1. PRODUCT AND COMPANY IDENTIFICATION

Product Name
KERLIX® AMD Super Sponges
KERLIX® AMD Rolls
Excilon® AMD Sponges
TELFA AMD Sponges
CURITY® AMD Packing Strips
CURITY® AMD Gauze Sponges

Use/Size
Wound Dressings

Product Numbers
6662, 6665, 6660, 3331, 3332, 7088, 7089, 7662, 7663, 7665, 7666, 7667, 7668, 7831AMD, 7832AMD, 7833AMD, 2506, 2533, 2539, 44133, 55511AMD, 55511AMDX, 55512AMDX, 55522AMDX, 55522AMDX, 55523AMD, 55523bAMD, 55535AMDX, 55535pAMDX, 55544AMD, 55544AMDX, 55544BAMD, 55544PAMDX, 55546AMD, 55546BAMD, 55546BAMDX, 55548AMDX, 55548BAMD, 55548BAMDX, 55566AMD, 55566AMDX, 55566BAMD, 55566BAMDX, 55588AMDX, 55588BAMD, 55588BAMDX, 55588BAMDX, 55588BAMDX

Manufacturer/Supplier
Covidien, LP

Address
15 Hampshire Street
Mansfield, MA 02048

Phone Number
(508) 261-8000 (Monday – Friday 8:00 am to 5:00 pm)

Chemtrec Number
(800) 424-9300

Revision Date:
May 3, 2013

MSDS Date:
July 24, 2000

This MSDS has been compiled in accordance with - EC Directive 91/155/EC - OSHA's Hazcom Standard (29 CFR 1910.1200)

2. COMPOSITION/INFORMATION ON THE COMPONENTS

Component Name
Poly(Hexamethylenebiguanide) hydrochloride
Water

CAS#/Codes
27083-27-8
No EC #
7732-18-5
231-791-2

Concentration
0.20%
>99.00%

R Phrases
R-None
R-None

Classification
None
None

3. HAZARD IDENTIFICATION

EU Main Hazards
Not classified as hazardous.

Routes of Entry
- Eye contact - Ingestion - Skin contact

Carcinogenic Status
Not considered carcinogenic by NTP, IARC, and OSHA.

Target Organs
- Eye

Health Effects – Eyes
Contact may cause slight transient irritation.
Health Effects – Skin
This product is non-irritating to the skin. Prolonged, repeated overexposure may cause allergic sensitization.

Health Effects – Ingestion
A large dose may have the following effects:
- nausea
- vomiting
- diarrhea
- gastrointestinal irritation

Health Effects – Inhalation
No adverse effects are expected.

4. FIRST AID MEASURES

Eyes
Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.

Skin
Wash skin thoroughly with soap and water. Obtain medical attention if blistering occurs or redness persists.

Ingestion
Do not induce vomiting. Have victim drink 1-3 glasses of water to dilute stomach contents. Never administer anything by mouth if a victim is losing consciousness, is unconscious or is convulsing. Obtain medical attention immediately.

Inhalation
If there is difficulty in breathing, give oxygen. Seek medical attention if symptoms persist.

Advice to Physicians
Treat symptomatically.

5. FIRE FIGHTING MEASURES

Extinguishing Media
Not Flammable. Select extinguishing agent appropriate to other materials involved.

Unusual Fire and Explosion Hazards
None known.

Protective Equipment for Fire-Fighting
Wear full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

This product may be collected by carefully scooping into a pan, paper towel or other absorbent material. Transfer into suitable containers for recovery or disposal. No specific measures necessary. Prevent the material from entering drains or watercourses.

7. HANDLING AND STORAGE

Keep container tightly closed when not in use. Storage area should be:
- cool
- dry
- well ventilated
- away from incompatible materials
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Standards
Exposure limits are listed below, if they exist.

Poly(Hexamethylenebiguanide) hydrochloride
None assigned.

Engineering Control Measures
No specific measures necessary. Good general room ventilation is expected to be adequate to control airborne levels.

Respiratory Protection
Respiratory protection not normally required.

Hand Protection
Skin protection not normally required.

Eye Protection
Eye protection not normally required. However, care should be taken to avoid accidental exposure.

Body Protection
Normal work wear.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Non-woven cloth/sponge saturated with liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Colorless - Pale Yellow</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>PH</td>
<td>5-5.5 at 10% w/w in water.</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>~1.04</td>
</tr>
<tr>
<td>Boiling Range/Point (°C/F)</td>
<td>102 / 215.6</td>
</tr>
<tr>
<td>Melting Point (°C/F)</td>
<td>No data.</td>
</tr>
<tr>
<td>Flash Point (PMCC) (°C/F)</td>
<td>Not Flammable</td>
</tr>
<tr>
<td>Explosion Limits (%)</td>
<td>No data.</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No data.</td>
</tr>
<tr>
<td>Density</td>
<td>No data.</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Completely soluble</td>
</tr>
<tr>
<td>Vapor Density (Air = 1)</td>
<td>No data.</td>
</tr>
<tr>
<td>Viscosity (cSt)</td>
<td>No data.</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Stability
Stable under normal conditions.

Conditions to Avoid
- Heat - High temperatures

Materials to Avoid
None known.

Hazardous Polymerization
Will not occur.
10. STABILITY AND REACTIVITY

Hazardous Decomposition Products
- oxides of carbon - hydrogen chloride

11. TOXICOLOGICAL INFORMATION

Acute Toxicity
Low order of acute toxicity. No adverse effects were observed in human studies using intact and abraded skin. PHMB is a methemoglobinemia former. No adverse effects are expected at the concentrations found in this product.

Chronic Toxicity/Carcinogenicity
This product is not expected to cause long term adverse health effects. PHMB induced an increase in cancer in mice when administered at very high doses. Under the conditions of anticipated use of this product, PHMB does not pose a risk to man.

Genotoxicity
This product is not expected to cause any mutagenic effects.

Reproductive/Developmental Toxicity
This product is not expected to cause reproductive or developmental health effects.

12. ECOLOGICAL INFORMATION

Mobility
No relevant studies identified.

Persistence/Degradability
No relevant studies identified.

Bio-accumulation
No relevant studies identified.

Ecotoxicity
The product may be harmful to aquatic organisms.

13. DISPOSAL

Dispose of in accordance with all applicable local and national regulations.

14. TRANSPORT INFORMATION

DOT CFR 172.101 Data
- Not Regulated

UN Proper Shipping Name
- Not Regulated

UN Class
- None.

UN Number
- None.

UN Packaging Group
- None.

Classification for AIR Transportation (IATA)
- Consult current IATA Regulations prior to shipping by air.
15. REGULATORY INFORMATION

<table>
<thead>
<tr>
<th>EU Label Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classification and labelling have been performed according to EU directives 67/548/EEC and 99/45/EC including amendments.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EC Annex I Classification</th>
</tr>
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<table>
<thead>
<tr>
<th>R phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>None.</td>
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<table>
<thead>
<tr>
<th>S phrases</th>
</tr>
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<tbody>
<tr>
<td>None.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>US REGULATIONS (Federal, State) and INTERNATIONAL CHEMICAL REGISTRATION LAWS</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA Listing</td>
</tr>
<tr>
<td>This product contains ingredients that are listed on or exempt from listing on the EPA Toxic Substance Control Act Chemical Inventory.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EINECS Listing</th>
</tr>
</thead>
<tbody>
<tr>
<td>All ingredients in this product are listed on the European Inventory of Existing Commercial Chemical Substances (EINECS) or are exempt from listing.</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>DSL (Canadian) Listing</th>
</tr>
</thead>
<tbody>
<tr>
<td>All ingredients in this product are listed on the Domestic Substance List (DSL).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MA Right To Know Law</th>
</tr>
</thead>
<tbody>
<tr>
<td>All components have been checked for inclusion on the Massachusetts Substance List (MSL). Those components present at the de minimus concentration have been identified in the hazardous ingredients section of the MSDS.</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>PA Right To Know Law</th>
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<tbody>
<tr>
<td>This product does not contain any chemicals on the Pennsylvania Hazardous Substance List.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>NJ Right To Know Law</th>
</tr>
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<tbody>
<tr>
<td>This product does not contain any chemicals on the New Jersey Workplace Hazardous Substance List.</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>California Proposition 65</th>
</tr>
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<tr>
<td>This product does not contain materials which the State of California has found to cause cancer, birth defects or other reproductive harm.</td>
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<table>
<thead>
<tr>
<th>SARA Title III Sect. 302 (EHS)</th>
</tr>
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<tr>
<td>This product does not contain any chemicals subject to SARA Title III Section 302.</td>
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<tr>
<th>SARA Title III Sect. 304</th>
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<td>This product does not contain any chemicals subject to SARA Title III Section 304.</td>
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<table>
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<tr>
<th>SARA Title III Sect. 311/312 Categorization</th>
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<tr>
<td>This product does not meet any of the SARA Title III Section 311/312 categorizations.</td>
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<table>
<thead>
<tr>
<th>SARA Title III Sect. 313</th>
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<tbody>
<tr>
<td>This product does not contain a chemical that is listed in Section 313 at or above de minimis concentrations.</td>
</tr>
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</table>

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA Ratings</th>
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<tbody>
<tr>
<td>NFPA Code for Flammability - 0</td>
</tr>
<tr>
<td>NFPA Code for Health - 1</td>
</tr>
<tr>
<td>NFPA Code for Reactivity - 0</td>
</tr>
</tbody>
</table>
16. OTHER INFORMATION

NFPA Code for Special Hazards - 0

**HMIS Ratings**
- HMIS Code for Flammability - 0
- HMIS Code for Health - 1
- HMIS Code for Reactivity - 0
- HMIS Code for Personal Protection - See Section 8

**Abbreviations**
- N/A: Denotes no applicable information found or available
- CAS#: Chemical Abstracts Service Number
- ACGIH: American Conference of Governmental Industrial Hygienists
- OSHA: Occupational Safety and Health Administration
- TLV: Threshold Limit Value
- PEL: Permissible Exposure Limit
- STEL: Short Term Exposure Limit
- NTP: National Toxicology Program
- IARC: International Agency for Research on Cancer
- EU: European Union
- R: Risk
- S: Safety
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- BOD: Biological Oxygen Demand
- KoC: Soil Organic Carbon Partition Coefficient

**Prepared By:** EnviroNet LLC.

The information and recommendations presented in this MSDS are based on sources believed to be accurate; therefore, Covidien, LP assumes no liability for the accuracy or completeness of this information. It is the user's responsibility to determine the suitability of the information for their particular purposes.