MATERIAL SAFETY DATA SHEET

1 IDENTIFICATION OF MATERIAL AND SUPPLIER

Trade Name: Cell Lysis Buffer
Catalog Number: CLB001
Supplier: Symansis NZ Ltd
26 Kennels Road
Timaru New Zealand
www.symansis.com
Technical assistance: info@symansis.com
Emergency phone number: Please contact your local Poison Control Centre
Australia – 131126
New Zealand – (0)34747000
United States – 1800 222 1222
Revision date: Feb 2011
Revision number: 1

2 HAZARDS IDENTIFICATION

Emergency overview
Harmful by ingestion. Irritant.
Routes of entry
Dermal contact. Eye contact. Ingestion.
Health hazards (acute and chronic)
Material may be harmful by ingestion, or skin absorption.
May be irritating to the mucous membranes and upper respiratory tract.
May cause eye, skin, or respiratory system irritation.
The toxicological properties of this product have not been evaluated.
No data available.

3 COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Reagent</th>
<th>%W/V</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 mM Tris, pH 7.4</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>150 mM NaCl</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>1 mM EDTA</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>1 mM EGTA</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>2 μg/ml Leupeptin</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>10 μM Pepstatin</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>3 μg/ml Aprotinin</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>1 mM Sodium Orthovanadate (Na₃VO₄)</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>2 mM Sodium Pyrophosphate (Na₄P₂O₇)</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>5mM Sodium fluoride (NaF)</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>0.5% (v/v) Triton X100</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>6M Urea</td>
<td>36.04%</td>
</tr>
</tbody>
</table>

4 FIRST AID MEASURES

Eye contact: Check for and remove contact lenses. Flush eyes with water for at least 15 minutes.
Get medical attention.

Skin contact: Wash skin thoroughly with soap and water. Remove and wash contaminated clothing. Should irritation occur get medical attention.

www.symansis.com
Inhalation: If inhaled remove to fresh air. If breathing is affected seek medical attention.
Ingestion: DO NOT INDUCE VOMITING. Flush out mouth and seek medical attention if symptoms appear.
Puncture wounds: Allow to bleed freely. Wash thoroughly with soap and water. Get medical attention.

5 FIRE FIGHTING MEASURES
Suitable extinguishing media: CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Hazards from combustion products: Not relevant.
Special protective precautions and equipment for fire fighters: Not relevant.

6 ACCIDENTAL RELEASE MEASURES
Emergency procedures: Not relevant.
Methods and materials for containment and clean up: Absorb, sweep or vacuum up spill, avoid raising dust. Place in closed container for disposal. Minimize contact with spill. Wear chemical-resistant gloves, safety glasses, lab coat, dust mask. Wash spill site area with water after clean-up.

7 HANDLING AND STORAGE
Precautions for safe handling: Avoid inhalation, and contact with eyes, skin, and clothing. Avoid repeated or prolonged exposure. Wear protective clothing.
Conditions for safe storage: Store in original container, keep container sealed until ready for use. Containers that have been opened should be carefully resealed. Do not reuse container.
Do not store with: No restriction.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION
National exposure standards: Not available.
Biological limit values: Not available.
Engineering controls: Provide adequate local exhaust ventilation.
Personal protective equipment: Wear chemical-resistant gloves, safety glasses, lab coat.

9 PHYSICAL AND CHEMICAL PROPERTIES
Physical state: white/yellowish crystals and colourless liquid.
Odor: Undetermined.
Melting point/Melting range: Undetermined.
Boiling point/Boiling range: Undetermined.
Flash point: Not applicable.
Flammability (solid, gaseous): Undetermined.
Danger of explosion: Product does not present an explosion hazard.
Density: Not determined.

10 STABILITY AND REACTIVITY
Chemical stability: Stable under ordinary conditions.
Thermal decomposition /conditions to be avoided: No decomposition if used according to specifications.
Dangerous reaction: No dangerous reactions known.
Dangerous decomposition products: No dangerous decomposition products known.

11 TOXICOLOGICAL INFORMATION
Health effects from the likely routes of exposure (eye, skin, inhalation, ingestion):
Acute toxicity: No known significant effects or critical hazards.
LD/LC₅₀ values relevant: Unknown.
Primary irritant effect: Unknown.
Sensitization: Unknown.
Potential Health Effects:
Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.
Skin: May be harmful if absorbed through skin. Causes skin irritation.
Eyes: Causes eye irritation.
Ingestion: Harmful if swallowed.

12 ECOLOGICAL INFORMATION
Ecotoxicity: Not available.
Persistence and degradability: Not available.

13 DISPOSAL CONSIDERATIONS
Disposal methods and containers: Dispose of small quantities in waste water. Disposal should be in accordance with Federal, Provincial /State and Local Laws and regulations. Special precautions for landfill or incineration: Not regarded as hazardous waste.

14 TRANSPORT INFORMATION
UN Number: Not available.
UN Proper Shipping Name: Not available.
Class and subsidiary risk: Not available.
Packing Group: Not available.
Special precautions for user: Not required.
Hazchem Code: Not available.

15 REGULATORY INFORMATION
Australia: This product is not classified under relevant Australian health, safety and environmental legislation.
Europe: This product is not classified according to EU regulations. Classification has been performed according to EU directives 1999/45/EC and 67/548/EEC.
Risk and safety phrases: S24/25 – avoid contact with skin and eyes.
S37/39 – wear suitable gloves and eye/face protection.
US Federal Regulations:
TSCA: No products were found.
SARA: 302/304/311/312 extremely hazardous substances: No products were found.
SARA: 302/304 emergency planning and notification. No products were found.
SARA: 302/304 hazardous chemicals: No products were found.
SARA: 311/312: Ingredient Triton X100, CAS#9002-93-1: Acute Health Hazard
Canada: WHMIS Not controlled under WHMIS: No products were found.

16 OTHER INFORMATION
Disclaimer: The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of its publication. Symansis makes no guarantee or representation, either expressed or implied, as to the accuracy or completeness of such information. The information given is designed as a guidance for safe handling, use, processing, storage, transportation, disposal or release only.