Material Safety Data Sheet

Section 1. Product and Company Identification
Product Name: Agarose, OmniPur®, For Molecular Biology
Manufacturer: EMD Chemicals Inc.
P.O. Box 70
480 Democrat Road
Gibbstown, NJ 08027
Prior to January 1, 2003 EMD Chemicals Inc. was EM Industries, Inc. or EM Science, Division of EM Industries, Inc.

In Case of Emergency 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 Hour/Day: 7 Days/Week

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>AGAROSE</td>
<td>9012-36-6</td>
<td>100</td>
</tr>
</tbody>
</table>

Section 3. Hazards Identification

Physical State and Appearance: Solid. (Crystalline granules solid.)

Emergency Overview: CAUTION!
Handling care generally in keeping with safe laboratory practices is recommended.

Routes of Entry: 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: 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.

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: May be combustible at high temperature.

Auto-ignition Temperature: Not available.
Flammable Limit: Not available.

Flammable Limits: Not available.

Flash Points: Not available.

Flammable Oxidizers: Not available.

Explosion Hazards in Presence of Various Substances: Risks of explosion of the product in presence of static discharge: No.


Fire Fighting Media and Instructions: SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

Section 6. Accidental Release Measures

Small Spill and Leaks: Use appropriate tools to put the spilled solid in a convenient waste disposal container.
Large Spill and Leaks: Use a shovel to put the material into a convenient waste disposal container.

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:
- Eye/Bodysafety: Safety glasses.
- Respiratory: Lab coat.
- Hand: Not applicable.


Exposure Limits: Not available.
Section 9. Physical and Chemical Properties

Odor: Not available.
Color: White to yellowish.
Physical State and Appearance: Solid. (Crystalline granules solid.)
Molecular Weight: Not available.
Molecular Formula: (C12H14O5(OH)4)n
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.
Evaporation Rate: Not available.
LogKow: Not available.
Solubility: Soluble in water.

Section 10. Stability and Reactivity

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: Not available.
Toxicity: LD50: Not available. LC50: Not available.
Chronic Effects on Humans: Not available.
Acute Effects on Humans: Not available.
Synergetic Products: (Toxicologically) Dermal Test: Not available.
Irritancy: 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

Economy: 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: Proper Shipping Name: CHEMICALS, N.O.S.
RQ: Not applicable.
TDG Classification: Not available.
IMDG/IMDG Classification: Not available.
ICAO/IATA Classification: Proper Shipping Name: CHEMICALS, N.O.S.
RQ: Not applicable.

Section 15. Regulatory Information

U.S. Federal Regulations:
TSCA 8(b) inventory: AGAROSE
SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304/311/312 extremely hazardous chemicals: No products were found.
SARA 311/312 MSDS distribution - chemical inventory – hazardous 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.
WHIMIS (Canada): Not controlled under WHIMIS (Canada).
CEPA DSL: AGAROSE
This product has been classified in accordance with the hazard criteria of the Controlled Product Regulations and the MSDS contains all required information.

International Regulations:
EINECS: AGAROSE 223-731-8
DSCL (EEC) This product is not classified according to the EU regulations.
Australia (NICNAS): AGAROSE
Korea (TCCL): AGAROSE
Philippines (RA9999): AGAROSE
China: No products were found.

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

Section 16. Other Information

National Fire 1 Fire Hazard
<table>
<thead>
<tr>
<th>Protection Association (U.S.A.)</th>
<th>Health</th>
<th>0</th>
<th>0</th>
<th>Reactivity</th>
<th>Specific Hazard</th>
</tr>
</thead>
</table>

**Notices to Reader**

The statements contained herein are based upon technical data that EMD Chemicals Inc. believes to be reliable, are offered for informational 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. EMD CHEMICALS INC. 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.