PBS: 1 L of 20X: sc-362183

MATERIAL SAFETY DATA SHEET

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION
Product Name: PBS: 1 L of 20X
Product Number: sc-362183
Supplier: Santa Cruz Biotechnology, Inc.
2145 Delaware Avenue
Santa Cruz, CA 95060
800.457.3801 or 831.457.3800
Emergency: ChemWatch
Within the US & Canada: 877-715-9305
Outside the US & Canada: +800 2436 2255 (1–800-CHEMCALL) or call +613 9573 3112

SECTION 2 – HAZARDS IDENTIFICATION
Hazard Classification: Not classified as hazardous according to criteria for Classifying Hazardous Substances [NOS:695:1008].
Hazardous and/or Dangerous Nature: NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.
Risk Phrases: None allocated.
Safety Phrases: S24/25: Avoid contact with skin and eyes.
Refer to Section 15 for Poisons Schedule.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS-No.</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Chloride</td>
<td>7647–14–5</td>
<td>~16%</td>
</tr>
<tr>
<td>Potassium Phosphate (monobasic)</td>
<td>7778–77–0</td>
<td>~0.4%</td>
</tr>
<tr>
<td>Sodium Phosphate, Dibasic</td>
<td>7558–79–4</td>
<td>~4%</td>
</tr>
<tr>
<td>Potassium Chloride</td>
<td>7447–40–7</td>
<td>~0.4%</td>
</tr>
<tr>
<td>Water</td>
<td>7732–18–5</td>
<td>~70%</td>
</tr>
</tbody>
</table>

SECTION 4 – FIRST AID MEASURES
Ingestion: If swallowed, DO NOT induce vomiting. If victim is conscious give water. If sickness persists transport to hospital or doctor.
Inhalation: Move victim to fresh air. Apply resuscitation if victim is not breathing – If trained personnel available administer oxygen if breathing is difficult.
Eye Contact: If material is splashed into eyes, immediately flush with plenty of water for 15 minutes, ensuring eye lids are held open. If irritation persists transport to hospital or doctor.
Skin Contact: If material is splashed onto the skin, remove any contaminated clothing and wash skin thoroughly with water and soap if available. If irritation persists transport to hospital or doctor.
First Aid Facilities: Eyebath/eyewash, Safety shower & general washroom facilities.
Medical Attention & Special Treatment: Treat symptomatically.
Additional Information: Not available.

SECTION 5 – FIRE FIGHTING MEASURES
Suitable Extinguishing Media: Use extinguishing media suitable for surrounding fire situation. This material is not a flammable or combustible liquid.
Hazards from Combustion Products: Decomposes on heating emitting oxides of carbon.
Precautions for Fire Fighters: Fire fighters to wear Self-contained breathing apparatus (SCBA) in confined spaces, in oxygen deficient atmospheres or if exposed to products of decomposition. Full protective clothing is also recommended. If safe to do so, move undamaged containers from fire area.

Hazchem Code: Not available.

SECTION 6 – ACCIDENTAL RELEASE MEASURES
Emergency Procedures: Material may be slippery when split. Walk cautiously. Ventilate area. Wear protective equipment to prevent skin and eye contact, as outlined under personal protection in this MSDS.
Containment & Clean up: Bund area using sand or soil – to prevent run off into drains and waterways. Use absorbent (soil, sand, vermiculite or other inert material). Collect and seal in properly labelled containers for disposal. Remainder of material can be washed to drain with plenty of water.

SECTION 7 – HANDLING & STORAGE
Precautions for Safe Handling: Wear appropriate protective equipment while handling. Refer to Section 8.
Precautions for Safe Storage: Store in a cool place and out of direct sunlight. Store away from sources of heat or ignition. Store away from oxidizing agents. Keep containers closed, when not using the product. Store in original packages as approved by manufacturer. Store at room temperature.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION
National Exposure Standards: No exposure standard allocated.
Biological Limit Values: No biological limit allocated.
Engineering Controls: Maintain adequate ventilation at all times. In most circumstances natural ventilation systems are adequate unless the material is heated, reacted or otherwise changed in some type of chemical reaction, then the use of a local exhaust ventilation system is recommended.
Personal Protective Equipment:
CLOTHING: PVC or natural rubber apron or splash suit.
GLOVES: PVC or natural rubber.
EYES: Chemical goggles or faceshield to protect eyes.
RESPIRATORY PROTECTION: Avoid breathing of vapors/gases. Select and use respirators in accordance with AS/NZS 1715/1716. The use of a P1 dust mask (disposable) or with replaceable filters is recommended. Filter capacity and respirator type depends on exposure levels and type of contaminant. If entering spaces where the airborne concentration of a contaminant is unknown then the use of a Self-contained breathing apparatus (SCBA) with positive pressure air supply complying with AS/NZS 1715 / 1716, or any other acceptable International Standard is recommended.

SECTION 9 – PHYSICAL & CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not available</td>
</tr>
<tr>
<td>Freezing/melting point</td>
<td>-20° C</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not available</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in all proportions</td>
</tr>
<tr>
<td>Liquid</td>
<td>Not available</td>
</tr>
<tr>
<td>Odor</td>
<td>23 hPa @ 20° C</td>
</tr>
<tr>
<td>Vapor pressure (mm of Hg at °C)</td>
<td>~100° C</td>
</tr>
<tr>
<td>Boiling point/range (°C)</td>
<td>~ 1.0</td>
</tr>
<tr>
<td>Specific gravity or density</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammable (explosive)</td>
<td>Not available</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>Not available</td>
</tr>
</tbody>
</table>

SECTION 10 – STABILITY AND REACTIVITY
Chemical stability: Stable under normal conditions of use.
Conditions to avoid: Heat, flames, ignition sources and incompatible materials.
Incompatible Materials: Strong alkalis, acids, oxidizing agents.
Hazardous Decomposition Products: Emits smoke and fumes when heated to decomposition.
Hazardous Reactions: Will not occur.

SECTION 11 – TOXICOLOGICAL INFORMATION
Exposure and Health Effects: None known.
Ingestion: If swallowed, DO NOT Induce vomiting. If victim is conscious give water. If sickness persists transport to hospital or doctor.
Inhalation: Move victim to fresh air. Apply resuscitation if victim is not breathing — If trained personnel available administer oxygen if breathing is difficult.
Eye Contact: If material is splashed into eyes, immediately, flush with plenty of water for 15 minutes, ensuring eye lids are held open. If irritation persists transport to hospital or doctor.
Skin Contact: If material is splashed onto the skin, remove any contaminated clothing and wash skin thoroughly with water and soap if available. If irritation persists transport to hospital or doctor.
Human/Animal data: Not available.
Carcinogenic Category: No data available to classify Carcinogenic Category.
Other Carcinogenic Information: Not available.

SECTION 12 – ECOLOGICAL INFORMATION
Ecotoxicity: Not available.
Persistence and degradability: Not available.
Mobility: Not available.
Additional Information: Not available.

SECTION 13 – DISPOSAL CONSIDERATIONS
Disposal Methods: Refer to appropriate authority in your State. Dispose of material through a licensed waste contractor. Advise flammable nature. Normally suitable for disposal by approved waste disposal agent.
Special Precautions/Additional Informational: Not available.

SECTION 14 – TRANSPORT INFORMATION
UN Number: Not regulated
UN Proper Shipping Name: Not regulated
Class and Subsidiary risk: Not regulated
Packing Group: Not regulated
Special Precautions for User: Not regulated
Hazchem Code: Not regulated

SECTION 15 – REGULATORY INFORMATION
Poison Schedule Number: None Allocated

SECTION 16 – OTHER INFORMATION
The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.

12/6/2011