

<u>Date of Issue</u>: 10/20/2021 <u>Revision Date</u>: 06/27/2023 Version Number: 2.0

SECTION 1: IDENTIFICATION

1.1 Product Identifier

Product Form: Mixture

Product Name: 50X Tris-Acetate-EDTA (TAE) (2.0 M Tris-Acetate 0.05M EDTA pH 8.3)

Product Codes: MB-020/MB-020-4000

1.2 Intended Use of the Product

For research use only

1.3 Name, Address, and telephone of the Responsible Party

Company:

Rockland Immunochemicals, Inc.

321 Jones Boulevard

Pottstown, PA 19464

(800) 656-7625

1.4 Emergency Telephone Number

<u>Chemtrec</u>: 800-424-9300 CHEMTREC (USA) +1-703- 527-3887 CHEMTREC (International) 24 Hours/day; 7

Days/week

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

GHS-US Classification: Not classified

2.2 Label Elements

GHS-US Labeling:

Hazard Pictogram: None.

Signal Word: None.

Hazard Statements: None.

Precautionary Statements: None.

2.3 Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

2.4 Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance

Not applicable

3.2 Mixture

No components need to be disclosed according to the applicable regulations.

Name	Product Identifier	%	GHS-US Classification
Acetic Acid, Glacial	(CAS-No.) 64-19-7	<=1	Skin Corr. 1A, H314
			Flam. Liq. 3, H226

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures

<u>General</u>: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

After Inhalation: When symptoms occur, go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

<u>After Skin Contact</u>: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

<u>After Eye Contact</u>: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

After Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

General: Not expected to present a significant hazard under anticipated conditions of normal use.

After Inhalation: Prolonged exposure may cause irritation.

After Skin Contact: Prolonged exposure may cause skin irritation.

After Eye Contact: May cause slight irritation to eyes.

After Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: None known.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

<u>Suitable Extinguishing Media</u>: Use extinguishing media appropriate for surrounding fire. Water spray, dry chemical, foam, carbon dioxide (CO₂).

<u>Unsuitable Extinguishing Media</u>: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2 Special Hazards Arising from the Substance or Mixture

Fire Hazard: Not flammable.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3 Advice for Firefighters

<u>Precautionary Measures - Fire</u>: Exercise caution when fighting any chemical fire. Under fire conditions closed containers may rupture or explode.

<u>Firefighting Instructions</u>: Use water spray or fog for cooling exposed containers. Remove containers from fire area if this can be done without risk. Do not breathe fumes from fires or vapors from decomposition.

<u>Protection During Firefighting</u>: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products:

Other Information: Do not allow run-off from firefighting to enter drains or water courses.

5.4 Reference to Other Sections

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

<u>General Measures</u>: Avoid prolonged contact with eyes, skin, and clothing. Avoid breathing (vapor, mist, spray).

6.1.1 For Non-emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2 For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

<u>Emergency Procedures</u>: Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2 Environmental Precautions

No special environmental precautions required.

6.3 Methods and Material for Containment and Cleaning Up

<u>For Containment</u>: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

<u>Methods for Cleaning Up</u>: Clean up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4 Reference to Other Sections

See Heading 8, Exposure Controls and Personal Protection. See Section 13, Disposal Considerations.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Additional Hazards When Processed:

<u>Precautions for Safe Handling</u>: For precautions see section 2.2. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid prolonged contact with eyes, skin and clothing. Avoid breathing vapors, mist, and spray.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2 Conditions for Safe Storage, Including Any Incompatibilities

<u>Technical Measures</u>: Comply with applicable regulations.

<u>Storage Conditions</u>: Keep container closed when not in use. Store in a dry, cool and well-ventilated place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

<u>Incompatible Products</u>: Strong acids, strong bases, strong oxidizers.

7.3 Specific End Use(s)

For research use only.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 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).

Acetic Acid (64-19-7)		
USA ACGIH	TWA	10 ppm
USA ACGIH	STEL	15 ppm
USA OSHA PEL	TWA	25 mg/m³ (10 ppm)
USA NIOSH	NIOSH REL (ceiling) (mg/m³)	25 mg/m ³
USA NIOSH	NIOSH REL (ceiling) (ppm)	10 ppm

8.2 Exposure Controls

<u>Appropriate Engineering Controls</u>: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

<u>Personal Protective Equipment</u>: The use of personal protective equipment may be necessary as conditions warrant. Gloves. Protective clothing. Protective goggles.









Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear protective gloves.

Eye and Face Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

<u>Respiratory Protection</u>: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where

exposure levels are not known wear approved respiratory protection.

Environmental Exposure Controls: No special environmental precautions required.

Other Information: When using, do not eat, drink, or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties

Physical State: Liquid

Appearance: No data available

Odor: No data available

Odor Threshold: No data available

pH: 8.3

Evaporation Rate: No data available Melting Point: No data available Freezing Point: No data available Boiling Point: No data available Flash Point: No data available

<u>Auto-ignition Temperature</u>: No data available <u>Decomposition Temperature</u>: No data available Flammability (solid, gas): No data available

<u>Lower Flammable Limit</u>: Upper Flammable Limit:

Vapor Pressure: No data available

Relative Vapor Density at 20°C: No data available

Relative Density: No data available

Specific Gravity:

Solubility: No data available

Partition Coefficient: N-Octanol/Water: No data available

Viscosity: No data available

9.2 Other Information

No additional information available.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Hazardous reactions will not occur under normal conditions.

10.2 Chemical Stability

Stable under recommended handling and storage conditions (see section 7).

10.3 Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

10.4 Conditions to Avoid

Direct sunlight, extremely high or low temperatures, and incompatible materials.

10.5 Incompatible Materials

Strong acids, strong bases, strong oxidizers. Water reactive materials.

10.6 Hazardous Decomposition Products

Thermal decomposition generates: Carbon oxides (CO, CO₂). Organic compounds. Sodium oxides. Potassium oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects

<u>Acute Toxicity (Oral)</u>: Not Classified <u>Acute Toxicity (Dermal)</u>: Not Classified <u>Acute Toxicity (Inhalation)</u>: Not Classified

Acetic Acid, Glacial (64-19-7)	
LD50 Oral Rat	3,310 mg/kg
LC50 Inhalation Mouse	2,819 mg/l

1,3-Propanediol, 2-amino-2-(hydroxymethyl) (77-86-1)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rabbit	> 5000 mg/kg

LD50 and LC50 Data: Not available
Skin Corrosion/Irritation: Not classified
Serious Eye Damage/Irritation: Not classified
Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

<u>IARC</u>: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

<u>ACGIH</u>: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

 $\overline{\text{NTP}}$: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

<u>OSHA</u>: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive Toxicity: Not classified

<u>Specific Target Organ Toxicity (Single Exposure)</u>: Not classified <u>Specific Target Organ Toxicity (Repeated Exposure)</u>: Not classified

Aspiration Hazard: Not classified

<u>Symptoms/Injuries After Inhalation</u>: Prolonged exposure may cause irritation.

Symptoms/Injuries After Skin Contact: Prolonged exposure may cause skin irritation.

Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Ecology - General: Not Classified.

Acetic Acid, Glacial (64-19-7	
LC50 Fish 1	>1,000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
ErC50 (algae)	>1,000 mg/l (Exposure time: 72 h)
EC50 Daphnia	>1,000 mg/l (Exposure time: 48 h)
EC5 (bacteria)	2,850 mg/l (Exposure time: 16 h – Species: Pseudomonas putida)

12.2 Persistence and Degradability

50X Tris-Acetate-EDTA (TAE) (2.0 M Tris-Acetate 0.05M EDTA pH 8.3)	
Persistence and Degradability	Not established.

12.3 Bioaccumulative Potential

50X Tris-Acetate-EDTA (TAE) (2.0 M Tris-Acetate 0.05M EDTA pH 8.3)	
Bioaccumulative Potential	Not established.

12.4 Mobility in Soil

No additional information available.

12.5 Other Adverse Effects

Other information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

<u>Waste Disposal Recommendations</u>: Dispose of contents/container in accordance with local, regional, national, and international regulations.

<u>Additional Information</u>: Container may remain hazardous when empty. Continue to observe all precautions. Ecology – Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1 In Accordance with DOT

Not regulated for transport.

14.2 In Accordance with IMDG

Not regulated for transport.

14.3 In Accordance with IATA

Not regulated for transport.

14.4 In Accordance with TDG

Not regulated for transport.

SECTION 15: REGULATORY INFORMATION

15.1 US Federal Regulations

Water (7732-18-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

1,3-Propanediol, 2-amino-2-(hydroxymethyl) (77-86-1)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2 US State Regulations

Acetic Acid, Glacial (64-19-7)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. Rhode Island Right To Know List

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest Revision: 06/27/2023

Other Information: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Skin Corr. 1A	Skin Corrosion Category 1A
Flam. Liq. 3	Flammable liquid Category 3
H314	Causes severe skin burns and eye damage
H226	Flammable liquid and vapor

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

NA GHS SDS 2015 (Can, US, Mex)