MATERIAL SAFETY DATA SHEET

<table>
<thead>
<tr>
<th>Protective Clothing</th>
<th>NFPA Rating (USA)</th>
<th>EC Classification</th>
<th>WHMIS (Canada)</th>
<th>Transportation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Irritant</td>
<td></td>
<td>Not Regulated</td>
</tr>
</tbody>
</table>

Section 1: Product and Company Information

Product Name: Magnesium Salicylate
Product Code: MAGSAL
Product Use: Not available
Chemical Family: Salicylate
Synonyms: Magnesium Salt of 2-Hydroxybenzoic acid
Manufacturer: Vertellus Health & Specialty Products LLC
            300 North Meridian Street, Suite 1500
            Indianapolis, Indiana 46204
Phone Number: (570) 420-3900
Fax: (570) 421-9012
24-hour Emergency: CHEMTREC: (800) 424-9300

Section 2: Composition and Ingredient Information

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Wt. %</th>
<th>EINECS / ELINCS</th>
<th>Symbol</th>
<th>Risk Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesium salicylate</td>
<td>Magnesium salicylate tetrahydrate</td>
<td>18917-95-8</td>
<td>99-100</td>
<td>242-669-3</td>
<td>Xi</td>
<td>R36/37/38</td>
</tr>
</tbody>
</table>

Note: See Section 8 of this MSDS for exposure limit data for these ingredients.
See Section 16 for the full text of the R-phrases above.
Section 3: Hazards Identification

Preparation Hazards and Classification:
Irritating to eyes, respiratory system and skin.
USA: This product is a hazardous material as defined by 29 CFR1910.1200, OSHA Hazard Communication Evaluation.
Canada: This product is controlled under WHMIS.
European Communities (EC): This chemical substance is not classified in the Annex I of Directive 67/548/EEC. European risk assessment information is not available for this substance.

Appearance, Color and Odor:
White crystalline powder, odorless.

Primary Route(s) of Exposure:
Inhalation, Ingestion, Eye contact, Skin contact

Potential Health Effects:
ACUTE (short term): see Section 8 for exposure controls

Inhalation: Breathing dusts may cause irritation of the respiratory tract. Symptoms may include coughing, sore throat and ringing in the ears.

Ingestion: Acute oral toxicity is low. Swallowing the concentrated product may cause irritation to the mouth, throat and stomach and may produce symptoms of gastrointestinal discomfort, nausea or vomiting. May cause ringing in the ears.

Skin: Direct contact with the powder may cause skin irritation.

Eyes: Direct contact with dust or powder may cause eye irritation with symptoms of redness and pain.

CHRONIC (long term): see Section 11 for additional toxicological data

Repeated or prolonged contact with the skin may cause dermatitis.

Medical Conditions Aggravated by Exposure:
Not available

Section 4: First Aid Measures

Inhalation: If exposed to very high concentrations of dust, remove to fresh air. If cough or other symptoms of respiratory irritation develop, get medical attention.

Eye Contact: Immediately flush the eye(s) with plenty of water for at least 15 minutes while holding the eyelids open. If irritation persists, get medical attention.

Skin Contact: Wash affected areas with soap and water. If irritation develops or persists, get medical attention.

Ingestion: Not expected to be toxic by ingestion however, if swallowed in appreciable amounts and symptoms of gastro-intestinal discomfort develop, get medical attention immediately. NEVER give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing.
Section 5: Fire Fighting Measures

**Extinguishing Media:**
Carbon dioxide, dry chemical powder, alcohol foam, polymer foam, water spray or fog.

**Unusual Fire and Explosion Hazards:**
Product is non-flammable but may be combustible if heated.
- Sensitivity to mechanical impact: Not applicable
- Sensitivity to static discharge: Like other organic dusts, magnesium salicylate dust may accumulate a static charge and under certain conditions, airborne dust may explode when ignited by an electrostatic spark, other high-voltage sparks or other ignition source.

**Fire Fighting Instructions:**
Evacuate area and fight fire from a safe distance or a protected location. Approach fire from upwind to avoid toxic combustion products and vapors. The combustion products of magnesium salicylate may be hazardous to health. Wear full protective gear when fighting fires involving this substance including a self-contained breathing apparatus (MSHA/NIOSH approved or equivalent).

**Hazardous Combustion Products:**
Carbon dioxide, carbon monoxide and Magnesium oxide fume.

Section 6: Accidental Release Measures

**Personal Precautions:**
Restrict access to area until completion of clean-up. Do not touch the spilled material. Ensure clean-up is conducted by trained personnel only. Wear adequate personal protective equipment to prevent contact with skin and eyes as indicated in Section 8.

**Environmental Precautions:**
Prevent the release of dust into the air. Prevent material from contaminating soil and from entering sewers or waterways.

**Methods for Containment:**
Stop the leak if it is safe to do so. Clean up spills immediately.

**Methods for Clean-up:**
Vacuum, sweep or scoop the spilled material and place in a chemical waste container. Avoid raising dust into the air. Apply detergent and flush the area with water.

Section 7: Handling and Storage

**Handling:**
Use with adequate ventilation. Avoid generating dusts and mists. Prevent the release of dusts, mists and vapors into the workplace air. Wash hands thoroughly after handling this material and before eating, drinking or smoking. Do not use with incompatible materials such as oxidizing agents and bases. See Section 10 of this MSDS for more information.

**Storage:**
Store in a cool, dry area, out of direct sunlight. Keep containers closed when not in use.
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Section 8: Exposure Controls and Personal Protection

Exposure Limits
No exposure limits have been established for this product. Use the exposure limit for PNOC (Particulates Not Otherwise Classified) of 10 mg/m$^3$ (inhalable) or 3 mg/m$^3$ (respirable).

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>ACGIH TLV (8-hr. TWA) (mg/m$^3$)</th>
<th>U.S. OSHA PEL (8-hr. TWA) (mg/m$^3$)</th>
<th>Ontario (Canada) TWAEV (mg/m$^3$)</th>
<th>UK OEL (8-hr. TWA) (mg/m$^3$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesium salicylate</td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
</tr>
</tbody>
</table>

Exposure Controls

Engineering Controls: Use adequate ventilation to keep airborne concentrations of magnesium salicylate low. Use local exhaust ventilation, and process enclosure if necessary, to control airborne dust.

Personal Protection:

Respiratory Protection: Wear a positive pressure supplied air respirator when dust concentrations in air exceed PNOC concentration of 10 mg/m$^3$ (inhalable) or 3 mg/m$^3$ (respirable).

A respiratory protection program that meets OSHA’s 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 or Canadian Standards Association (CSA) Standard Z94.4-93 must be followed whenever workplace conditions warrant a respirator’s use.

Skin Protection: Wear chemical protective gloves. Wear clean body-covering clothing to prevent contact with skin.

Eye Protection: Wear safety glasses or chemical goggles. Wear a face-shield in settings where splashing is likely or where mists or dusts, from this product, are present.

Other Protective Equipment: Have a safety shower and eye-wash fountain readily available in the immediate work area.

Hygiene Measures: Remove contaminated clothing promptly. Keep contaminated clothing in closed containers. Discard or launder before re-wearing. Inform laundry personnel of contaminant’s hazards. Do not eat, drink or smoke in work areas. Wash hands thoroughly after handling this material. Maintain good housekeeping.
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Section 9: Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical State:</th>
<th>Solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance:</td>
<td>White, crystalline powder</td>
</tr>
<tr>
<td>pH:</td>
<td>Not available</td>
</tr>
<tr>
<td>Specific gravity:</td>
<td>&gt;1 (water = 1)</td>
</tr>
<tr>
<td>Boiling Point:</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting Point:</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>Not available</td>
</tr>
<tr>
<td>Oxidizing Properties:</td>
<td>None</td>
</tr>
</tbody>
</table>

Vapor Pressure: (mm Hg @ 20°C)
Not available

Vapor Density: (Air = 1)
Not available

Solubility in Water:
1g/3mL

Water / Oil distribution coefficient:
Not available

Odor Type:
Odorless

Odor Threshold:
Not available

Evaporation Rate: (n-Butyl Acetate = 1)
Not available

Auto Ignition Temperature (°C):
Not available

Flammability Limits (%):
Lower: Not available
Upper: Not available

Section 10: Stability and Reactivity

Stability: Normally stable.

Conditions to Avoid: Static charge, sparks, heat, other ignition sources, and generation of dust.

Incompatible Materials: STRONG OXIDIZING AGENTS (e.g. perchlorates, peroxides, chromates, sodium hypochlorite) - may react violently or explosively.

Hazardous Decomposition Products: From combustion: Carbon dioxide, Carbon monoxide and Magnesium oxide fume.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Other Reactivity Concerns: None
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Section 11: Toxicological Information

Acute Toxicity Data

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>LD₅₀ Oral (mg/kg)</th>
<th>LD₅₀ Dermal (mg/kg)</th>
<th>LC₅₀ Inhalation (mg/m³, 4 hrs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesium salicylate</td>
<td>Not available</td>
<td>Not available</td>
<td>Not available</td>
</tr>
</tbody>
</table>

Chronic Toxicity Data

Carcinogenicity: The table below indicates whether each agency has listed any ingredient as a carcinogen.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesium salicylate</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

Irritation: Eye, skin and respiratory irritation may result from exposure to dusts, mists and solutions of magnesium salicylate.

Sensitization: Not available

Neurological Effects: Not available

Teratogenicity: Not available

Reproductive Toxicity: Not available

Mutagenicity (Genetic Effects): Not available

Toxicologically Synergistic Materials: Not available

Section 12: Ecological Information

Ecotoxicity: Not available. Do not allow the material to be released into the environment.

Mobility: Not available

Persistence and degradability: Not available

Bioaccumulative potential: Not available

Other adverse effects: Not available
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Section 13: Disposal Considerations

Waste Disposal Method:
Do NOT dump into any sewers, on the ground or into any body of water. Store material for disposal as indicated in Section 7 Handling and Storage.

USA:
Dispose of in accordance with local, state and federal laws and regulations.
RDRA P-Series: None listed
RCRA U-Series: None listed

Canada:
Dispose of in accordance with local, provincial and federal laws and regulations.

EC:
Waste must be disposed of in accordance with relevant EC Directives and national, regional and local environmental control regulations. For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used.

Section 14: Transport Information:

Not Regulated

Canadian Transportation of Dangerous Goods (TDG):
Not Regulated

ADR/RID:
Not Regulated

IMDG:
Not Regulated

Marine Pollutants:
None

ICAO/IATA:
Not Regulated

Section 15: Regulatory Information

<table>
<thead>
<tr>
<th>Category</th>
<th>NFPA</th>
<th>HMIS Hazard Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Health</td>
<td>1</td>
<td>Acute Health</td>
</tr>
<tr>
<td>Flammability</td>
<td>1</td>
<td>Flammability</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
<td>Reactivity</td>
</tr>
</tbody>
</table>

USA

TSCA Status: All ingredients in the product are listed on the TSCA inventory. Listed as the anhydrous form of magnesium salicylate (18917-89-0).

SARA Title III:
Sec. 302/304: None
Sec: 311/312: None
Sec. 313: None
CERCLA RQ: None
Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

**WHMIS Classification:** D2B—Material Causing Other Toxic Effects (eye, skin and respiratory irritation)

**NSNR Status (New Substance Notification Regulations):** All ingredients in the product are listed, as required, on Canada’s Domestic Substances List (DSL). Listed as the anhydrous form of magnesium disalicylate (18917-89-0)

**NPRI Substances (National Pollutant Release Inventory):** There are no NPRI reportable substances in this product.

**EC Classification for the Substance/Preparation:**

- **Symbol:** Irritant
- **Risk Phrases:** R36/37/38: Irritating to eyes, respiratory system and skin.
- **Safety Phrases:** S24/25: Avoid contact with skin and eyes.
  S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
  S28: After contact with skin, wash immediately with plenty of water.
  S36/37/39: Wear suitable clothing, gloves and eye/face protection.

### Section 16: Other Information

**Full Text of R-phrases appearing in Section 2:** R36/37/38: Irritating to eyes, respiratory system and skin.

**Preparation Information:**

- **Prepared by:** LEHDER Environmental Services Limited
  704 Mara Street, Suite 210
  Pt. Edward, ON
  N7V 1X4
  www.lehder.com
- **Phone:** (519) 336-4101
- **Preparation Date:** July 9, 2004
- **Revision Date:** This MSDS replaces the original MSDS, dated October 22, 1988, which was last revised April 11, 1994.
- **Revision Summary:** Revisions made in all sections.
- **Disclaimer:** While LEHDER Environmental Services Limited believes that the data set forth herein is accurate, as of the date hereof, LEHDER makes no warranty with respect thereto and expressly disclaims all liability for reliance thereon. Such data is offered solely for your consideration, investigation and verification.
MATERIAL SAFETY DATA SHEET

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Printed Date: September 18, 2006

Printed Summary: Changed manufacturer from Heico, A Division of Rutherford Chemicals LLC to Vertellus Health & Specialty Products LLC. Changed Section 16 Manufacturer Disclaimer. Added printed date to Section 16.