1. Product and Company Identification

Product identifier: MACRO-FILL™

2. Hazards Identification

Emergency overview: Product may form explosive dust/air mixtures if high concentration of product dust is suspended in air. Material can be slippery when wet. Harmful by inhalation, in contact with skin and if swallowed. Highly flammable.

Potential health effects:
- **Routes of exposure**
  - Inhalation: Ingestion.
  - Eyes: Dust or powder may irritate eye tissue.
  - Skin: No information regarding skin irritation. Not expected to be a primary skin irritant.
  - Inhalation: Inhalation of dusts may cause respiratory irritation. Harmful if inhaled.
  - Ingestion: Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhoea. Harmful if swallowed.

3. Composition/Information on Ingredients

The components are not hazardous or are below required disclosure limits.

Composition comments: Not applicable to consumer products. Occupational Exposure Limits for constituents are listed in Section 8. This product contains trace levels (<0.1%) of a potential carcinogen.

4. First Aid Measures

First aid procedures:
- **Inhalation**: If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.
- **Skin contact**: Immediately flush skin with running water for at least 20 minutes. Launder contaminated clothing before reuse. Get medical attention if irritation develops or persists.
- **Eye contact**: Immediately flush eyes with plenty of water for at least 20 minutes. Get medical attention if irritation develops or persists.
- **Ingestion**: Have victim rinse mouth thoroughly with water. Give several glasses of water. Do not induce vomiting without medical advice. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. If ingestion of a large amount does occur, seek medical attention.

Notes to physician: Provide general supportive measures and treat symptomatically.

General advice: If you feel unwell, seek medical advice (show the label where possible).
5. Fire-fighting measures

Flammable properties
Dusts at sufficient concentrations can form explosive mixtures with air.

Extinguishing media
Suitable extinguishing media
Water fog. Foam. Dry chemical powder. Dry chemical, CO2, water spray or regular foam. Carbon dioxide (CO2).

Unsuitable extinguishing media
Not available.

Protection of firefighters

Fire fighting equipment/instructions

Specific methods
Cool containers exposed to flames with water until well after the fire is out.

Explosion data
Sensitivity to static discharge
Not available.

Sensitivity to mechanical impact
Not available.

Hazardous combustion products
Not available.

General fire hazards
Not a fire hazard.

6. Accidental Release Measures

Personal precautions
Keep unnecessary personnel away. Wear a dust mask if dust is generated above exposure limits. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of dust from the spilled material. Ensure adequate ventilation. For personal protection, see section 8. Material can be slippery when wet.

Environmental precautions
Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so.

Methods for containment
Stop leak if you can do so without risk.

Methods for cleaning up
Sweep up or gather material and place in appropriate container for disposal. Avoid the generation of dusts during clean-up. Following product recovery, flush area with water. For waste disposal, see section 13 of the MSDS.

7. Handling and Storage

Handling
Keep formation of airborne dusts to a minimum. Take measures to prevent the build up of electrostatic charge. Provide appropriate exhaust ventilation at places where dust is formed. Do not get this material in your eyes, on your skin, or on your clothing. Material can be slippery when wet.

Storage
Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from incompatible materials (see Section 10 of the MSDS). Guard against dust accumulation of this material. Keep out of the reach of children.

8. Exposure Controls / Personal Protection

Occupational exposure limits

Material name: MACRO-FILL™

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

<table>
<thead>
<tr>
<th>Constituents</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>INERT OR NUISANCE DUSTS</td>
<td>TWA</td>
<td>3 mg/m³</td>
<td>Respirable particles.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 mg/m³</td>
<td>Total particulate.</td>
</tr>
</tbody>
</table>

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

<table>
<thead>
<tr>
<th>Constituents</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>INERT OR NUISANCE DUSTS</td>
<td>TWA</td>
<td>3 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 mg/m³</td>
<td>Total dust.</td>
</tr>
</tbody>
</table>
Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

<table>
<thead>
<tr>
<th>Constituents</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>INERT OR NUISANCE</td>
<td>TWA</td>
<td>3 mg/m³</td>
<td>Respirable particles.</td>
</tr>
<tr>
<td>DUSTS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 mg/m³</td>
<td>Inhalable</td>
</tr>
</tbody>
</table>

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

<table>
<thead>
<tr>
<th>Constituents</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>INERT OR NUISANCE</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>Total dust.</td>
</tr>
<tr>
<td>DUSTS</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

<table>
<thead>
<tr>
<th>Constituents</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>INERT OR NUISANCE</td>
<td>PEL</td>
<td>5 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td>DUSTS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>15 mg/m³</td>
<td>Total dust.</td>
</tr>
</tbody>
</table>

US. OSHA Table Z-3 (29 CFR 1910.1000)

<table>
<thead>
<tr>
<th>Constituents</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>INERT OR NUISANCE</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td>DUSTS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>15 mg/m³</td>
<td>Total dust.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>50 Mppcf</td>
<td>Total dust.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15 Mppcf</td>
<td>Respirable fraction.</td>
</tr>
</tbody>
</table>

No biological exposure limits noted for the ingredient(s).

Biological limit values

Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

Engineering controls

Personal protective equipment

Eye/face protection: Wear dust goggles.

Skin protection: Normal work clothing (long sleeved shirts and long pants) is recommended. Use of butyl rubber or nitrile gloves is recommended.

Respiratory protection: Use a particulate filter respirator for particulate concentrations exceeding the Occupational Exposure Limit.

Hand protection: Not normally needed.

9. Physical & Chemical Properties

Appearance: Free flowing wettable powder.

Physical state: Solid.

Form: Powder.

Colour: White.

Odour: None.

Odour threshold: Not available.

pH: Not available.

Vapour pressure: 760 mm Hg @ 100 C

Vapour density: Not available.

Boiling point: Not available.

Melting point/freezing point: Not available.

Solubility (water): Not available.

Specific gravity: 0.8 - 1

Relative density: Not available.

Flash point: Not available.

Flammability limits in air, upper, % by volume: Not available.

Flammability limits in air, lower, % by volume: Not available.
Auto-ignition temperature  Not available.
Evaporation rate  Not available.
Percent volatile  0 % estimated
Partition coefficient (n-octanol/water)  Not available.

Other data
Density  1.12 g/cm³ estimated

10. Chemical Stability & Reactivity Information
Chemical stability  Stable at normal conditions.
Conditions to avoid  Heat, flames and sparks. Contact with incompatible materials. Dust may form explosive mixture in air.
Incompatible materials  Strong oxidising agents.
Hazardous decomposition products  Toxic gas. Hydrogen bromide. Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
Possibility of hazardous reactions  Will not occur.

11. Toxicological Information
Toxicological data  No data available.
Sensitisation  Not available.
Chronic effects  Not expected to be hazardous by WHMIS criteria.
Carcinogenicity  Not listed by ACGIH, IARC, NIOSH, NTP OR OSHA.
Skin corrosion/irritation  Not available.
Serious eye damage/irritation  Not available.
Mutagenicity  No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Reproductive effects  Not available.
Teratogenicity  No data available to indicate product or any components present at greater than 0.1% may cause birth defects.
Synergistic materials  Not available.

12. Ecological Information
Ecotoxicological data  No ecotoxicity data noted for the ingredient(s).
Ecotoxicity  No data available for this product. This product is not expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.
Environmental effects  No data available for this product.
Aquatic toxicity  Not available.
Persistence and degradability  Not available.

13. Disposal Considerations
Disposal instructions  Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
Waste from residues / unused products  Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging  Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information
TDG  Not regulated as dangerous goods.
IATA  Not regulated as dangerous goods.
IMDG
Not regulated as dangerous goods.

15. Regulatory information
Canadian regulations This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.
WHMIS status Non-Controlled

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other Information
Further information This safety datasheet only contains information relating to safety and does not replace any product information or product specification. HMIS® is a registered trade and service mark of the NPCA.
HMIS® ratings
Health: 0
Flammability: 0
Physical hazard: 0
NFPA ratings
Health: 0
Flammability: 0
Instability: 0
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Prepared by EHS Department
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