1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: Epsom Salt, Technical Grade
Product description: Magnesium sulfate, heptahydrate
Product Use: Pulping additive, Agricultural uses
Manufacturer: PQ Corporation
P. O. Box 840, Valley Forge, PA USA
Phone number: 610-651-4200
Supplier: National Silicates
429 Kipling Ave, Toronto, ON M8Z 5C7
Phone number: 416-255-7771
In case of emergency call: 1 416-255-7771

2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical and Common Name</th>
<th>CAS Registry Number</th>
<th>Wt. %</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesium sulfate, heptahydrate; Epsom salt</td>
<td>10034-99-8*</td>
<td>100%</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
</tbody>
</table>

* Under the Toxic Substances Control Act (TSCA), hydrates are considered as mixtures of their anhydrous salt and water. Accordingly, the CAS Numbers 7487-88-9, 7732-18-5 are used for purposes of TSCA.

3. HAZARDS IDENTIFICATION

Emergency Overview: White or transparent crystalline odorless powder. Non-combustible. At very high temperatures, magnesium oxide, sulfur dioxide, and sulfur trioxide may be generated. Causes mild eye irritation.

Eye contact: Causes mild irritation to the eyes.
Skin contact: No known adverse effects.
Inhalation: Causes nausea, vomiting, abdominal cramps, and diarrhea.
Ingestion: Causes nausea, vomiting, abdominal cramps, and diarrhea.
Chronic hazards: No known chronic hazards. Not listed by NTP, IARC or OSHA as a carcinogen.
Physical hazards: Spilled material can be slippery.

4. FIRST AID MEASURES

Eye: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation persists.
Skin: Not applicable.
Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion: If large quantities of this material are swallowed, call a physician immediately. Do NOT induce vomiting unless directed to do so by a physician. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Flammable limits: This material is noncombustible.
Extinguishing Media: This material is compatible with all extinguishing media
Hazard to fire-fighters: See Section 3 for information on hazards when this material is present in the area of a fire.
Fire-fighting equipment: The following protective equipment for fire fighters is recommended when this material is present in the area of a fire: chemical goggles, body-covering protective clothing, self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal protection: Wear chemical goggles, See section 8.


Small spill cleanup: Sweep, scoop or vacuum discharged material. Flush residue with water. Observe environmental regulations.

Large spill cleanup: Keep unnecessary people away; isolate hazard area and deny entry. Do not touch or walk through spilled material. Sweep, scoop or vacuum discharged material. Flush residue with water. Observe environmental regulations.

CERCLA RQ (US): There is no CERCLA Reportable Quantity for this material.

7. HANDLING AND STORAGE

Handling: Avoid breathing dust. Promptly clean up spills.

Storage: Keep containers closed. Protect from extremes of temperature and humidity during storage. Recommended storage conditions 68-110º F and 54-87% relative humidity.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls: Use with adequate ventilation. Safety shower and eyewash fountain should be within direct access.

Respiratory protection: Use a NIOSH-approved dust respirator where dust occurs. Observe Provincial regulations for respirator use.

Skin protection: Wear gloves if abrasion or irritation occurs.

Eye protection: Wear chemical goggles.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Crystalline odourless powder.

Color: White or transparent.

Odour: Odourless.

pH: Approximately 6-7

Specific gravity: 1.76 g/cm³, Bulk Density Approximately 1.05 g/cm³

Solubility in water: 71g/100 ml at 20º C, 91g/100 ml at 40º C

10. STABILITY AND REACTIVITY

Stability: This material is stable under all conditions of use and storage.

Conditions to avoid: None.

Materials to avoid: Metal hydrides and other water reactive materials.

Hazardous decomposition products: At very high temperatures, magnesium oxide, sulfur dioxide, and sulfur trioxide may be generated.
11. TOXICOLOGICAL INFORMATION

Acute Data: When tested for primary irritation potential, this material caused mild irritation to the eyes. RTECS reports Oral TDLo= 428 mg/kg in man 351 mg/kg in women.

12. ECOLOGICAL INFORMATION

Eco toxicity: Data not available.
Environmental Fate: This material is not persistent in aquatic systems and does not contribute to BOD. It does not bioconcentrate up the food chain.
Physical/Chemical: Sinks and mixes with water.

13. DISPOSAL CONSIDERATIONS

Disposal Method: Dispose in accordance with federal, provincial and local regulations.

14. TRANSPORT INFORMATION

TDG UN Status: This material is not regulated hazardous material for transportation.

15. REGULATORY INFORMATION

WHMIS (Canada): Not a WHMIS controlled product
DSL (Canada): All components of this formulation are listed on the CEPA-DSL
CERCLA (US): No CERCLA Reportable Quantity has been established for this material.
TSCA (US): All ingredients of this material are listed on the TSCA inventory.
FDA: Magnesium sulfate is authorized by FDA GRAS substance pursuant to 21 CFR 184.1443. However, Epsom salt, technical grade is not a suitable grade of magnesium sulfate for FDA regulated uses.

16. OTHER INFORMATION

Prepared by: EHS Dept
Supersedes revision of: March 10, 2009

The information on this safety data sheet is believed to be accurate and it is the best information available to National Silicates. This document is intended only as a guide to the appropriate precautions for handling a chemical by a person trained in chemical handling. National Silicates makes no warranty of merchantability or any other warranty, express or implied with respect to such information or the product to which it relates, and we assume no liability resulting from the use or handling of the product to which this safety data sheet relates. Users and handlers of this product should make their own investigations to determine the suitability of the information provided herein for their own purposes.