

**Safety Data Sheet**

according to 29CFR1910/1200 and GHS Rev. 3

**Initial preparation date:** : 12.20.2014**Triethanolamine, ACS****SECTION 1: Identification of the substance/mixture and of the supplier****Product name:** Triethanolamine, ACS**Manufacturer/Supplier Article number:** TR7000**Recommended uses of the product and restrictions on use:** Laboratory Chemicals**Manufacturer Details:**

AquaPhoenix Scientific, Inc.  
860 Gitts Run Road  
Hanover, PA 17331  
1-717-632-1291

**Emergency telephone number:****ChemTel: (24-hour)**

+1(800)255-3924

+1(813)248-0585 (International)

**SECTION 2: Hazards identification****Classification of the substance or mixture:**

Not classified for physical or health hazards under GHS.

**Signal word:** None**Hazard statements:**

None

**Precautionary statements:**

If medical advice is needed have product container or label at hand.

Keep out of reach of children.

Read label before use.

**Other Non-GHS Classification:** None**SECTION 3: Composition/information on ingredients****Ingredients:**

Ingredients:		
CAS 102-71-6	Triethanolamine	>95 %
Percentages are by weight		

**SECTION 4: First aid measures****Description of first aid measures****After inhalation:**

Loosen clothing as necessary and position individual in a comfortable position. Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen.

**After skin contact:**

Wash hands and exposed skin with soap and plenty of water. Seek medical attention immediately.

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Protect unexposed eye. Rinse or flush exposed eye gently using water for 15-20 minutes. Remove contact lenses, if present and easy to do, and continue rinsing. Occasionally lift the upper and lower eyelids while rinsing. Seek medical attention immediately.

**After swallowing:**

Rinse mouth thoroughly. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention immediately.

**Most important symptoms and effects, both acute and delayed:**

Irritation. Nausea. Headache. Shortness of breath.

**Indication of any immediate medical attention and special treatment needed:**

If seeking medical attention, provide SDS document to physician.

**SECTION 5: Firefighting measures****Extinguishing media****Suitable extinguishing agents:**

Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

**Unsuitable extinguishing agents:** None**Special hazards arising from the substance or mixture:**

Carbon oxides. Nitrogen oxides.

**Advice for firefighters:****Protective equipment:**

Wear protective eyewear, gloves, and clothing.

**Additional information (precautions):**

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. Fire Fighting Instructions. Do not inhale gases, fumes, dust, mist, vapor, and aerosols. Avoid contact with skin, eyes and clothing. Use normal procedures. Use protective clothing. Use NIOSH approved breathing equipment.

**SECTION 6: Accidental release measures****Personal precautions, protective equipment and emergency procedures:**

Keep product and empty container away from heat and sources of ignition. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Avoid contact with eyes, skin, and clothing. Ensure adequate ventilation.

**Environmental precautions:**

Should not be released into environment.

**Methods and material for containment and cleaning up:**

Soak up with inert absorbent material. Keep in suitable closed containers for disposal. Collect contaminated soil for characterization per Section 13. If necessary use trained response staff or contractor.

**Reference to other sections:** None**SECTION 7: Handling and storage****Precautions for safe handling:**

Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid splashes or spray in enclosed areas. Wear protective eyewear, gloves, and clothing. Wash hands after handling. Avoid contact with skin and eyes. Do not breathe vapors or spray mist.

**Conditions for safe storage, including any incompatibilities:**

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Store away from acids. Store product and empty container away from heat and sources of ignition. Store away from food. Keep container tightly closed in a cool, dry, and well-ventilated area. Store in inert atmosphere. Store with like hazards. Store away from incompatible materials.

**SECTION 8: Exposure controls/personal protection****Control parameters:**102-71-6, Triethanolamine ACS., ACGIH 5 mg/m<sup>3</sup> TWA.**Appropriate engineering controls:**

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

**Respiratory protection:**

Not required under normal conditions of use. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls.

**Protection of skin:**

Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Wear protective clothing.

**Eye protection:**

Safety glasses with side shields or goggles.

**General hygienic measures:**

Before re-wearing, wash contaminated clothing. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash hands before breaks and at the end of work. Follow Chemical Hygiene Plan. Wash hands and exposed skin with soap and plenty of water. Remove contaminated clothing and shoes.

**SECTION 9: Physical and chemical properties**

<b>Appearance (physical state, color):</b>	Light yellow - clear liquid	<b>Explosion limit lower:</b>	1.3 vol %
<b>Odor:</b>	Ammonia Like	<b>Explosion limit upper:</b>	8.5 vol %
<b>Odor threshold:</b>	Ammonia Like	<b>Vapor pressure at 20°C:</b>	< 0.01 mmHg at 20°C
<b>pH-value:</b>	10.5 15 g/G water	<b>Vapor density:</b>	5.14 (Air = 1.0)
<b>Melting/Freezing point:</b>	21°C	<b>Relative density:</b>	1.124 g/mL at 25°C
<b>Boiling point/Boiling range:</b>	360°C	<b>Solubilities:</b>	Soluble in water: 149 g/l at 20°C
<b>Flash point (closed cup):</b>	190°C	<b>Partition coefficient (n-octanol/water):</b>	Not available
<b>Evaporation rate:</b>	Not available	<b>Auto/Self-ignition temperature:</b>	325°C
<b>Flammability (solid, gaseous):</b>	No information	<b>Decomposition temperature:</b>	Not applicable
<b>Density at 20°C:</b>	No information	<b>Viscosity:</b>	a. Kinematic: Not applicable b. Dynamic: 600 mPa.s at 25°C

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Hygroscopic air sensitive.

**Possible hazardous reactions:**

None under normal processing.

**Conditions to avoid:**

Incompatible materials. Excessive heat. Exposure to air. Exposure to light. Exposure to moisture or water.

**Incompatible materials:**

Acids. Metals. Strong oxidizers.

**Hazardous decomposition products:**

Carbon oxides. Nitrous oxides. Hydrogen cyanide. Formaldehyde.

**SECTION 11: Toxicological information****Acute Toxicity:****Dermal:**

LD50 Dermal - Rabbit - &gt; 22.5 g/kg.

**Chronic Toxicity:** No additional information.**Skin corrosion/irritation:**

Rabbit: mild irritation.

**Serious eye damage/irritation:**

Rabbit: mild irritation.

**Respiratory or skin sensitization:**

May cause sensitization by skin contact.

Irritation: Causes eye irritation

**Carcinogenicity:****Triethanolamine.:** Liver - Irregularities - Based on Human Evidence**Germ cell mutagenicity:**

Other adverse effects:

Tumorigenic effects have been reported in experimental animals.

**Reproductive Toxicity:** No additional information.**STOT-single and repeated exposure:** No additional information.**Additional toxicological information:**

No additional information.

**SECTION 12: Ecological information****Ecotoxicity:**Freshwater Algae, 72 Hr EC50 *Desmodesmus subspicatus*: 216 mg/L; 96 Hr EC50 *Desmodesmus subspicatus*:

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169 mg/L.

Freshwater Fish, 96-Hr LC50 Pimephales promelas: 10600 - 13000 mg/L [flow-through]; 96-Hr LC50 Pimephales promelas: &gt; 1000 mg/L [static]; 96-Hr LC50 Lepomis macrochirus: 450 - 1000 mg/L [static].

**Persistence and degradability:**

Readily biodegradable.

**Bioaccumulative potential:** No additional information.**Mobility in soil:**

Aqueous solution has high mobility in soil: -2.53.

**Other adverse effects:** No additional information.**SECTION 13: Disposal considerations****Waste disposal recommendations:**

Do not allow product to reach sewage system or open water. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Place in container for disposal according to local regulations (see section 13). Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification.

**SECTION 14: Transport information****US DOT****UN Number:**

ADR, ADN, DOT, IMDG, IATA

Not Regulated

**Limited Quantity Exception:**

None

**Bulk:****RQ (if applicable):** None**Proper shipping Name:** Not Regulated.**Hazard Class:** None**Packing Group:** Not Regulated.**Marine Pollutant (if applicable):** No**Comments:** None**Non Bulk:****RQ (if applicable):** None**Proper shipping Name:** Not Regulated.**Hazard Class:** None**Packing Group:** Not Regulated.**Marine Pollutant (if applicable):** No**Comments:** None**SECTION 15: Regulatory information****United States (USA)****SARA Section 311/312 (Specific toxic chemical listings):**

Chronic

**SARA Section 313 (Specific toxic chemical listings):**

None of the ingredients are listed.

**RCRA (hazardous waste code):**

None of the ingredients are listed.

**TSCA (Toxic Substances Control Act) :**

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All ingredients are listed.

**CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):**

None of the ingredients are listed.

**Proposition 65 (California):****Chemicals known to cause cancer:**

None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

**Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

**Canada****Canadian Domestic Substances List (DSL) :**

All ingredients are listed.

**SECTION 16: Other information**

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

**NFPA:** 2-0-0**HMIS:** 2-0-0**GHS Full Text Phrases:** None**Abbreviations and Acronyms:**

IMDG	International Maritime Code for Dangerous Goods.
PNEC.	Predicted No-Effect Concentration (REACH).
CFR	Code of Federal Regulations (USA)
SARA	Superfund Amendments and Reauthorization Act (USA).
RCRA.	Resource Conservation and Recovery Act (USA).
TSCA.	Toxic Substances Control Act (USA).
NPRI	National Pollutant Release Inventory (Canada).
DOT	US Department of Transportation.
IATA	International Air Transport Association.
GHS	Globally Harmonized System of Classification and Labelling of Chemicals.
ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstracts Service (division of the American Chemical Society).

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NFPA National Fire Protection Association (USA).

HMIS Hazardous Materials Identification System (USA).

WHMIS Workplace Hazardous Materials Information System (Canada).

DNEL Derived No-Effect Level (REACH).