

MATERIAL SAFETY DATA SHEET  
**anti-phospholamban phospho-Ser16**

Badrilla Ltd.  
Leeds Innovation Centre  
103 Clarendon Road  
Leeds LS2 9DF, UK

printed 11 August 2009  
version 11 August 2009  
created 11 August 2009

**1. Product and Company Identification**

**Product Code:** A010-12  
**Product name:** anti-phospholamban phospho-Ser16  
**Manufacturing information:**  
**Company name:** Badrilla Ltd  
**Emergency contact:** Badrilla Ltd +44 7801 730 618  
**Information:** Badrilla Ltd +44 1937 572 179  
**Chemical Family:** Monoclonal and polyclonal antibody  
**Synonyms:** anti-PLB PS-16

**2. Composition & information on ingredients**

Hazardous components chemical name	CAS No.	Percentage	OSHA PEL	ACGIH TLV	Other limits
anti-phospholamban phospho-Ser16	NA	100%	No data	No data	No data

**3. Hazard Identification**

**Emergency overview:** No data available  
**Route(s) of entry:** Inhalation? Yes skin? Yes Eyes? Yes Ingestion? Yes other? Injection  
**Potential Health Effects (Acute and Chronic):** Material may be irritating to the mucous membranes and upper respiratory tract. May be harmful by inhalation, ingestion, or skin absorption. May cause eye, skin or respiratory tract irritation. The toxicological properties of this compound have not been fully evaluated.  
**Signs and symptoms of Exposure:** No data available.

**4. First Aid Measures**

**Emergency and First Aid Procedures:** If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention. If swallowed, wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do not induce vomiting unless directed to do so by medical personnel. In case of contact with eyes, hold eyelids apart and flush with plenty of water. After initial flushings, remove any contact lenses and continue flushing for at least 20 minutes. Have eyes examined and tested by medical personnel. In case of skin contact, immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

**5. Fire Fighting Measures**

**Flash point:** No data.  
**Explosive Limits:** LEL: No data UEL: No data  
**Fire Fighting Instructions:** As in any fire, wear self-contained breathing apparatus pressure demand (MSHA/NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.  
**Flammable Properties and Hazards:** No data available  
**Extinguishing Media:** Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray when fighting fires involving this material.  
**Unsuitable Media:** No data available.

**6. Accidental release measures**

**Steps to be taken in case Materials Is released or spilled:** Wear a NIOSH/MSHA approved self-contained breathing apparatus and appropriate personal protection equipment (rubber boots, safety goggles, heavy rubber gloves). Vacuum or sweep up material and place in disposal container. Avoid raising dust. After removal, ventilate contaminated area and flush thoroughly with water.

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### 7. Handling and Storage

<b>Hazard Label Information:</b>	Avoid contact with skin and eyes. Do not reuse container. Use with adequate ventilation.
<b>Precautions to be taken in handling:</b>	Avoid breathing in dust, vapour, mist, gas. Avoid contact with eyes, skin, clothing. Avoid prolonged or repeated exposure. Do not reuse the container. Use with adequate ventilation Wash thoroughly after handling.
<b>Precautions to be taken in Storing:</b>	Store at the correct temperature.

### 8. Exposure Control/Personal Protection

<b>Protective equipment summary – Hazard Label Information</b>	Eye wash station in work area. Lab coat. Latex disposable gloves. Safety glasses. Safety shower in work area. Vent hood.
<b>Respiratory Equipment (Specific type):</b>	No data available.
<b>Eye Protection:</b>	Safety glasses.
<b>Protective gloves:</b>	Latex disposable gloves.
<b>Other Protective Clothing:</b>	Laboratory coat.
<b>Engineering Controls (Ventillation etc.)</b>	Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.
<b>Work/Hygenic/Maintenance Practices:</b>	DO NOT take internally. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Wash thoroughly after handling.

### 9. Physical and Chemical Properties

<b>Physical States:</b>	<input type="checkbox"/> Gas <input type="checkbox"/> Liquid <input checked="" type="checkbox"/> Solid
<b>Melting point:</b>	No data.
<b>Boiling point:</b>	No data.
<b>Auto ignition point:</b>	No data.
<b>Flash point:</b>	No data. Method:
<b>Explosive Limits:</b>	LEL: No data    UEL: No data.
<b>Specific gravity (water = 1)</b>	No data.
<b>Vapour pressure (vs Air or mm Hg)</b>	No data.
<b>Vapour density (vs Air = 1):</b>	No data.
<b>Evaporation rate (vs butyl acetate = 1):</b>	No data.
<b>Solubility in water:</b>	soluble to 10mg/ml
<b>Percent volatile:</b>	No data.
<b>Corrosive Rate:</b>	No data.
<b>pH:</b>	No data.
<b>Appearance and odour:</b>	A lyophilised powder. No odour.

### 10. Stability and Reactivity

<b>Stability:</b>	<input type="checkbox"/> Unstable <input checked="" type="checkbox"/> Stable
<b>Conditions to avoid – instability:</b>	No data available.
<b>Incompatibility – materials to avoid:</b>	No data available
<b>Hazardous decomposition or byproducts:</b>	No data available
<b>Hazardous polymerisation:</b>	<input type="checkbox"/> Will occur <input checked="" type="checkbox"/> Will not occur
<b>Conditions to avoid – Hazardous Polymerization:</b>	No data available

### 11. Toxicological Information

<b>Toxicological Information:</b>	The toxicological effects of this compound have not been thoroughly studied.
<b>Carcinogenic/Other Information:</b>	No data available.
<b>Carcinogenicity:</b>	NTP? No    IARC Monographs? No    OSHA Regulated? No

### 12. Ecological Information

<b>Ecological Information:</b>	Runoff from fire control or dilution water may cause pollution.
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### 13. Disposal Considerations

<b>Waste Disposal Method:</b>	Dispose in accordance with local, state and federal regulations.
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**14. Transport Information**

**LAND TRANSPORT (US DOT)**

**DOT Proper Shipping Name:** No data available.

**Additional Transport Information:** Transport in accordance with local, state and federal regulations.

**15. Regulatory Information**

**US EPA SARA Title III**

Hazardous Components (Chemical name)	CAS#	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
anti-phospholamban phospho-Ser16	NA	No	No	No	No

**USA EPA CAA, CWA, TSCA**

Hazardous Components (Chemical name)	CAS#	EPA CAA	EPA CWA NPDES	EPA TSCA	CA PROP 65
anti-phospholamban phospho-Ser16	NA	No	No	No	No

**16 Other Information**

**COMPANY POLICY or DISCLAIMER**

For research use only, not for human or veterinary clinical use.

**DISCLAIMER:** This information is believed to be accurate and full and represents the best information currently available to us.

However, we make no warranty of merchantability or any other warrant, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.