

## MATERIAL SAFETY DATA SHEET

This document has been prepared to meet the requirements of the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200; the EC Directive, 91/155/EEC and other regulatory requirements.

### 1. Company and Product Identification

Lonza Rockland, Inc.  
191 Thomaston Street  
Rockland, ME 04841 (U.S.A.)  
Business Telephone: (207) 594-3400  
Emergency Telephone: 703-527-3887 (US: 800-424-9300)

Chemical Name: Aqueous Solution, Tris Acetate EDTA Buffer  
Trade Name: AccuGENE® TAE Buffer Concentrate  
Synonyms: TAE Buffer

### 2. Hazards Identification

**Emergency Overview:** Clear, colorless liquid.

**Potential Health Effects:** This product can be irritating to eyes, skin and respiratory tract. Harmful if swallowed.

### 3. Composition/Information on Ingredients

Ingredient Name	CAS #	% Ingredients	EC Symbol & Risk Phrases
2-Amino-2(hydroxymethyl)-1,3-propanediol	77-86-1	≤2.4	Xi; R36/37/38

### 4. First Aid Measures

**Eyes:** Immediately flush with water for at least 15 minutes, lifting upper and lower eyelids intermittently. If irritation occurs and persists, obtain medical attention.

**Skin:** Remove contaminated clothing, and shoes, and thoroughly wash with soap and water. If irritation occurs and persists, contact a medical doctor.

**Inhalation:** Remove to fresh air. If breathing difficulty or discomfort occurs and persists, contact a medical doctor.

**Ingestion:** Drink plenty of water. Never give anything by mouth to an unconscious person. If discomfort persists, obtain medical attention.

**Note to Medical Doctor :** This product may be irritating to the skin, eyes and mucous membranes. Treatment is removal of exposure followed by symptomatic and supportive care.

### 5. Fire Fighting Measures

**Extinguishing Media:** Carbon dioxide, dry chemical powder, alcohol or polymer foam, or water spray.

**Unusual Fire/Explosion Hazard:** Emits toxic fumes under fire conditions.

**Special Fire Fighting Procedures:** Wear self-contained breathing apparatus and full protective clothing to prevent contact with skin and eyes.

**Hazardous Decomposition Products:** Burning may produce toxic fumes.

### 6. Accidental Release Measures

Absorb on absorbent material and place into closed containers for later disposal. Flush area with water. Material sublimes; therefore, clean up all spills before they dry. For personal precautions see section 8.

### 7. Handling and Storage

Store 18-24°C. Keep tightly closed.

### 8. Exposure Controls/Personal Protection

**Prevention of worker exposure:** Avoid contact. There shall be access to water and eye wash fountain. Careful personal hygiene is a necessity.

**Respiratory:** Use exhaust ventilation or wear NIOSH, EC CEN, or other approved mask in the absence of adequate ventilation.

**Gloves:** Waterproof gloves should be worn.

**Special Clothing and Equipment:** Chemical resistant gloves should be worn. Lab coat or equivalent recommended.

**Eye Protection:** Wear standard laboratory safety glasses or goggles.

**Exposure Limits:** No data available for the formulation.

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## 9. Physical/Chemical Properties

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**Appearance:** Clear or colorless aqueous solution.

**Odor:** None.

**Melting Point:** Not applicable.

**Boiling Point:** About 100° C.

**Flammable Limits in Air:** Not available

**Explosive Properties:** Not applicable.

**Flash Point:** Not measured.

**Autoignition Temperature:** Not applicable.

**Oxidizing Properties:** Not applicable.

**pH:** 7~9.

**Specific Gravity:** 1.020

**% Volatiles:** Not applicable.

**Vapor Density:** Not determined.

**Vapor Pressure:** Not determined.

**Molecular Weight:** Not available.

**Solubility (H<sub>2</sub>O):** Miscible in H<sub>2</sub>O.

**Partition Coefficient:** No data available.

**Evaporation Rate:** As water.

### Comments:

Explosive Properties: Not applicable

Fat Solubility: No data available

Partition Coefficient: No data available

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## 10. Stability and Reactivity

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**Stability:** Stable

**Hazardous Decomposition Products:** Burning may produce toxic fumes, including carbon monoxide, carbon dioxide.

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## 11. Toxicological Information

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**Skin Contact:** No data available for formulation. Acetic acid: irritating RTECS, 1998

**Skin Absorption:** No data available for formulation.

**Inhalation LC:** No data available for formulation.

**Ingestion:** No data available for formulation.

Tris buffer: LD<sub>50</sub> = 5900 mg/kg (rat) RTECS, 1998

**Eye Contact:** No data available for formulation.

**Acute Effects From Overexposure:** No data available for the formulation. This product is expected to be toxic if swallowed and is expected to be irritating to the eyes, skin and respiratory system. Ingestion or inhalation of concentrated acetic acid causes damage to tissues of the respiratory and digestive tracts.

**Chronic Effects From Overexposure:** No data available for the formulation.

**Exotoxicity:** No data available for the formulation.

**Carcinogenicity:** No **IARC:** No **NTP:** No **Other** (OSHA): No ACGIH Appendix A- No

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## 12. Ecological Information

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**Environmental Fate:** No data available.

**Environmental Effect:** No data available.

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## 13. Disposal Considerations

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It is the users responsibility to comply with applicable local, state/provincial, and federal/national environmental regulations.

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## 14. Transportation Information

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**U.S. DOT:** Chemicals, n.o.s. (non-regulated)

**UN MARPOL designation:** Chemicals, n.o.s. (non-regulated)

**Canada (TDG):** Not applicable

**Packaging requirements:** None

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### **15. Regulatory Information**

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**U.S. TSCA Inventory:** All components are listed.  
**U.S. SARA Title III:** No components listed.  
**California Proposition 65:** This product does not contain any chemicals currently on the California list of known carcinogens and reproductive toxins.  
**Canada WHMIS:** D2B  
**EINECS No.:** All components listed.  
**EC Symbols:** Xn (Harmful)  
**EC Risk Phrases:** R36/37/38 Irritating to eyes, respiratory system, and skin.  
**EC Safety Advise Phrases:** S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S 36 Wear suitable protective clothing.

**Caution:** This preparation contains substance(s) not yet fully tested.

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### **16. Other Information**

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**NFPA/HMIS Designation**

Fire: 1  
Health: 2  
Reactivity: 0  
Special Hazard: None

**Degree of Hazard Code**

4 = Extreme  
3 = High  
2 = Moderate  
1 = Slight  
0 = Insignificant

**Prepared by:** Lonza Rockland, Inc.

**Effective:** 1/15/08, Rev. 2

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