Material Safety Data Sheet

Catalog Number: 156608
Revision date: 26-Apr-2006

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY INFORMATION

Catalog Number: 156608

Product name: SER-GLY

Supplier:
MP Biomedicals, LLC
29525 Fountain Parkway
Solon, OH 44139
tel: 440-337-1200

Emergency telephone number: CHEMTREC: 1-800-424-9300 (1-703-527-3887)

2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS Number</th>
<th>Weight %</th>
<th>ACGIH Exposure Limits</th>
<th>OSHA Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SER-GLY</td>
<td>687-63-8</td>
<td>90 - 100%</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: May cause skin irritation and/or dermatitis

Principle routes of exposure: Skin
Inhalation: May cause irritation of respiratory tract
Ingestion: May be harmful if swallowed.
Skin contact: May cause allergic skin reaction
Eye contact: Avoid contact with eyes

Statements of hazard MAY CAUSE ALLERGIC SKIN REACTION.
Statement of Spill or Leak - ANSI Label Eliminate all ignition sources. Absorb and/or contain spill with inert materials (e.g., sand, vermiculite). Then place in appropriate container. For large spills, use water spray to disperse vapors, flush spill area. Prevent runoff from entering waterways or sewers.

4. FIRST AID MEASURES

General advice: In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
Inhalation: Move to fresh air. Call a physician immediately.
Skin contact: Rinse immediately with plenty of water and seek medical advice
Ingestion: Do not induce vomiting without medical advice.
Eye contact: In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Protection of first-aiders: No information available
Medical conditions aggravated by exposure: None known
5. FIRE FIGHTING MEASURES

Suitable extinguishing media:
Use dry chemical, CO2, water spray or "alcohol" foam

Specific hazards:
Burning produces irritant fumes.

Unusual hazards:
None known

Special protective equipment for firefighters:
As in any fire, wear self-contained breathing apparatus
pressure-demand, MSHA/NIOSH (approved or equivalent)
and full protective gear

Specific methods:
Water mist may be used to cool closed containers.

Flash point:
Not determined

Autoignition temperature:
Not determined

NFPA rating:

<table>
<thead>
<tr>
<th>NFPA Health</th>
<th>NFPA Flammability</th>
<th>NFPA Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:
Use personal protective equipment.

Environmental precautions:
Prevent product from entering drains.

Methods for cleaning up:
Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

Storage:
ROOM TEMPERATURE

Handling:
Use only in area provided with appropriate exhaust ventilation.

Safe handling advice:
Wear personal protective equipment.

Incompatible products:
Oxidising and spontaneously flammable products

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures: Ensure adequate ventilation.

PERSONAL PROTECTIVE EQUIPMENT
Respiratory protection: Breathing apparatus only if aerosol or dust is formed.

Hand protection: PVC or other plastic material gloves

Skin and body protection: Usual safety precautions while handling the product will provide adequate protection against this potential effect.

Eye protection: Safety glasses with side-shields

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Powder

Formula: C5H10N2O4

Molecular weight: 162.1

Melting point/range: No data available at this time.

Boiling point/range: No Data available at this time.

Density: No data available

Vapor pressure: No data available

Evaporation rate: No data available

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10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability</td>
<td>Stable under recommended storage conditions.</td>
</tr>
<tr>
<td>Polymerization</td>
<td>None under normal processing.</td>
</tr>
<tr>
<td>Hazardous decomposition products</td>
<td>Nitrogen oxides (NOx)/ammonia/CN-</td>
</tr>
<tr>
<td>Materials to avoid</td>
<td>Strong oxidising agents</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>Exposure to air or moisture over prolonged periods.</td>
</tr>
</tbody>
</table>

11. TOXICOLOGICAL INFORMATION

Product Information

<table>
<thead>
<tr>
<th>Component</th>
<th>RTECS Number</th>
<th>Selected LD50s and LC50s</th>
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</thead>
<tbody>
<tr>
<td>SER-GLY</td>
<td>Not Available</td>
<td>Not Determined</td>
</tr>
</tbody>
</table>

Chronic toxicity: Chronic exposure may cause nausea and vomiting, higher exposure causes unconsciousness.

Local effects: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Specific effects: May include moderate to severe erythema (redness) and moderate edema (raised skin), nausea, vomiting, headache.

Primary irritation: No data is available on the product itself.

Carcinogenic effects: No data is available on the product itself.

Mutagenic effects: No data is available on the product itself.

Reproductive toxicity: No data is available on the product itself.

12. ECOLOGICAL INFORMATION

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<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>SER-GLY</td>
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<table>
<thead>
<tr>
<th>Component</th>
<th>Germany VCI (WGK)</th>
<th>World Health Organization (WHO) - Drinking Water</th>
<th>Ecotoxicity - Fish Species Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>SER-GLY</td>
<td>Not Listed</td>
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<tr>
<th>Component</th>
<th>Ecotoxicity - Freshwater Algae Data</th>
<th>Ecotoxicity - Microtox Data</th>
<th>Ecotoxicity - Water Flea Data</th>
</tr>
</thead>
<tbody>
<tr>
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<table>
<thead>
<tr>
<th>Component</th>
<th>EPA - ATSDR Priority List</th>
<th>EPA - HPV Challenge Program Chemical List</th>
<th>California - Priority Toxic Pollutants</th>
</tr>
</thead>
<tbody>
<tr>
<td>SER-GLY</td>
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<td>Not Listed</td>
<td>Not Listed</td>
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</tbody>
</table>
13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products:
Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority. Residue from fires extinguished with this material may be hazardous.

Contaminated packaging:
Do not re-use empty containers.

14. TRANSPORT INFORMATION

UN/Id No: Not regulated
DOT:
Proper shipping name: Not Regulated

15. REGULATORY INFORMATION

International Inventories

Components
SER-GLY
Inventory - United States TSCA - Sect. 8(b) Not Listed
Canada DSL Inventory List - Not Listed

U.S. regulations:

Components
SER-GLY
California Proposition 65 - Not Listed
Massachusetts Right to Know List: Not Listed
New Jersey Right to Know List: Not Listed
Pennsylvania Right to Know List: Not Listed

Catalog Number: 156608 Product name: SER-GLY
Components

|---------|-----------------------------------|---------------------------------------------|---------------------------------------------|-------------------------------------------------|

Components

<table>
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<tr>
<th>SER-GLY</th>
<th>SARA 313 Emission reporting/Toxic Release of Chemicals Not Listed</th>
<th>CERCLA/SARA - Section 302 Extremely Haz Not Listed</th>
<th>NTP: None</th>
<th>IARC: None</th>
</tr>
</thead>
</table>

SARA 313 Notification:
The above is your notification as to the SARA 313 listing for this product(s) pursuant to Section 313 of Title III of the Superfund Ammendments and Reauthorization Act of 1986 and 40 CFR Part 372.

If you are unsure if you are subject to the reporting requirements of Section 313, or need more information, please call the EPA Emergency Planning and Community Right-To-Know Information Hotline: (800) 535-0202 or (202) 479-2499 (in Washington, DC or Alaska).

State Notification:
The above information is your notice as to the Right-to-Know listings of the stated product(s). Individual states will list chemicals for a variety of reasons including, but not limited to, the compounds toxicity; carcinogenic, tumorigenic and/or reproductive hazards; and the compounds environmental impact if accidentally released.

16. OTHER INFORMATION

Prepared by: Health & Safety

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End of Safety Data Sheet