Material Safety Data Sheet

Section 1. Product and Company Identification
Product Name: Silica Gel
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.

Section 2. Composition and Information on Ingredients
Component: Silica Gel
CAS #: 63231-67-4
Weight %: 100

Section 3. Hazards Identification
Physical State and Appearance: Solid.

Emergency Overview:
CAUTION!
MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION.
PROLONGED OR REPEATED INHALATION MAY CAUSE DAMAGE TO RESPIRATORY SYSTEM.

Routes of Entry:
Inhalation. Ingestion.

Potential Acute Health Effects:
- Eyes: May be hazardous in case of eye contact (irritant).
- Skin: May be hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.
- Inhalation: May be hazardous in case of inhalation (lung irritant).
- 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.

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. Get medical attention.

Skin Contact: In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. 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.
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.

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

Section 7. Handling and Storage

Handling
Avoid contact with eyes, skin and clothing. Avoid breathing dust. Keep container closed. Do not ingest.

Storage
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
Splash goggles.

Body Lab coat.

Respiratory
Dust respirator. Be sure to use an approved/certified respirator or equivalent.

Hands
Gloves.

Feet
Not applicable.

Protective Clothing

(Pictograms)

Personal Protection in Case of a Large Spill
Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Section 9. Physical and Chemical Properties

Odor
Odorless.

Color
White or Blue.

Physical State and Appearance
Solid.

Molecular Weight
60.09 g/mole

Molecular Formula
SiO2

pH
Not applicable.

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
Insoluble in water.

http://www.emdchemicals.com/analytics/doc/msds/MSDSU_10185.htm
Section 10. Stability and Reactivity

Stability and Reactivity: The product is stable.
Conditions of Instability: Not available.
Incompatibility with Various Substances: Not available.
Rem/Incompatibility: Not available.
Hazardous Decomposition Products: Not available.
Hazardous Polymerization: Will not occur.

Section 11. Toxicological Information

RTECS Number: Silica Gel, Not available.
Toxicity: LD50: Not available. LC50: Not available.
Chronic Effects on Humans: Not available.
Acute Effects on Humans: May be hazardous in case of eye contact (irritant). May be hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering. May be hazardous in case of inhalation (lung irritant).
Synergistic Products: Not available.
(Irritocologically) 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.
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.
IMO/IMDG Classification: Proper Shipping Name: CHEMICALS, N.O.S.
RQ: Not applicable.
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: Silica Gel
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).

http://www.emdchemicals.com/analytics/doc/msds/MSDSU_10185.htm
CEPA DSL: Silica Gel
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
EI/NECS: Not available.
DSCL (EEC): R36/37/38- Irritating to eyes, respiratory system and skin.
International Lists
China: Silica Gel
Korea (TCCL): Silica Gel
Philippines (RA6969): Silica Gel
China: Silica Gel
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>Fire Hazard</th>
<th>Reactivity</th>
<th>Specific Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Other Special Considerations
Indicating grades of silica gel contain a small amount of indicating compound which does not affect the hazard or protection requirement data.

Changed Since Last Revision
+

Notice to Reader
The statements contained herein are based upon technical data that EMD Chemicals Inc. 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. 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.