**** MATERIAL SAFETY DATA SHEET ****

MSDS Name: Mouse PD1/PDCD1 Protein

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: Mouse PD1/PDCD1 Protein
Catalog Numbers: PD1-M5228
Synonyms:
Company Identification: ACROBIOSYSTEMS INC
For information, call: +1 800-810-0816

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

The product contains no substances which at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW

Eye: Potassium chloride can cause eye irritation, including redness, tearing, and possible abrasions.
Skin: Sodium Phosphate is a corrosive material and can cause burns.
   Sensitization possible through skin contact and inhalation.
Ingestion: Material can be irritating to mucous membranes and respiratory tract.
Inhalation: Inhalation of high concentrations of dust may cause nasal or lung irritation.
   Ingestion of large quantities can produce gastrointestinal irritation and vomiting.
Chronic: N/A

**** SECTION 4 - FIRST AID MEASURES ****

Eyes: Rinse opened eye for at least 15 minutes under running water, lifting upper and lower eyelids occasionally.
   Seek medical attention.
Skin: Remove contaminated clothing. Immediately wash with plenty of soap and water for at least 15 minutes.
   Seek medical attention.
Ingestion: swallowed and patient is conscious, induce vomiting. Seek medical attention immediately.
Inhalation: In case of unconsciousness, place patient on side position for transportation.
   If not breathing, give artificial respiration. Supply fresh air or oxygen; seek medical attention immediately.

**** SECTION 5 - FIRE FIGHTING MEASURES ****

Fight larger fires with water or alcohol resistant foam. Firefighters should wear protective equipment and self-contained breathing
apparatus. As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source.

*** SECTION 6 - ACCIDENTAL RELEASE MEASURES ***

Personal Precautions          Use personal protective equipment.
Methods for Cleaning Up       Take up mechanically and collect in suitable container for disposal.

*** SECTION 7 - HANDLING AND STORAGE ***

Handling: Wear personal protective equipment.
Storage: Keep in properly labelled containers.

*** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ***

Engineering Controls: Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Respiratory Protection: In case of insufficient ventilation wear suitable respiratory equipment.
Hand Protection: Protective gloves.
Eye Protection: Safety glasses with side-shields.
Skin and Body Protection: Lightweight protective clothing.
Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice.
Environmental Exposure: Prevent product from entering drains.

*** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ***

General Information

<table>
<thead>
<tr>
<th>Form</th>
<th>Solid Lyophilized powder</th>
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<table>
<thead>
<tr>
<th>Important Health Safety and Environmental Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point/Range</td>
</tr>
<tr>
<td>Melting Point/Range</td>
</tr>
<tr>
<td>Flash Point</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
</tr>
<tr>
<td>Water Solubility</td>
</tr>
</tbody>
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*** SECTION 10 - STABILITY AND REACTIVITY ***

Stability: Stable.
Materials to Avoid: No information available.
Hazardous decomposition: No information available.
products
Polymerization Hazardous polymerisation does not occur.

**** SECTION 11 - TOXICOLOGICAL INFORMATION ****

**Acute Toxicity**
Principle Routes of Exposure/
Potential Health effects

Eyes May cause eye irritation with susceptible persons.
Skin. No information available.
Inhalation May cause irritation of respiratory tract.
Ingestion May be harmful if swallowed.

**Specific effects (Long Term Effects)**
Carcinogenic effects No information available.
Mutagenic Effects No information available.
Reproductive Toxicity No information available.
Sensitization No information available.

**** SECTION 12 - ECOLOGICAL INFORMATION ****

Ecotoxicity Effects No information available.
Mobility No information available.
Biodegradation Inherently biodegradable.
Bioaccumulation Does not bioaccumulate.

**** SECTION 13 - DISPOSAL CONSIDERATIONS ****

Dispose of in accordance with local regulations

**** SECTION 14 - TRANSPORT INFORMATION ****

Transportation information-DOT/IATA/IMDG
Not dangerous goods. Be available for any mode of transportation.

**** SECTION 15 - OTHER INFORMATION****

For research use only

**Reported by:**

Company Name: ACROBIOSYSTEMS INC Date: Jul. 15, 2013

www.acrobiosystems.com