SAFETY DATA SHEET

1. Identification

Material name: SURFHARD
Material: 060 55

Recommended use and restriction on use
  Recommended use: Coatings
  Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information
EUCLID CHEMICAL COMPANY
19218 REDWOOD ROAD
CLEVELAND OH 44110
US

Contact person: EH&S Department
Telephone: 216-531-9222
Emergency telephone number: 1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

Hazard Classification

Health Hazards
  Acute toxicity (Oral) Category 4

Unknown toxicity - Health
  Acute toxicity, oral 0.0089 %
  Acute toxicity, dermal 22.62 %
  Acute toxicity, inhalation, vapor 22.62 %
  Acute toxicity, inhalation, dust or mist 0.009 %

Label Elements

Hazard Symbol:

Signal Word: Warning
Hazard Statement: Harmful if swallowed.
Precautionary Statements

Prevention: Wash thoroughly after handling. Do not eat, drink or smoke when using this product.

Response: IF SWALLOWED: Call a POISON CENTER/doctor/ if you feel unwell. Rinse mouth.

Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC): None.

3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>CAS number</th>
<th>Content in percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesium fluorosilicate</td>
<td>16949-65-8</td>
<td>20 - &lt;50%</td>
</tr>
</tbody>
</table>

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Ingestion: Call a POISON CENTER/doctor/ if you feel unwell. Rinse mouth.

Inhalation: Move to fresh air.

Skin Contact: Remove contaminated clothing and wash the skin thoroughly with soap and water after work.

Eye contact: Rinse immediately with plenty of water.

Most important symptoms/effects, acute and delayed

Symptoms: May cause skin and eye irritation.

Indication of immediate medical attention and special treatment needed

Treatment: Symptoms may be delayed.

5. Fire-fighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.
Suitable (and unsuitable) extinguishing media

**Suitable extinguishing media:**
Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media:**
Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical:**
During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

**Special fire fighting procedures:**
No data available.

**Special protective equipment for fire-fighters:**
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures:**
No data available.

**Methods and material for containment and cleaning up:**
Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

**Notification Procedures:**
In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

**Environmental Precautions:**
Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

7. Handling and storage

**Precautions for safe handling:**
Do not taste or swallow. Wash hands thoroughly after handling. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities:**
Store away from incompatible materials. Store in original tightly closed container.

8. Exposure controls/personal protection

Control Parameters

**Occupational Exposure Limits**

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Type</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

800000050704
Magnesium fluorosilicate - as F

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Type</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesium fluorosilicate - as F</td>
<td>TWA</td>
<td>2.5 mg/m3</td>
<td>US. ACGIH Threshold Limit Values (2011)</td>
</tr>
<tr>
<td></td>
<td>PEL</td>
<td>2.5 mg/m3</td>
<td>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)</td>
</tr>
<tr>
<td>Magnesium fluorosilicate - Dust</td>
<td>TWA</td>
<td>2.5 mg/m3</td>
<td>US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Type</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesium fluorosilicate - as F</td>
<td>TWA</td>
<td>2.5 mg/m3</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)</td>
</tr>
<tr>
<td>Magnesium fluorosilicate - as F</td>
<td>TWA</td>
<td>2.5 mg/m3</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)</td>
</tr>
<tr>
<td>Magnesium fluorosilicate - as F</td>
<td>TWA</td>
<td>2.5 mg/m3</td>
<td>Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)</td>
</tr>
</tbody>
</table>

Biological Limit Values

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesium fluorosilicate (Fluoride: Sampling time: Prior to shift.)</td>
<td>2 mg/l (Urine)</td>
<td>ACGIH BEI (03 2013)</td>
</tr>
<tr>
<td>Magnesium fluorosilicate (Fluoride: Sampling time: End of shift.)</td>
<td>3 mg/l (Urine)</td>
<td>ACGIH BEI (03 2013)</td>
</tr>
</tbody>
</table>

Appropriate Engineering Controls

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

Individual protection measures, such as personal protective equipment

General information: Use personal protective equipment as required.

Eye/face protection: Wear goggles/face shield.

Skin Protection Hand Protection: Use suitable protective gloves if risk of skin contact.

Other: No data available.

Respiratory Protection: In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

Hygiene measures: Do not eat, drink or smoke when using the product. Wash hands after handling.

9. Physical and chemical properties

Appearance

Physical state: liquid
Form: liquid
Color: Colorless
**Odor:** Mild  
**Odor threshold:** No data available.  
**pH:** 2.5  
**Melting point/freezing point:** No data available.  
**Initial boiling point and boiling range:** No data available.  
**Flash Point:** No data available.  
**Evaporation rate:** Slower than Ether  
**Flammability (solid, gas):** No  

<table>
<thead>
<tr>
<th>Upper/lower limit on flammability or explosive limits</th>
<th>No data available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability limit - upper (%)</td>
<td>No data available.</td>
</tr>
<tr>
<td>Flammability limit - lower (%)</td>
<td>No data available.</td>
</tr>
<tr>
<td>Explosive limit - upper (%)</td>
<td>No data available.</td>
</tr>
<tr>
<td>Explosive limit - lower (%)</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

**Vapor pressure:** No data available.  
**Vapor density:** Vapors are heavier than air and may travel along the floor and in the bottom of containers.  
**Relative density:** 1.06  
**Solubility(ies)**  
| Solubility in water: Soluble                        | No data available. |
| Solubility (other): No data available.              | No data available. |

**Partition coefficient (n-octanol/water):** No data available.  
**Auto-ignition temperature:** No data available.  
**Decomposition temperature:** No data available.  
**Viscosity:** No data available.  

**10. Stability and reactivity**  
**Reactivity:** No data available.  
**Chemical Stability:** Material is stable under normal conditions.  
**Possibility of hazardous reactions:** No data available.  
**Conditions to avoid:** Avoid heat or contamination.  
**Incompatible Materials:** Strong acids. Strong bases.  
**Hazardous Decomposition Products:** Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.  

**11. Toxicological information**  
**Information on likely routes of exposure**  
**Inhalation:** In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.
Skin Contact: Moderately irritating to skin with prolonged exposure.

Eye contact: Eye contact is possible and should be avoided.

Ingestion: Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Ingestion: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral
Product: ATEmix: 1,287.03 mg/kg

Dermal
Product: Not classified for acute toxicity based on available data.

Inhalation
Product: ATEmix: 15.04 mg/l

Repeated dose toxicity
Product: No data available.

Skin Corrosion/Irritation
Product: No data available.

Specified substance(s):
Magnesium fluorosilicate
In vitro (Human, in vitro reconstituted epidermis model): Not irritant
Experimental result, Key study

Serious Eye Damage/Eye Irritation
Product: No data available.

Respiratory or Skin Sensitization
Product: No data available.

Carcinogenicity
Product: No data available.
IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:
No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:
No carcinogenic components identified

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro
Product: No data available.

In vivo
Product: No data available.

Reproductive toxicity
Product: No data available.

Specific Target Organ Toxicity - Single Exposure
Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure
Product: No data available.

Aspiration Hazard
Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish
Product: No data available.

Aquatic Invertebrates
Product: No data available.

Chronic hazards to the aquatic environment:
Fish
Product: No data available.

Aquatic Invertebrates
Product: No data available.

Toxicity to Aquatic Plants
Product: No data available.

Persistence and Degradability

Biodegradation
Product: No data available.

BOD/COD Ratio
Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)
Product: No data available.

Partition Coefficient n-octanol / water (log Kow)
Product: No data available.

Mobility in soil: No data available.

Other adverse effects: No data available.

13. Disposal considerations

Disposal instructions: Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Contaminated Packaging: No data available.

14. Transport information

TDG: Not Regulated

CFR / DOT:
800000050704
Not Regulated

IMDG:

Not Regulated

### 15. Regulatory information

**US Federal Regulations**

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

None present or none present in regulated quantities.


None present or none present in regulated quantities.

**CERCLA Hazardous Substance List (40 CFR 302.4):**

None present or none present in regulated quantities.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**

- Immediate (Acute) Health Hazards
- Acute toxicity

**SARA 302 Extremely Hazardous Substance**

None present or none present in regulated quantities.

**SARA 304 Emergency Release Notification**

None present or none present in regulated quantities.

**SARA 311/312 Hazardous Chemical**

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Threshold Planning Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesium fluorosilicate</td>
<td>10000 lbs</td>
</tr>
</tbody>
</table>

**SARA 313 (TRI Reporting)**

None present or none present in regulated quantities.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

None present or none present in regulated quantities.

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**

None present or none present in regulated quantities.

**US State Regulations**

**US. California Proposition 65**

No ingredient regulated by CA Prop 65 present.

**US. New Jersey Worker and Community Right-to-Know Act**

<table>
<thead>
<tr>
<th>Chemical Identity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesium fluorosilicate</td>
</tr>
</tbody>
</table>
US. Massachusetts RTK - Substance List
No ingredient regulated by MA Right-to-Know Law present.

US. Pennsylvania RTK - Hazardous Substances
Chemical Identity
Magnesium fluorosilicate

US. Rhode Island RTK
Chemical Identity
Magnesium fluorosilicate

International regulations

Montreal protocol
not applicable

Stockholm convention
not applicable

Rotterdam convention
not applicable

Kyoto protocol
not applicable

VOC:
Regulatory VOC (less water and exempt solvent) : 0 g/l
VOC Method 310 : 0.00 %
### Inventory Status:

**Australia AICS:** All components in this product are listed on or exempt from the Inventory.

**Canada DSL Inventory List:** All components in this product are listed on or exempt from the Inventory.

**EINECS, ELINCS or NLP:** One or more components in this product are not listed on or exempt from the Inventory.

**Japan (ENCS) List:** All components in this product are listed on or exempt from the Inventory.

**China Inv. Existing Chemical Substances:** All components in this product are listed on or exempt from the Inventory.

**Korea Existing Chemicals Inv. (KECI):** All components in this product are listed on or exempt from the Inventory.

**Canada NDSL Inventory:** One or more components in this product are not listed on or exempt from the Inventory.

**Philippines PICCS:** All components in this product are listed on or exempt from the Inventory.

**US TSCA Inventory:** All components in this product are listed on or exempt from the Inventory.

**New Zealand Inventory of Chemicals:** All components in this product are listed on or exempt from the Inventory.

**Japan ISHL Listing:** One or more components in this product are not listed on or exempt from the Inventory.

**Japan Pharmacopoeia Listing:** One or more components in this product are not listed on or exempt from the Inventory.

### 16. Other information, including date of preparation or last revision

**Revision Date:** 09/15/2017

**Version #:** 6.0

**Further Information:** No data available.
Disclaimer: For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.