



## Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS 2024)

### SECTION 1: Identification

#### 1.1. Product Identifier

**Trade Name or Designation** Triethanolamine, min. 99%

**Product Number** RSOT0270

**Other Identifying Product Numbers** RSOT0270-4B, RSOT0270-500A, RSOT0270-500B

#### 1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

#### 1.3. Details of the Supplier of the Safety Data Sheet

**Company** Ricca Chemical Company

**Address** 412 West Fork Drive

Arlington, TX 76012 USA

**Telephone** 888-467-4222

#### 1.4. Emergency Telephone Number (24 hours)

CHEMTREC (USA) 800-424-9300

CHEMTREC (International) 1+ 703-527-3887

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## SECTION 2: Hazard(s) Identification

### 2.1. Classification of the Substance or Mixture

This product is not categorized as hazardous in any GHS hazard class.

### 2.2. GHS Label Elements

**Pictograms:** None Required.

**Signal Word:** None Required.

**Hazard Statements:** None Required.

**Precautionary Statements:** None Required.

### 2.3. Hazards not Otherwise Classified

No other hazards identified.

### 2.4. Ingredients of Unknown Acute Toxicity

## SECTION 3: Composition / Information on Ingredients

### 3.1. Components of Substance

| Chemical Name (IUPAC)               | Common Name and Synonyms                                                                   | CAS Number | Weight% |
|-------------------------------------|--------------------------------------------------------------------------------------------|------------|---------|
| 2-[bis(2-hydroxyethyl)amino]ethanol | Triethanolamine; trolamine;<br>2,2',2''-nitrilotriethanol;<br>tris(hydroxyethyl)amine; TEA | 102-71-6   | 100.00  |

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## SECTION 4: First-Aid Measures

### 4.1. Description of Necessary Measures

**Eye Contact:** May cause irritation with burning and stinging with possible damage to the cornea and conjunctiva.

**Ingestion:** Dilute with water or milk. Do not induce vomiting. Call a physician if necessary.

**Inhalation:** Not expected to require first aid. If necessary, remove to fresh air.

**Skin Contact:** May cause irritation, redness, and pain.

### 4.2. Most Important Symptoms and Effects, Acute and Delayed

Corrosive liquid. May cause irritation to the eyes and skin. If ingested, dilute with large quantity of water. Do not induce vomiting. Call a physician. Wash areas of contact with plenty of water for at least 15 minutes. EYE CONTACT: May cause irritation with burning and stinging with possible damage to the cornea and conjunctiva. SKIN CONTACT: May cause irritation, redness, and pain. CHRONIC EFFECTS / CARCINOGENICITY: Repeated ingestion of Triethanolamine has caused liver and kidney damage in animals.

### 4.3. Immediate Medical Attention or Special Treatment Needed

Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops. Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen. Wash areas of contact with soap and water for at least 15 minutes. Call a physician if irritation develops. Dilute with water or milk. Do not induce vomiting. Call a physician if necessary.

## SECTION 5: Fire-Fighting Measures

### 5.1. Extinguishing Media

Carbon dioxide, dry chemical powder, alcohol foam, polymer foam, halons, water spray. Water or ordinary type foam may cause frothing.

### 5.2. Specific Hazards Arising from the Substance or Mixture in a Fire

Above flash point, vapor-air mixtures are explosive.

### 5.3. Special Protective Equipment and Precautions for Firefighters

Wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

## SECTION 6: Accidental Release Measures

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear appropriate PPE for the size and nature of the spill. As a general rule, wear safety glasses and gloves.

### 6.2. Cleanup and Containment Methods and Materials

Do not flush to sewer. Containerize for disposal with a hazardous waste disposal facility. Dispose of in accordance with local regulations.

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### SECTION 7: Handling and Storage

#### 7.1. Precautions for Safe Handling and Storage Conditions

As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage.

### SECTION 8: Exposure Controls / Personal Protection

#### 8.1. Exposure Limits

##### U.S. OSHA - Permissible Exposure Limits (PEL) - Time Weighted Averages (TWA)

No limits found.

##### U.S. OSHA - Permissible Exposure Limits (PEL) - Ceiling Limits

No limits found.

##### U.S. OSHA - Permissible Exposure Limits (PEL) - Short Term Exposure Limits (STEL)

No limits found.

##### U.S. OSHA - Specifically Regulated Chemicals

No limits found.

##### ACGIH - Threshold Limit Values - Ceilings (TLV-C)

No limits found.

##### ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)

No limits found.

##### ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)

| Chemical Name   | CAS Number | Exposure Limit |
|-----------------|------------|----------------|
| Triethanolamine | 102-71-6   | 5 mg/m3 TWA    |

#### 8.2. Engineering Controls

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limit.

#### 8.3. Individual Protective Measures and Personal Protective Equipment

**Respiratory Protection:** Normal room ventilation is adequate. If the exposure limit is exceeded, a full facepiece respirator with organic vapor cartridge may be worn.

**Skin Protection:** Chemical resistant gloves.

**Eye Protection:** Safety glasses or goggles.

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## SECTION 9: Physical and Chemical Properties

### 9.1. Basic Physical and Chemical Properties

|                                                   |                                    |
|---------------------------------------------------|------------------------------------|
| <b>Physical State:</b>                            | liquid                             |
| <b>Color:</b>                                     | Colorless to pale yellow           |
| <b>Odor:</b>                                      | slight, ammonia-like, disagreeable |
| <b>Odor Threshold:</b>                            | Data not available.                |
| <b>Melting/Freezing Point:</b>                    | 21°C                               |
| <b>Boiling Point/Range:</b>                       | 335°C                              |
| <b>Flammability:</b>                              | Data not available.                |
| <b>Flammability/Explosive Limits:</b>             | Data not available.                |
| <b>Flash Point:</b>                               | Not flammable                      |
| <b>Auto-Ignition Temperature:</b>                 | Data not available.                |
| <b>Decomposition Temperature:</b>                 | Data not available.                |
| <b>pH:</b>                                        | 10.5 (0.1 N solution)              |
| <b>Kinematic Viscosity:</b>                       | Data not available.                |
| <b>Solubility:</b>                                | miscible at 25°C                   |
| <b>Vapor Pressure:</b>                            | 0.000000477 hPa at 25°C            |
| <b>Evaporation Rate:</b>                          | Data not available.                |
| <b>Relative Density:</b>                          | 1.12                               |
| <b>Relative Vapor Density:</b>                    | 5.14                               |
| <b>Particle Characteristics:</b>                  | Data not available.                |
| <b>Partition Coefficient n-octanol/water, log</b> | -2.53                              |

## SECTION 10: Stability and Reactivity

### 10.1. Reactivity and Chemical Stability

Stable under normal conditions of use and storage.

### 10.2. Possibility of Hazardous Reactions

Data not available.

### 10.3. Conditions to Avoid and Incompatible Materials

Copper, copper alloys, galvanized iron, acids, and oxidizers.

### 10.4. Hazardous Decomposition Products

Will not occur.

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### SECTION 11: Toxicological Information

#### 11.1. Information on Toxicological Effects

##### Acute Toxicity - Oral Exposure:

Oral acute toxicity estimate (ATE): 4190 mg/kg(calculated)

| Chemical Name   | CAS Number | Toxicity                                   |
|-----------------|------------|--------------------------------------------|
| Triethanolamine | 102-71-6   | Oral LD50 Rat 4190 mg/kg (Source: NLM_CIP) |

##### Acute Toxicity - Dermal Exposure:

Not acutely toxic.

| Chemical Name   | CAS Number | Toxicity                                           |
|-----------------|------------|----------------------------------------------------|
| Triethanolamine | 102-71-6   | Dermal LD50 Rabbit >20000 mg/kg (Source: NLM_HSDB) |

##### Acute Toxicity - Inhalation Exposure:

No information found.

#### 11.2 Carcinogenicity:

##### International Agency for Research on Cancer (IARC)

| Chemical Name   | CAS Number | Classification                                 |
|-----------------|------------|------------------------------------------------|
| Triethanolamine | 102-71-6   | Group 3 (Not Classified) - Monograph 77 [2000] |

##### National Toxicology Program (NTP)

| Chemical Name   | CAS Number | Classification                                                                                                                                                                                                                                                 |
|-----------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Triethanolamine | 102-71-6   | Male Rat - Equivocal Evidence; Female Rat - No Evidence; Male Mice - Inadequate Experiment; Female Mice - Inadequate Experiment (TR-449); Male Rat - Not Tested; Female Rat - Not Tested; Male Mice - Equivocal Evidence; Female Mice - Some Evidence (TR-518) |

##### U.S. OSHA specifically regulated carcinogens

| Chemical Name | CAS Number | Classification |
|---------------|------------|----------------|
|               |            | No data found. |

#### 11.3 Additional Toxicology Information:

Data not available.

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### SECTION 12: Ecological Information

#### 12.1. Ecotoxicity

| Chemical Name   | CAS Number | Species          | Exposure | Toxicity                                                                                                                                                                                                                |
|-----------------|------------|------------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Triethanolamine | 102-71-6   | Freshwater Algae | Acute    | EC50 72 h <i>Desmodesmus subspicatus</i> 216 mg/L (IUCLID); EC50 96 h <i>Desmodesmus subspicatus</i> 169 mg/L (IUCLID)                                                                                                  |
| Triethanolamine | 102-71-6   | Freshwater Fish  | Acute    | LC50 96 h <i>Pimephales promelas</i> 10600 - 13000 mg/L [flow-through] (EPA); LC50 96 h <i>Pimephales promelas</i> >1000 mg/L [static] (IUCLID); LC50 96 h <i>Lepomis macrochirus</i> 450 - 1000 mg/L [static] (IUCLID) |

#### 12.2. Persistence and Degradability

Data not available.

#### 12.3. Bioaccumulative Potential

Data not available.

#### 12.4. Mobility in soil

Data not available.

#### 12.5. Other Adverse Ecological Effects

Data not available.

### SECTION 13: Disposal Considerations

#### 13.1. Waste Treatment Methods

Data not available.

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## SECTION 14: Transportation Information

### 14.1 Transportation by Land - Department of Transportation (DOT, United States of America)

Not regulated according to DOT regulations.

### 14.2 Transportation by Air - International Air Transport Association (IATA)

Not regulated according to IATA Dangerous Goods Regulations.

### 14.3 Transportation of Dangerous Goods (TDG, Canada)

Not regulated according to TDG regulations.

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### SECTION 15: Regulatory Information

#### 15.01. Occupational Safety and Health Administration (OSHA) Hazards

| Chemical Name  | CAS Number | Regulatory Information |
|----------------|------------|------------------------|
| No data found. |            |                        |

#### 15.02. Superfund Amendments and Reauthorization Act (SARA) 302 Extremely Hazardous Substances

| Chemical Name  | CAS Number | RQ |
|----------------|------------|----|
| No data found. |            |    |

#### 15.03. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals

| Chemical Name  | CAS Number | Regulatory Information |
|----------------|------------|------------------------|
| No data found. |            |                        |

#### 15.04. Superfund Amendments and Reauthorization Act (SARA) 313 Toxics Release Inventory (TRI)

| Chemical Name  | CAS Number | List |
|----------------|------------|------|
| No data found. |            |      |

#### 15.05. Massachusetts Right-to-Know Substance List

| Chemical Name   | CAS Number | Regulatory Information |
|-----------------|------------|------------------------|
| Triethanolamine | 102-71-6   | Present                |

#### 15.06. Pennsylvania Right-to-Know Hazardous Substances

| Chemical Name   | CAS Number | Regulatory Information |
|-----------------|------------|------------------------|
| Triethanolamine | 102-71-6   | Present                |

#### 15.07. New Jersey Worker and Community Right-to-Know Components

| Chemical Name   | CAS Number | Regulatory Information |
|-----------------|------------|------------------------|
| Triethanolamine | 102-71-6   | sn 4094                |

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### 15.08. California Proposition 65

| Chemical Name | CAS Number | Regulatory Information |
|---------------|------------|------------------------|
|               |            | No data found.         |

### 15.09. Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)

| Chemical Name   | CAS Number | List | Status  |
|-----------------|------------|------|---------|
| Triethanolamine | 102-71-6   | DSL  | Present |

### 15.10. United States of America Toxic Substances Control Act (TSCA) List

| Chemical Name   | CAS Number | Status           |
|-----------------|------------|------------------|
| Triethanolamine | 102-71-6   | Present (ACTIVE) |

### 15.11. European Inventory of Existing Commercial Chemical Substances (EINECS), European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)

| Chemical Name   | CAS Number | List   | Number    |
|-----------------|------------|--------|-----------|
| Triethanolamine | 102-71-6   | EINECS | 203-049-8 |

### 15.12. China - Inventory of Existing chemical Substances (IECSC)

| Chemical Name   | CAS Number | Status          |
|-----------------|------------|-----------------|
| Triethanolamine | 102-71-6   | Present [29507] |

### 15.13. Korea - Existing Chemicals Inventory (KECI/KECL)

| Chemical Name   | CAS Number | List    | Status             |
|-----------------|------------|---------|--------------------|
| Triethanolamine | 102-71-6   | Annex 1 | Present [KE-25940] |

### 15.14. Japan - Existing and New Chemical Substances Inventory (ENCS)

| Chemical Name   | CAS Number | MITI No.         |
|-----------------|------------|------------------|
| Triethanolamine | 102-71-6   | (2)-308, (2)-353 |

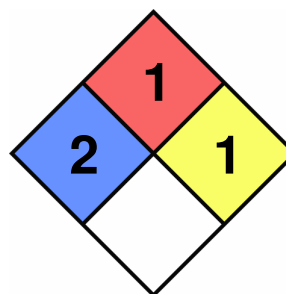
## SECTION 16: Other Information

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## 16.1 National Fire Protection Associate (NFPA) Rating

**Health:** 2  
**Flammability:** 1  
**Reactivity** 1  
**Special Hazard:**



## 16.2 Document Revision

**Last Revision Date:**  
2026-05-04

## DISCLAIMER

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and RICCA CHEMICAL COMPANY assumes no legal responsibility or liability whatsoever resulting from its use.