



# Safety Data Sheet

## Monoethanolamine

---

### 1. PRODUCT AND COMPANY IDENTIFICATION

---

**Product Name:** Ethanolamine Cell Culture Reagent

**Synonyms/Generic Names:** Colamine, Glycinol, Olamine; Ethanolamine; 2-Aminoethanol; 2-Hydroxyethylamine; beta-Ethanolamine; beta-Hydroxyethylamine

**Product Use:** Industrial, Manufacturing or Laboratory use

**Distributor:** The Chemical Supply  
9595 Six Pines Dr., Ste 8210  
The Woodlands, TX 77380

**In Case of Emergency Call:** CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

---

### 2. HAZARDS IDENTIFICATION

---

**OSHA Hazards:** Combustible liquid, Target organ effect, Harmful by ingestion, Harmful by skin absorption, Corrosive

**Target Organs:** Liver, Heart, Lungs

**Signal Words:** Danger

**Pictograms:**



**GHS Classification:**

Flammable liquids	Category 4
Acute toxicity, Oral	Category 4
Acute toxicity, Inhalation	Category 4
Acute toxicity, Dermal	Category 4
Skin corrosion	Category 1B
Serious eye damage	Category 1
Acute aquatic toxicity	Category 3

**GHS Label Elements, including precautionary statements:**

**Hazard Statements:**

H227	Combustible liquid.
H302+H312	Harmful if swallowed or in contact with skin.
H314	Causes severe skin burns and eye damage.
H332	Harmful if inhaled.
H402	Harmful to aquatic life.

**Precautionary Statements:**

P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
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.

**Potential Health Effects**

<b>Eyes</b>	Causes eye burns.
<b>Inhalation</b>	May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
<b>Skin</b>	Harmful if absorbed through skin. Causes skin burns.
<b>Ingestion</b>	Harmful if swallowed.

**NFPA Ratings**

<b>Health</b>	2
<b>Flammability</b>	2
<b>Reactivity</b>	0
<b>Specific hazard</b>	Not Available

**HMIS Ratings**

<b>Health</b>	2
<b>Fire</b>	2
<b>Reactivity</b>	0
<b>Personal</b>	H

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	Weight %	CAS #	EINECS# / ELINCS#	Formula	Molecular Weight
Ethanolamine	>99	141-43-5	205-483-3	C <sub>2</sub> H <sub>7</sub> NO	61.08 g/mol

**4. FIRST-AID MEASURES**

<b>Eyes</b>	Rinse with plenty of water for at least 15 minutes and seek medical attention.
<b>Inhalation</b>	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.
<b>Skin</b>	Flush with plenty of water for at least 15 minutes and wash using soap. Get medical attention.
<b>Ingestion</b>	<b>Do Not Induce Vomiting!</b> Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention.

**5. FIRE-FIGHTING MEASURES**

<b>Suitable (and unsuitable) extinguishing media</b>	Product is flammable. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Use appropriate media for adjacent fire. Cool containers with water.
<b>Special protective equipment and precautions for firefighters</b>	Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.
<b>Specific hazards arising from the chemical</b>	Emits toxic fumes (carbon oxides, nitrogen oxides) under fire conditions. (See also Stability and Reactivity section).

**6. ACCIDENTAL RELEASE MEASURES**

<b>Personal precautions, protective equipment and emergency procedures</b>	See section 8 for recommendations on the use of personal protective equipment.
<b>Environmental precautions</b>	Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.

<b>Methods and materials for containment and cleaning up</b>	Neutralize spill with sodium bicarbonate or lime. Absorb spill with noncombustible absorbent material, then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.
--	---

---

## 7. HANDLING AND STORAGE

---

### Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Keep away from sources of ignition. Ground all equipment containing material. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of aerosols.

### Conditions for safe storage, including any incompatibilities

Store in cool, dry well ventilated area. Sensitive to light. Store in light-resistant containers. Hygroscopic material. Keep away from incompatible materials (see section 10 for incompatibilities).

---

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

---

### Occupational exposure controls:

Component	Exposure Limits	Basis	Entity
Ethanolamine	3 ppm 7.5 mg/m <sup>3</sup>	TLV	ACGIH
	6 ppm 15 mg/m <sup>3</sup>	STEL	ACGIH
	3 ppm 6 mg/m <sup>3</sup>	PEL	OSHA
	3 ppm 8 mg/m <sup>3</sup>	REL	NIOSH
	3 ppm 8 mg/m <sup>3</sup>	STEL	NIOSH

TWA: Time Weighted Average over 8 hours of work.

TLV: Threshold Limit Value over 8 hours of work.

REL: Recommended Exposure Limit

PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes.

IDLH: Immediately Dangerous to Life or Health

WEEL: Workplace Environmental Exposure Levels

CEIL: Ceiling

### Personal Protection

<b>Eyes</b>	Wear chemical safety glasses or goggles.
<b>Inhalation</b>	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.
<b>Skin</b>	Wear nitrile or rubber gloves, apron or lab coat. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
<b>Other</b>	Not Available

### Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	Clear, colorless, viscous liquid.
Odor	Ammoniacal. Fish. Unpleasant.
Odor threshold	Not Available
pH	10 (Basic)
Melting point/freezing point	10.3°C (50.5°F)
Initial boiling point and boiling range	170.8°C (339.4°F) 69-70°C (156-158°F) at 13 hPa (10 mmHg)
Flash point	86°C (187°F)
Evaporation rate	Not Available
Flammability (solid, gas)	Flammable
Upper/lower flammability or explosive limit	Upper: 17 %(V) Lower: 2.5 %(V)
Vapor pressure	0.1 kPa (@ 20°C)
Vapor density	2.1 (Air = 1)
Density	1.018 (Water = 1)
Solubility (ies)	Soluble in cold water, hot water, methanol, acetone.
Partition coefficient: n-octanol/water	Not Available
Auto-ignition temperature	410°C (770°F)
Decomposition temperature	Not Available

## 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable
<b>Possibility of Hazardous Reactions</b>	Will not occur.
<b>Conditions to Avoid</b>	Heat, ignition sources, incompatible materials, light, moisture.
<b>Incompatible Materials</b>	Iron, oxidizing agents, copper.
<b>Hazardous Decomposition Products</b>	Carbon oxides, nitrogen oxides.

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

<b>Skin</b>	LD50 Dermal - rabbit - 1,015 mg/kg
<b>Eyes</b>	Eyes - rabbit - Severe eye irritation
<b>Respiratory</b>	Not Available
<b>Ingestion</b>	LD50 Oral - rat - 1,720 mg/kg

### Carcinogenicity

<b>IARC</b>	No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
<b>ACGIH</b>	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
<b>NTP</b>	No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
<b>OSHA</b>	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

### Signs & Symptoms of Exposure

<b>Skin</b>	Causes moderate skin irritation and possible burns.
<b>Eyes</b>	Causes severe eye irritation and possible eye burns.
<b>Respiratory</b>	Causes respiratory tract irritation, shortness of breath and an asthma-like condition.
<b>Ingestion</b>	Nausea, headache, weakness, dizziness, giddiness, sleepiness, loss of coordination and judgment, gastrointestinal tract irritation.

<b>Chronic Toxicity</b>	May cause damage to the following organs: kidneys, lungs, liver, central nervous system.
<b>Teratogenicity</b>	May cause adverse reproductive effects and birth defects.
<b>Mutagenicity</b>	May affect genetic material.
<b>Embryotoxicity</b>	May cause adverse reproductive effects and birth defects.
<b>Specific Target Organ Toxicity</b>	Not Available
<b>Reproductive Toxicity</b>	Not Available

---

## 12. ECOLOGICAL INFORMATION

---

### Ecotoxicity

<b>Aquatic Vertebrate</b>	LC50 - Pimephales promelas (fathead minnow) - 227 mg/l - 96 h
<b>Aquatic Invertebrate</b>	EC50 - Daphnia magna (Water flea) - 65 mg/l - 48 h
<b>Terrestrial</b>	EC50 - Desmodesmus subspicatus (green algae) - 15 mg/l - 72 h

<b>Persistence and Degradability</b>	Not Available
<b>Bioaccumulative Potential</b>	Not Available
<b>Mobility in Soil</b>	Not Available
<b>PBT and vPvB Assessment</b>	Not Available
<b>Other Adverse Effects</b>	Harmful to aquatic life.

---

## 13. DISPOSAL CONSIDERATIONS

---

<b>Waste Residues</b>	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product or residue.
<b>Product Containers</b>	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

---

## 14. TRANSPORTATION INFORMATION

---

US DOT	UN2491, Ethanolamine, 8, pg III
TDG	UN2491, ETHANOLAMINE, 8, pg III
IMDG	UN2491, ETHANOLAMINE, 8, pg III
Marine Pollutant	No
IATA/ICAO	UN2491, Ethanolamine, 8, pg III

---

## 15. REGULATORY INFORMATION

---

TSCA Inventory Status	All ingredients are listed on the TSCA inventory.
DSCL (EEC)	All ingredients are listed on the DSCL inventory.
California Proposition 65	Not Listed
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	Fire Hazard, Acute Health Hazard, Chronic Health Hazard
SARA 312	Fire Hazard, Acute Health Hazard, Chronic Health Hazard
SARA 313	Not Listed
WHMIS Canada	CLASS B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F). CLASS E: Corrosive liquid.

---

## 16. OTHER INFORMATION

---

Revision	Date
Revision 1	01/28/2014

Disclaimer: The Chemical Supply "TCS" believes that the information herein is factual but is not intended to be all inclusive. The information relates only to the specific material designated and does not relate to its use in combination with other materials or its use as to any particular process. Because safety standards and regulations are subject to change and because TCS has no continuing control over the material, those handling, storing or using the material should satisfy themselves that they have current information regarding the particular way the material is handled, stored or used and that the same is done in accordance with federal, state and local law. TCS MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING (WITHOUT LIMITATION) WARRANTIES WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN OR WITH RESPECT TO FITNESS FOR ANY PARTICULAR USE.