Material Safety Data Sheet

Section 1. Product and Company Identification

**Product Name:** Dextrin  
**Product Code:** DX0130  
**Manufacturer:** EM Science  
A Division of EM Industries  
P.O. Box 70  
480 Democrat Road  
Gibbstown, N.J. 08027  
**Effective Date:** 10/29/2001

**For More Information Call**  
856-423-6300 Technical Service  
Monday-Friday: 8:00 AM - 5:00 PM  
800-424-9300 CHEMTREC (USA)  
613-996-6666 CANUTEC (Canada)  
24 Hours/Day: 7 Days/Week

**Synonym**  
WHITE DEXTRIN; STARCH GUM

**Material Uses**  
Analytical reagent.

**Chemical Family**  
Hydrolyzed Starch

Section 2. Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEXTRINS</td>
<td>9004-53-9</td>
<td>100</td>
</tr>
</tbody>
</table>

Section 3. Hazards Identification

**Physical State and Appearance**  
Solid. (Powder.)

**Emergency Overview**  
Handling care generally in keeping with safe laboratory practices is recommended.

**Routes of Entry**  
Absorbed through skin. Eye contact. Inhalation. Ingestion.

**Potential Acute Health Effects**

- **Eyes:** No known acute effects of this product resulting from eye contact.
- **Skin:** No known acute effects of this product resulting from skin contact.
- **Inhalation:** No known acute effects of this product resulting from inhalation.
- **Ingestion:** No known acute effects of this product resulting from ingestion.

**Potential Chronic Health Effects**

**Carcinogenic Effects**  
This material is not known to cause cancer in animals or humans.

**Medical Conditions Aggravated by Overexposure:**  
Repeated or prolonged exposure is not known to aggravate medical condition.

Additional information See Toxicological Information (section 11)

Section 4. First Aid Measures

**Eye Contact**  
Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

**Skin Contact**  
In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

**Inhalation**  
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Ingestion**  
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Section 5. Fire Fighting Measures

**Flammability of the Product**  
Non-flammable.
<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto-ignition</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Temperature</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Flash Points</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Flammable Limits</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Products of Combustion</td>
<td>Not available.</td>
</tr>
<tr>
<td>Fire Hazards in Presence of Various Substances</td>
<td></td>
</tr>
<tr>
<td>Explosion Hazards in Presence of Various Substances</td>
<td></td>
</tr>
<tr>
<td>Fire Fighting Media</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>and Instructions</td>
<td></td>
</tr>
<tr>
<td>Protective Clothing (Fire)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Special Remarks on Fire Hazards</td>
<td>Not available.</td>
</tr>
<tr>
<td>Special Remarks on Explosion Hazards</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

**Section 6. Accidental Release Measures**

**Small Spill and Leak**
- Use appropriate tools to put the spilled solid in a convenient waste disposal container.

**Large Spill and Leak**
- Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

**Spill Kit Information**
- No specific spill kit required for this product.

**Section 7. Handling and Storage**

**Handling**
- Avoid breathing dust. Do not ingest.

**Storage**
- Keep container tightly closed. Keep container in a cool, well-ventilated area.

**Section 8. Exposure Controls/Personal Protection**

**Engineering Controls**
- Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protection**

- **Eyes**: Safety glasses.
- **Body**: Lab coat.
- **Respiratory**: Not applicable.
- **Hands**: Not applicable.
- **Feet**: Not applicable.

**Personal Protection in Case of a Large Spill**
- Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Product Name Exposure Limits**
- DEXTRINS: Not available.

**Section 9. Physical and Chemical Properties**

**Odor**
- Not available.

**Color**
- White. Cream.

**Physical State and Appearance**
- Solid. (Powder.)

**Molecular Weight**
- Not available.

**Molecular Formula**
- (C6-H10-O5)n.xH2-O

**pH**
- Not available.

**Boiling/Condensation Point**
- Not available.

**Melting/Freezing Point**
- Not available.

**Specific Gravity**
- Not available.

**Vapor Pressure**
- Not available.

**Vapor Density**
- Not available.

**Odor Threshold**
- Not available.
Section 10. Stability and Reactivity

- **Evaporation Rate**: Not available.
- **LogKow**: Not available.
- **Solubility**: Partially soluble in water.
- **Stability and Reactivity**: The product is stable.
- **Conditions of Instability**: Not available.
- **Incompatibility with Various Substances**: Reactive with oxidizing agents.
- **Rem/Incompatibility**: Not available.
- **Hazardous Decomposition Products**: Not available.
- **Hazardous Polymerization**: Will not occur.

Section 11. Toxicological Information

- **RTECS Number**: Dextrin HH9450000
- **Toxicity**:
  - LD50: Not available.
  - LC50: Not available.
- **Chronic Effects on Humans**: Not available.
- **Acute Effects on Humans**: Not available.
- **Synergetic Products (Toxicologically)**: Not available.
- **Irritancy**: Draize Test: Not available.
- **Sensitization**: Not available.
- **Carcinogenic Effects**: This material is not known to cause cancer in animals or humans.
- **Toxicity to Reproductive System**: Not available.
- **Teratogenic Effects**: Not available.
- **Mutagenic Effects**: Not available.

Section 12. Ecological Information

- **Ecotoxicity**: Not available.
- **BOD5 and COD**: Not available.
- **Toxicity of the Products of Biodegradation**: The product itself and its products of degradation are not toxic.

Section 13. Disposal Considerations

- **EPA Waste Number**: Not available.
- **Treatment**: Material does not have an EPA Waste Number and is not a listed waste, however consultation with a permitted waste disposal site (TSD) should be accomplished. Always contact a permitted waste disposal (TSD) to assure compliance with all current local, state, and Federal Regulations.

Section 14. Transport Information

- **DOT Classification**: Not available.
- **TDG Classification**: Not available.
- **IMO/IMDG Classification**: Not available.
- **ICAO/IATA Classification**: Not available.

Section 15. Regulatory Information

- **U.S. Federal Regulations**: TSCA 8(b) inventory: DEXTRINS
SARA 302/304/311/312 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.
SARA 313 toxic chemical notification and release reporting: 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 accidental release prevention: 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.

**WHMIS (Canada)**

Not controlled under WHMIS (Canada).

CEPA DSL: DEXTRINS

**International Regulations**

<table>
<thead>
<tr>
<th>EINECS</th>
<th>DEXTRINS 232-675-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSCL (EEC)</td>
<td>This product is not classified according to the EU regulations.</td>
</tr>
<tr>
<td>Australia (NICNAS):</td>
<td>DEXTRINS</td>
</tr>
<tr>
<td>Korea (TCCL):</td>
<td>DEXTRINS</td>
</tr>
<tr>
<td>Philippines (RA6969):</td>
<td>DEXTRINS</td>
</tr>
<tr>
<td>China: No products were found.</td>
<td></td>
</tr>
</tbody>
</table>

**State Regulations**

No products were found.
California prop. 65: No products were found.

**Section 16. Other Information**

<table>
<thead>
<tr>
<th>National Fire Protection Association (U.S.A.)</th>
<th>Health</th>
<th>1</th>
<th>Fire Hazard Reactivity</th>
<th>0</th>
<th>Specific Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changed Since Last Revision Notice to Reader</td>
<td>+</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The statements contained herein are based upon technical data that EM Industries believes to be reliable, are offered for information purposes only and as a guide to the appropriate precautionary and emergency handling of the material by a properly trained person having the necessary technical skills. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use, storage and disposal of these materials and the safety and health of employees and customers and the protection of the environment. EM INDUSTRIES MAKES NO REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE, WITH RESPECT TO THE INFORMATION HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS.