Material Safety Data Sheet

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: BIOSTEP Collagen Matrix Dressing
Chemical Family: Collagen / Alginate / Carboxymethylcellulose
CAS Number: N/A
Other Designations: N/A
General Use: Absorbent wound dressing for microbial control
Manufacturer: Colvalon Technologies, Ltd. 405 Britannia Rd. E., Ste. 106, Mississauga, ON L4Z 3E6 CANADA
Phone: 905 568-8400
Supplier: Smith & Nephew, Inc. 11775 Starkey Road Largo, FL 33773-4727 Phone: 1 800 876-1261
Date Reviewed: August 6, 2007

Section 2 - Composition Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>CAS Number</th>
<th>% Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denatured Collagen</td>
<td>9000-70-8</td>
<td>Proprietary</td>
</tr>
<tr>
<td>Sodium Alginate</td>
<td>9005-38-3</td>
<td>Proprietary</td>
</tr>
<tr>
<td>Sodium Carboxymethylcellulose Disodium</td>
<td>9004-32-4</td>
<td>Proprietary</td>
</tr>
<tr>
<td>Ethylenediaminetetraacetic Acid</td>
<td>6381-92-6</td>
<td>Proprietary</td>
</tr>
<tr>
<td>Sodium Hydroxide</td>
<td>1310-73-2</td>
<td>Proprietary</td>
</tr>
<tr>
<td>EDC</td>
<td>25952-52-8</td>
<td>Proprietary</td>
</tr>
<tr>
<td>NHS</td>
<td>6066-82-6</td>
<td>Proprietary</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

Emergency Overview

Potential Health Effects

Primary Entry Routes: Skin contact
Target Organs: N/A
Acute Effects: Rashes and irritation in sensitized individuals.
   - Eye: Corneal irritation may occur as a result of mechanical abrasion. In the event of eye irritation, flush eyes with flowing water.
   - Skin: Skin irritation may result as an allergic reaction to the collagen component of the dressing. Obtain medical attention in the event irritation develops or persists.
   - Ingestion: Ingestion of the dressing will act as a foreign body. Obtain medical attention.

Chronic Effects: None known

Section 4 - First Aid Measures

Eye Contact: Flush eyes (including under the eyelids) with copious amounts of flowing water for at least 15 minutes. Obtain medical attention.
Skin Contact: Obtain medical attention in the event skin irritation develops or persists.
Ingestion: Ingestion of the dressing may cause a choking hazard or internal blockage. Obtain medical attention.
Inhalation: This dressing does not present an inhalation hazard.

Special Precautions/Procedures: None.

MSDSUM01030 Page 1 of 3 Revision A
Section 5 - Fire-Fighting

Flash Point: Not available
Flash Point Method: Not available.
Burning Rate: Not available.
Autoignition Temperature: Not available.
LEL (%vol. In air): Not available.
UEL (%vol. In air): Not available.
Flammability Classification: Dressing flammability has not been determined.
Extinguishing Media: Dressing is not reactive to water or other means of extinguishment. If involved in a fire, treat as a flammable solid.
Unusual Fire or Explosion Hazards: Not available, however, low explosion risk is expected.
Hazardous Combustion Products: Not available.
Fire-Fighting Instructions: Do not release runoff from fire control methods to sewers or waterways.
Fire-Fighting Equipment: Self Contained Breathing Apparatus should be worn.

Section 6 - Accidental Release Measures

Spill or Leak Procedure: Treat used dressing as medical waste. No special spill procedures required.
Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Handling Precautions: No special handling procedures required. If used, handle as per medical waste.
Storage Requirements: Store in a cool, dry environment. If pouches are opened, do not use. Keep away from moisture. Avoid extreme heat and strong oxidizing agents.
Regulatory Requirements: None

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: None required
Handling Procedures and Equipment: No special handling procedures required. If used, handle as per medical waste.
Personal Protective Equipment: No special protection is required.
Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section 9 - Physical and Chemical Properties

Physical State: Solid sponge-like material
Odor: Slight odor associated with the dressing
Vapor Pressure (mm Hg): Not applicable.
Vapor Density (Air=1): Not applicable.
Formula Weight: N/A
Water Oil dist. Coeff.: Not applicable.
Specific Gravity: >1pH (1% soln/water): Not available.
Evaporation Rate (nBuAc = 1): Not applicable.
Appearance: White
Taste: Not available
Water Solubility: Not available
Critical Temperature: Not available.
Boiling / Condensation Point: Not applicable.
Melting / Sublimation Point: Not applicable.
Viscosity: Not applicable.

Section 10 - Stability and Reactivity

Stability: Yes
Corrosivity: Non-corrosive.
Chemical Incompatibilities: None known
Conditions to Avoid: Avoid extreme heat and strong oxidizing agents.
Hazardous Decomposition Products: Not available.
Degradability: Exposure to proteolytic enzymes will degrade material.
Section 11 - Toxicological Information

Toxicological Properties:

**TLV (ACGIH 2000)** Not required.

**Chronic effects on humans:** Excessive or chronic exposure to silver by skin contact, ingestion or inhalation may cause Argyrosis – a local or generalized discoloration of the eyes, skin and mucous membranes, where grey or blue patches of pigmentation are formed.

**Acute effects on humans:** Temporary discoloration of affected areas or rashes and irritation in sensitized individuals.

**Irritancy:** Refer to acute effects on humans section in this MSDS.

**Sensitization:** Some individuals may be sensitized to silver metal.

**Route of entry:** Skin contact.

Section 12 - Ecological Information

**Ecotoxicity:** Not determined

**Environmental Fate:** Not determined

**Environmental Degradation:** Not available

**Soil Absorption/Mobility:** Not determined

**Marine Pollutant:** Not applicable

Section 13 - Disposal Considerations

**Disposal:** Material should be considered a medical waste after use. Dispose of according to applicable federal, state or local regulations. The state and local regulations may differ from federal regulatory requirements, and laws may change or be reinterpreted.

Section 14 - Transport Information

**DOT Transportation Data:** Not Regulated

**Air Transport (ICAO/IATA):** Not regulated

**Marine Transport (IMDG Code):** Not regulated.

Section 15 Regulatory Information

**EPA Regulations:** None known

**OSHA Regulations:** None known

**State Regulations:** May vary from state to state

**TDG (Canada):** Not regulated.

**WHMIS:** Not a WHMIS controlled product.

Section 16 - Other Information

**Additional Hazard Rating Systems:** None Known

**Additional Information:**