Material Safety Data Sheet (MSDS) for
Protein Kinase/ Phosphatase

rev. 08/09/07

I. Identification:
Product name: Protein Kinase/ Phosphatase
Product Catalog Number: Includes products within the following range of catalog numbers: 7000-7999.
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:
This product is composed of enzymes in the form of GST fusion proteins in SDS sample buffer.
According to 29 CFR 90.200(d), hazardous ingredients at less than <1% and carcinogens at less than < 0.1% are considered non-hazardous. This product may contain the following hazardous ingredients:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS#</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerol</td>
<td>56-81-5</td>
<td>≤50%</td>
</tr>
<tr>
<td>Sodium dodecyl sulfate</td>
<td>151-21-3</td>
<td>≥2%</td>
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</tbody>
</table>

III. Hazard Identification:
Emergency Overview:
Caution: May be harmful if swallowed. May be irritating to eyes, respiratory system, and skin. Avoid contact and inhalation.
Target Organ: Kidneys.

IV. First Aid Measures:
Inhalation: If inhaled, remove to fresh air. If breathing is difficult, get medical attention.
Ingestion: If swallowed, rinse mouth with water provided person is conscious. Get medical attention.
Skin Exposure: In case of contact, wash skin with soap and water.
Eye Exposure: In case of contact with eyes, immediately flush eyes with water for at least 15 minutes. Get medical attention.

V. Fire Fighting Measures:
Flash Point: Data not available.
Autoignition Temperature: Data not available.
Fire extinguishing media: Water spray, dry chemical, foam, or carbon dioxide.
Firefighting: Wear protective clothing and self-contained breathing apparatus to prevent contact with skin and eyes.

VI. Accidental Release Measures:
Absorb liquid with an absorbent material. Transfer contaminated absorbent to a chemical waste container for disposal.

VII. Handling And Storage:
Avoid inhalation, ingestion and contact with eyes and skin. Avoid prolonged or repeated exposure. Store at ~80°C in tightly closed container.

VIII. Exposure Controls/Personal Engineering Controls: Maintain adequate ventilation, eye wash and quick-drench facilities in work area.
Personal Protective Equipment: Lab coat, chemical resistant gloves and chemical safety glasses.
Occupational Exposure Limits: Data not available.

IX. Exposure Controls/Personal Protection:
Physical State: Red or blue liquid.
Boiling Point: Data not available.
Melting Point: Data not available.
Volatile Organic Compounds (VOC): Data not available.
Solubility in Water: Readily miscible in water.

X. Stability and Reactivity:
Stability: Stable under recommended conditions.
Hazardous Decomposition: May form carbon dioxide and carbon monoxide.
Conditions to avoid: Strong oxidizing agents.

XI. Toxicological Information:
To the best of our knowledge, the chemical, physical, and toxicological properties of this solution have not been thoroughly investigated.
May be irritating to eyes, skin, and respiratory system.
May be toxic if absorbed through skin or ingested.
May cause eye irritation.
Target Organs: Kidneys.
Prolonged exposure may cause nausea, headache, and vomiting.

XII. Ecological Information:
Data not available.

XIII. Disposal Considerations:
Dispose of in accordance with federal, state and local environmental regulations.

XIV. Transport Information:
D.O.T: This substance is considered non-hazardous for transport.
IATA: This substance is considered non-hazardous for air transport.

XV. Regulatory Information:
EU Regulations/Classifications/Labeling Information: Not available for this product.
US Regulatory Information:
SARA listed components: None.
TSCA components: None.
DSL components: None.
Canada (WHMIS): DSL No, NDSL No.

XVI. Other Information:
This product is not intended for use in humans. It is sold only for research use by personnel familiar with chemicals and who are well trained in good laboratory habits, such as avoiding spills, keeping hands clean at all times and not rubbing eyes with hands while working in the laboratory. No other use is intended, and any other use may involve substantive hazards.
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide for experienced personnel. Cell Signaling Technology, Inc., shall not be held liable for any damage resulting from the handling of or from contact with the above product. The burden of safe use of this material rests entirely with the user.