1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

Product Name  Magnesium Sulfate, Anhydrous
Product Code(s)  0338
Recommended Use  For Further Manufacturing Use Only
                 Not for Human or Animal Drug Use
Synonyms  Epsom Salts * Magnesium Sulphate * Sulfuric Acid Magnesium Salt (1:1)
Company  AMRESCO, LLC
         6681 Cochran Road
         Solon, Ohio 44139

Emergency Telephone Number  Chemtrec 1-800-424-9300
Company Phone Number  1-800-448-4442
E-mail Address  info@amresco-inc.com

2. HAZARDS IDENTIFICATION

GHS - Classification

Classification  Skin Irritant 2  Eye Irritant 2
Signal Word  Warning

Hazard Statements  H315 - Causes skin irritation  H319 - Causes serious eye irritation  H335 - May cause respiratory irritation

Precautionary Statements  P280 - Wear protective gloves/protective clothing/eye protection/face protection
P302+P352 - IF ON SKIN: Wash with plenty of soap and water
P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>EC No.</th>
<th>REACH Reg. No.</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesium Sulfate Anhydrous</td>
<td>-</td>
<td>Not available</td>
<td>7487-88-9</td>
<td>95-100</td>
<td></td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Eye Contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician

Skin Contact
Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes

Inhalation
Move to fresh air. If breathing becomes difficult, give oxygen

Ingestion
Clean mouth with water and afterwards drink plenty of water

Notes to Physician
Treat symptomatically

5. FIRE-FIGHTING MEASURES

Flammable Properties
Not flammable

Flash Point
Not determined

Suitable Extinguishing Media
Dry chemical, CO2, water spray or regular foam

Hazardous Combustion Products
Carbon oxides

Explosion Data
Not sensitive

Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions
Avoid contact with skin, eyes and clothing. Use personal protective equipment. Ensure adequate ventilation

Methods for Containment
Prevent further leakage or spillage if safe to do so

Methods for Cleaning Up
Avoid dust formation. Pick up and transfer to properly labeled containers. Ventilate area and wash spill site after material pickup is complete.

7. HANDLING AND STORAGE
Handling
Handle in accordance with good industrial hygiene and safety practice. Hygroscopic.

Storage
Keep containers tightly closed in a cool, well-ventilated place. Hygroscopic.

Incompatible Products
Strong oxidizing agents.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesium Sulfate Anhydrous</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7487-88-9</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Engineering Measures**
- Showers
- Eyewash stations
- Ventilation systems

**Personal Protective Equipment**

<table>
<thead>
<tr>
<th>Eye/Face Protection</th>
<th>Skin and Body Protection</th>
<th>Respiratory Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tightly fitting safety goggles</td>
<td>Wear protective gloves/clothing</td>
<td>If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations</td>
</tr>
</tbody>
</table>

**Hygiene Measures**
Handle in accordance with good industrial hygiene and safety practice

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White to off-white</td>
</tr>
<tr>
<td>Odor</td>
<td>No information available</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No information available</td>
</tr>
<tr>
<td>Decomposition Temperature °C</td>
<td>No information available</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>No information available</td>
</tr>
<tr>
<td>Initial Boiling Point</td>
<td>No information available</td>
</tr>
<tr>
<td>Physical State</td>
<td>Fine Powder</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not determined</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting Point/Range</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td>Upper No data available</td>
</tr>
<tr>
<td></td>
<td>Lower No data available</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>No information available</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>No information available</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No data available</td>
</tr>
<tr>
<td>MMHG @ 37.8 C</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No data available</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>No information available</td>
</tr>
<tr>
<td>Partition Coefficient (n-octanol/water)</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No information available</td>
</tr>
</tbody>
</table>

### 10. STABILITY AND REACTIVITY
Stability
Stable under recommended storage conditions.

Incompatible Products
Strong oxidizing agents.

Conditions to Avoid
Hygroscopic. Protect from moisture.

Hazardous Decomposition Products
Sulfur oxides. Magnesium oxides.

Hazardous Polymerization
Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information
May cause irritation to eyes, skin and respiratory system.

Chronic Toxicity

Chronic Toxicity
No known effect based on information supplied.

Target Organ Effects
Central nervous system (CNS), Gastrointestinal tract (GI).

12. ECOLOGICAL INFORMATION

Ecotoxicity
The environmental impact of this product has not been fully investigated.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method
Dispose of material in accordance with all federal, state, and local regulations.

Contaminated Packaging
Dispose of in accordance with all federal, state and local regulations.
14. TRANSPORT INFORMATION

IATA  Not regulated
DOT  Not regulated

15. REGULATORY INFORMATION

REACH Title VII Restrictions  No information available.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Dangerous Substances</th>
<th>Organic Solvents</th>
<th>Harmful Substances Whose Names Are to be Indicated on the Label</th>
<th>Pollution Release and Transfer Registry (Class II):</th>
<th>Pollution Release and Transfer Registry (Class I):</th>
<th>Poison and Deleterious Substances Control Law:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesium Sulfate Anhydrous</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>ISHA - Harmful Substances Prohibited for Manufacturing, Importing, Transferring, or Supplying</th>
<th>ISHA - Harmful Substances Requiring Permission</th>
<th>Toxic Chemical Classification Listing (TCCL) - Toxic Chemicals</th>
<th>Toxic Release Inventory (TRI) - Group I</th>
<th>Toxic Release Inventory (TRI) - Group II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesium Sulfate Anhydrous 7487-88-9 ( 95-100 )</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

International Inventories

<table>
<thead>
<tr>
<th>TSCA</th>
<th>Does not Comply</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS/ELINCS</td>
<td>Does not Comply</td>
</tr>
<tr>
<td>ENCS</td>
<td>Does not Comply</td>
</tr>
<tr>
<td>IECSC</td>
<td>Does not Comply</td>
</tr>
<tr>
<td>KECL</td>
<td>Does not Comply</td>
</tr>
<tr>
<td>PICCS</td>
<td>Does not Comply</td>
</tr>
<tr>
<td>AICS</td>
<td>Does not Comply</td>
</tr>
</tbody>
</table>

U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories
Magnesium Sulfate, Anhydrous

Acute Health Hazard: Yes
Chronic Health Hazard: No
Fire Hazard: No
Sudden Release of Pressure Hazard: No
Reactive Hazard: No

Clean Water Act
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)
This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990

CERCLA

U.S. State Regulations
California Proposition 65
This product does not contain any Proposition 65 chemicals.

International Regulations
Mexico - Grade: No information available.

Canada

WHMIS Hazard Class
D2B  Toxic materials

16. OTHER INFORMATION
Issuing Date: 16-May-2011
Revision Date: 16-May-2011
Revision Note: No information available.
Recommended Restrictions

No information available

Disclaimer
The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS