Material Safety Data Sheet

Section 1. Chemical product and company identification

Product name: DEAE Sephadex™ A-50, 100 g

Catalogue Number: 17-0180-01

Synonym: Bead-formed crosslinked Dextran


Product type: Solid.

Validation date: 28 June 2011

Print date: 28 June 2011

Supplier: GE Healthcare UK Ltd
Amersham Place
Little Chalfont
Buckinghamshire HP7 9NA
England
+44 0870 606 1921

In case of emergency

US
ChemTrec (US)
1-800-424-9300

Canada
ChemTrec (US)
1-703-527-3887

2. Hazards identification

Physical state: Solid. [Solid beads.]

Odor: Odorless.

OSHA/HCS status: While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.

Emergency overview: No specific hazard.

NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED.

Routes of entry: Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects:

Eyes: No known significant effects or critical hazards.
Skin: No known significant effects or critical hazards.
Inhalation: No known significant effects or critical hazards.
Ingestion: No known significant effects or critical hazards.

Potential chronic health effects:

Chronic effects: No known significant effects or critical hazards.
Carcinogenicity: No known significant effects or critical hazards.
Mutagenicity: No known significant effects or critical hazards.
Teratogenicity: No known significant effects or critical hazards.
Developmental effects: No known significant effects or critical hazards.
Fertility effects: No known significant effects or critical hazards.
Inhalation: No specific data.
Ingestion: No specific data.
Skin: No specific data.
Eyes: No specific data.

Medical conditions aggravated by over-exposure: None known.

See toxicological information (Section 11)
3. **Composition/information on ingredients**

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Section 4. **First aid measures**

| Eye contact | In case of contact with eyes, rinse immediately with plenty of water. Get medical attention if irritation occurs. |
| Skin contact | Wash with soap and water. Get medical attention if irritation develops. |
| Inhalation | If inhaled, remove to fresh air. Get medical attention if symptoms appear. |
| Ingestion | Get medical attention if symptoms appear. |
| Protection of first-aiders | No action shall be taken involving any personal risk or without suitable training. |

Section 5. **Fire-fighting measures**

| Flammability of the product | No specific fire or explosion hazard. |
| Extinguishing media | Use an extinguishing agent suitable for the surrounding fire. |
| Suitable | None known. |
| Not suitable | None known. |
| Special exposure hazards | Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. |
| Special protective equipment for fire-fighters | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. |

Section 6. **Accidental release measures**

| Personal precautions | No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment (see Section 8). |
| Environmental precautions | Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). |
| Methods for cleaning up | Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal. |
| Small spill | Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. |

Section 7. **Handling and storage**

| Handling | Put appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Do not reuse container. |
| Storage | Store between the following temperatures: 4 to 30°C (39.2 to 86°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. |

Section 8. **Exposure controls/personal protection**

| Recommended monitoring procedures | Product does not contain relevant quantities of materials with exposure values that have to be monitored. |
| Engineering measures | No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. |
| Hygiene measures | Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. |
| Personal protection | A respirator is not needed under normal and intended conditions of product use. |
Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Hands

Eyes

Skin

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Section 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid (Solid beads.)</td>
</tr>
<tr>
<td>Flash point</td>
<td>Product does not sustain combustion.</td>
</tr>
<tr>
<td>Color</td>
<td>White to yellowish</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Volatility</td>
<td>0% (w/w)</td>
</tr>
<tr>
<td>VOC</td>
<td>0% (w/w) ISO 11890-1</td>
</tr>
<tr>
<td>Solubility</td>
<td>Insoluble in the following materials: cold water, hot water, methanol and acetone.</td>
</tr>
</tbody>
</table>

### Section 10. Stability and reactivity

- Stability: The product is stable.
- Materials to avoid: No specific data.
- Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur. Not considered to be a product presenting a risk of explosion.

### Section 11. Toxicological information

- Sensitizer: Conclusion/Summary: Not available.

### Section 12. Ecological information

- Environmental effects: No known significant effects or critical hazards.
- Aquatic ecotoxicity: Conclusion/Summary: Not available.
- Biodegradability: Conclusion/Summary: Not available.
- Toxicity of the products of biodegradation: The product itself and its products of degradation are not toxic.
- Other adverse effects: No known significant effects or critical hazards.

### Section 13. Disposal considerations

- Waste disposal: The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

### Section 14. Transport information

- International transport regulations: Not classified.
Section 15. Regulatory information

HCS Classification
- Not regulated.

U.S. Federal regulations
- TSCA 8(a) IUR Exempt/Partial exemption: This material is listed or exempted.
- United States inventory (TSCA 8b): This material is listed or exempted.
- SARA 302/304 extremely hazardous substances: No products were found.
- SARA 302/304 emergency planning and notification: No products were found.
- SARA 302/304/311/312 hazardous chemicals: No products were found.
- SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found.
- Clean Water Act (CWA) 307: No products were found.
- Clean Water Act (CWA) 311: No products were found.
- Clean Air Act (CAA) 112 regulated flammable substances: No products were found.
- Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

State regulations
- Massachusetts: This material is not listed.
- New York: This material is not listed.
- New Jersey: This material is not listed.
- Pennsylvania: This material is not listed.
- California Prop. 65: This material is not listed.

United States inventory (TSCA 8b)
- This material is listed or exempted.

International regulations
- International lists
  - Australia inventory (AICS): This material is listed or exempted.
  - China inventory (IECSC): This material is listed or exempted.
  - Japan inventory: This material is listed or exempted.
  - Korea inventory: This material is listed or exempted.
  - New Zealand Inventory of Chemicals (NZIoC): This material is listed or exempted.
  - Philippines inventory (PICCS): This material is listed or exempted.

Chemical Weapons Convention
- List Schedule I Chemicals: Not listed
- List Schedule II Chemicals: Not listed
- List Schedule III Chemicals: Not listed

Section 16. Other information

Label requirements
- NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Health 0
Flammability 1
Instability 0
Special
Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.