Material Safety Data Sheet
Date Printed: 08/31/2000
Date Updated: 10/31/1999
Version 1.0

Section 1 - Product and Company Information

<table>
<thead>
<tr>
<th>Product Name</th>
<th>TRIS-ACETATE-EDTA BUFFER, 10X CONCENTRATE MOLECULAR BIOLOGY REAGENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Number</td>
<td>T9650</td>
</tr>
<tr>
<td>Brand</td>
<td>Sigma Chemical</td>
</tr>
<tr>
<td>Company</td>
<td>Sigma-Aldrich</td>
</tr>
<tr>
<td>Street Address</td>
<td>3050 Spruce Street</td>
</tr>
<tr>
<td>City, State, Zip, Country</td>
<td>St. Louis, MO, 63103, US</td>
</tr>
<tr>
<td>Technical Phone</td>
<td>314 771 5765</td>
</tr>
<tr>
<td>Fax:</td>
<td>800 325 5052</td>
</tr>
<tr>
<td>Emergency Phone:</td>
<td>414 273 3850 Ext.5996</td>
</tr>
</tbody>
</table>

Section 2 - Composition/Information on Ingredient

<table>
<thead>
<tr>
<th>Substance Name</th>
<th>TRIS ACETATE-EDTA BUFFER CONCENTRATE</th>
<th>CAS #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formula</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Synonyms</td>
<td></td>
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</tr>
</tbody>
</table>

Section 3 - Hazards Identification

Emergency Overview
Harmful.
Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system, and skin.
Target organ(s): Liver. Kidneys.

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

Oral Exposure
If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Inhalation Exposure
If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

Dermal Exposure
In case of contact, immediately wash skin with soap and copious amounts of water.

Eye Exposure
In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

Section 5 - Fire Fighting Measures

Extinguishing Media
Suitable
Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.
Firefighting
Protective Equipment
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Specific Hazard(s)
Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

Procedure(s) of Personal Precaution(s)
Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

Methods for Cleaning Up
Cover with dry lime or soda ash, pick up, keep in a closed container, and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

Section 8 - Exposure Controls / PPE

Engineering Controls
Safety shower and eye bath. Mechanical exhaust required.

Personal Protective Equipment
Respiratory
NIOSH/MSHA-approved respirator.
Hand
Compatible chemical-resistant gloves.
Eye
Chemical safety goggles.

General Hygiene Measures
Wash contaminated clothing before reuse.

Section 9 - Physical/Chemical Properties

Appearance
Physical State
Liquid

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>pH</td>
<td></td>
</tr>
<tr>
<td>BP/VP Range</td>
<td></td>
</tr>
<tr>
<td>MP/MP Range</td>
<td></td>
</tr>
<tr>
<td>Freezing Point</td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
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</tr>
<tr>
<td>Saturated Vapor Conc.</td>
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</tr>
<tr>
<td>SG/Density</td>
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</tr>
<tr>
<td>Bulk Density</td>
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</tr>
<tr>
<td>Odor Threshold</td>
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</tr>
<tr>
<td>Volatile%</td>
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</tr>
<tr>
<td>VOC Content</td>
<td></td>
</tr>
<tr>
<td>Water Content</td>
<td></td>
</tr>
<tr>
<td>Solvent Content</td>
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</tr>
<tr>
<td>Evaporation Rate</td>
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</tr>
<tr>
<td>Viscosity</td>
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</tr>
<tr>
<td>Partition Coefficient</td>
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</tr>
<tr>
<td>Decomposition Temp.</td>
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</tr>
<tr>
<td>Flash Point °F</td>
<td></td>
</tr>
<tr>
<td>Flash Point °C</td>
<td></td>
</tr>
</tbody>
</table>
Section 10 - Stability and Reactivity

Stability
Stable.

Materials to Avoid
Acids, Bases, Oxidizing agents, Soluble carbonates and phosphates, Hydroxides, Oxides, Sulfur, Acid anhydrides, Peroxides, Permanganates, Amines, Alcohols.

Hazardous Decomposition Products
Hazardous Decomposition Products
Carbon monoxide, Carbon dioxide.

Hazardous Polymerization
Hazardous Polymerization
Will not occur.

Section 11 - Toxicological Information

Route of Exposure
Skin Contact
Causes skin irritation.

Multiple Routes
Harmful if swallowed, inhaled, or absorbed through skin. Vapor or mist is irritating to the eyes, mucous membranes, and upper respiratory tract.

Target Organ(s) or System(s)

RTECS Number:

Section 12 - Ecological Information

Section 13 - Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation
Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

Section 15 - Regulatory Information

US Classification and Label Text
Indication of Danger
Harmful.

Risk Statements
Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system, and skin.

Safety Statements
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

US Statements
Target organ(s): Liver. Kidneys.
Section 16 - Other Information

Warranty