I. IDENTIFICATION:

Product name: 1 M DTT
Product Catalog Number: Component of kit #9002 and #9003
CAS number: None
Manufacturer Supplier: Cell Signaling Technology®
3 Trask Lane
Danvers, MA 01923 USA
1-978-867-2300 TEL
1-978-867-2400 FAX
1-978-578-6737 Emergency Phone

II. COMPOSITION/INFORMATION ON INGREDIENTS:

According to 29 CFR 1910.1200(d), hazardous ingredients at less than <1% and carcinogens at less than < 0.1% therefore considered non-hazardous. Any hazardous or carcinogenic ingredients meeting these criteria are listed below.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS#</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dithiothreitol</td>
<td>3483-12-3</td>
<td>15.4%</td>
</tr>
</tbody>
</table>

III. HAZARD IDENTIFICATION:

Irritant. Irritating to eyes, respiratory system, skin.
Target organs: Central nervous system.
HMIS Rating: Health: 2  Flammability: 0  Reactivity: 0
NFPA Rating: Health: 2  Flammability: 0  Reactivity: 0

IV. FIRST AID MEASURES:

Inhalation: Remove to fresh air. If breathing is difficult, get medical attention.
Ingestion: If person is conscious, wash out mouth with water. Get medical attention.
Skin Exposure: Wash skin with soap and water. If irritation develops or persists, get medical attention.
Eye Exposure: Immediately flush eyes with water for at least 15 minutes. Get medical attention.

V. FIRE FIGHTING MEASURES:

Flash Point: Not applicable.
Autoignition Temperature: Not applicable.
Explosion: Not applicable.
Fire Extinguishing Media: Water spray, dry chemical, alcohol foam, or carbon dioxide.
Firefighting: Wear protective clothing and self-contained breathing apparatus to prevent contact with skin and eyes.

VI. ACCIDENTAL RELEASE MEASURES:

Wear appropriate personal protective equipment as indicated in Section VIII. Absorb liquid with an absorbent material. Transfer contaminated absorbent to a closed chemical waste container for disposal. Wash spill site after material has been picked up for disposal.

VII. HANDLING AND STORAGE:

Store at -20°C in tightly closed container.
Do not breathe vapor. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION:

Ventilation System: A system of local (fume hood) and general exhaust is recommended.
Skin Protection: Wear compatible chemical resistant gloves and protective clothing.
Eye protection: Wear chemical safety goggles. Maintain emergency eyewash and shower in work area.

IX. EXPOSURE CONTROLS/PERSONAL PROTECTION:

Appearance: Liquid
Odor: Unpleasant odor
pH: Data not available
Boiling Point: Data not available
Melting Point: Data not available
Freezing Point: Data not available
Volatile Organic Compounds (VOC): Data not available
Autoignition temp.: Data not available
Solubility: Soluble in water

X. STABILITY AND REACTIVITY:

Stability: Stable
Conditions to avoid: Bases, oxidizing agents, reducing agents, alkali metals.
Hazardous Decomposition: Carbon monoxide, carbon dioxide, sulfur oxides, hydrogen sulfide gas.
Hazardous polymerization: Will not occur.

XI. TOXICOLOGICAL INFORMATION:

Skin Exposure: Causes skin irritation. May be harmful if absorbed through skin.
Eye Exposure: Causes eye irritation.
Inhalation: May be harmful if inhaled. Material may be irritating to mucous membrane and upper respiratory tract.
Ingestion: May be harmful if swallowed.

Signs and Symptoms of Exposure: Exposure can cause CNS depression.

XII. ECOLOGICAL INFORMATION:

Data not available.

XIII. DISPOSAL CONSIDERATIONS:

Dispose of in accordance with federal, state and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

XIV. TRANSPORT INFORMATION:

D.O.T.

Proper Shipping Name: None.
This substance is considered non-hazardous for transport.

IATA

Proper Shipping Name: None.
This substance is considered non-hazardous for air transport.

XV. REGULATORY INFORMATION:

EU Regulations/Classifications: Harmful. Harmful if swallowed. Irritating to eyes, respiratory system, skin.
US Regulations/Classifications: Toxic. Harmful if swallowed. Irritating to eyes, respiratory system, skin. In case of contact with eyes, wash thoroughly and seek medical attention.

SARA Listed: No.
Canada (WHIMIS): DSL: No. NDSL: No.

XVI. OTHER INFORMATION:

This product is not intended for use in humans. To the best of our knowledge, this document is accurate. It is intended to serve as a guide for safe use of this product in a laboratory setting by experienced personnel. The burden of safe use of this material rests entirely with the user. The above information is believed to be accurate but is not necessarily all-inclusive and shall be used only as a guide. Cell Signaling Technology, Inc., shall not be held liable for any damage resulting from the handling of or from contact with the above product.