irritation: No information available

pH: No information available

Respiratory or Skin Sensitization: No information available

Germ Cell Mutagenicity: No information available

Carcinogenicity: No information available

IARC: No information available

NTP: No information available

OSHA: No information available

Reproductive Toxicity: No information available

Specific Target Organ Toxicity (Single Exposure): No information available

Specific Target Organ Toxicity (Repeated Exposure): No information available

Aspiration Hazard: No information available

Symptoms/Injuries After Inhalation: No information available

Symptoms/Injuries After Skin Contact: No information available

Symptoms/Injuries After Eye Contact: No information available

Symptoms/Injuries After Ingestion: No information available

Chronic Symptoms: No information available

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability: No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential: No further relevant information available.

Mobility in soil: No further relevant information available. •

Additional ecological information: •

General notes: N/A

Results of PBT and vPvB assessment • PBT: Not applicable. • vPvB: Not applicable.

Other adverse effects: No further relevant information available

SECTION 13: DISPOSAL CONSIDERATIONS**Waste treatment methods:**

Recommendation: Must not be disposed together with household garbage. Do not allow product to reach water system. Offer surplus and non-recyclable solutions to a licensed disposal company. Disposal must be made according to official regulations.

SECTION 14: TRANSPORT INFORMATION

DOT: Not regulated

IMDG/IMO: Not regulated

IATA: Not regulated

SECTION 15: REGULATORY INFORMATION

Safety, health, and environmental regulations/legislation specific for the substance or mixture

Section 355 (extremely hazardous substances): None of the ingredients is listed.

Section 313 (Specific toxic chemical listings): None of the ingredients is listed.

TSCA (Toxic Substances Control Act): All ingredients are listed.

Proposition 65 · Chemicals known to cause cancer: None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females: None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males: None of the ingredients is listed.

Chemicals known to cause developmental toxicity: None of the ingredients is listed.

Carcinogenic categories ·

EPA (Environmental Protection Agency) None of the ingredients is listed.

TLV (Threshold Limit Value established by ACGIH) None of the ingredients is listed.

NIOSH-Ca (National Institute for Occupational Safety and Health) None of the ingredients is listed. ·

GHS label elements

Chemical safety assessment: A Chemical Safety Assessment has not been carried out

SECTION 16: OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing SDS: Quality Assurance.

Contact: · Date of preparation / last revision

Creation date for SDS 09/18/2019.

review SDS for accuracy. 11/07/2022·