SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form: Substance
Physical state: Solid
Substance name: MUSCOVITE
Product code: SIM6594.9
Formula: K₂O∙3Al₂O₃∙6SiO₂∙2H₂O
Synonyms: POTASSIUM MICA
Chemical family: INORGANIC SILICATE

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture: Chemical intermediate
For research and industrial use only

1.3. Details of the supplier of the safety data sheet

GELEST, INC.
11 East Steel Road
Morrisville, PA 19067
USA
T 215-547-1015 - F 215-547-2484 - (M-F): 8:00 AM - 5:30 PM EST
info@gelest.com - www.gelest.com

1.4. Emergency telephone number

Emergency number: CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification
Not classified

2.2. Label elements

GHS-US labeling
No labeling applicable

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)
No data available

SECTION 3: Composition/Information on ingredients

3.1. Substance

Substance type: Mono-constituent
Name: MUSCOVITE
CAS No: 12001-26-2

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mica</td>
<td>(CAS No) 12001-26-2</td>
<td>97 - 100</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical advice.

First-aid measures after skin contact: Wash with plenty of soap and water. Get medical advice/attention.

First-aid measures after eye contact: Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.

First-aid measures after ingestion: Never give anything by mouth to an unconscious person. Get medical advice/attention.
4.2. Most important symptoms and effects, both acute and delayed
Symptoms/injuries after inhalation: May cause irritation to the respiratory tract.
Symptoms/injuries after skin contact: May cause skin irritation.
Symptoms/injuries after eye contact: May cause eye irritation.
Symptoms/injuries after ingestion: No information available.
Chronic symptoms: Chronic overexposure to mica dust may cause fibrotic pneumoconiosis to develop. Where pneumoconiosis due to overexposure to mica has been demonstrated, signs and symptoms resemble those of silicosis, but X-ray patterns differ.

4.3. Indication of any immediate medical attention and special treatment needed
No additional information available

SECTION 5: Firefighting measures
5.1. Extinguishing media
Suitable extinguishing media: Not combustible.
Unsuitable extinguishing media: None known.
5.2. Special hazards arising from the substance or mixture
Fire hazard: None known.
Explosion hazard: None known.
5.3. Advice for firefighters
Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. Avoid contact with skin and eyes. Do not breathe dust.

SECTION 6: Accidental release measures
6.1. Personal precautions, protective equipment and emergency procedures
6.1.1. For non-emergency personnel
Protective equipment: Wear protective equipment as described in Section 8.
Emergency procedures: Evacuate unnecessary personnel.
6.1.2. For emergency responders
Protective equipment: Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".
6.2. Environmental precautions
Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.
6.3. Methods and material for containment and cleaning up
For containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for cleaning up: Sweep or shovel spills into appropriate container for disposal.
6.4. Reference to other sections
No additional information available

SECTION 7: Handling and storage
7.1. Precautions for safe handling
Precautions for safe handling: Avoid contact with skin and eyes. Do not breathe dust. Avoid dust formation. Provide local exhaust or general room ventilation to minimize exposure to dust.
Hygiene measures: Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Keep container tightly closed.
Incompatible materials: None known.
7.3. Specific end use(s)
No additional information available

SECTION 8: Exposure controls/personal protection
8.1. Control parameters
<table>
<thead>
<tr>
<th>Mica (12001-26-2)</th>
<th>ACGIH</th>
<th>USA ACGIH</th>
<th>USA NIOSH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ACGIH TWA (mg/m³)</td>
<td>3 mg/m³ (respirable fraction)</td>
<td>NIOSH REL (TWA) (mg/m³)</td>
</tr>
</tbody>
</table>
MUSCOVITE
Safety Data Sheet

Mica (12001-26-2)

<table>
<thead>
<tr>
<th>USA IDLH</th>
<th>US IDLH (mg/m³)</th>
<th>1500 mg/m³ (containing &lt;1% quartz)</th>
</tr>
</thead>
</table>

8.2. Exposure controls
Appropriate engineering controls: Provide local exhaust or general room ventilation.
Personal protective equipment: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Hand protection: Neoprene or nitrile rubber gloves.
Eye protection: Chemical goggles. Contact lenses should not be worn.
Skin and body protection: Wear suitable protective clothing.
Respiratory protection: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. NIOSH-certified dust and mist (orange cartridge) respirator.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties
Physical state: Solid
Appearance: Powder.
Molecular mass: 760.62/796.65 g/mol
Color: White.
Odor: No data available
Odor threshold: No data available
Refractive index: 1.55 - 1.61
pH: No data available
Relative evaporation rate (butyl acetate=1): No data available
Melting point: > 1500 °C decomposes
Freezing point: No data available
Boiling point: No data available
Flash point: None
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Flammability (solid, gas): No data available
Vapor pressure: < 0.01 mm Hg @ 20°C
Relative vapor density at 20 °C: No data available
Relative density: 2.77 - 2.88 ;Typical bulk density, not compacted: 0.25 g/cm³
VOC content: 100 %
Solubility: Insoluble in water.
Log Pow: No data available
Log Kow: No data available
Viscosity, kinematic: No data available
Viscosity, dynamic: No data available
Explosive properties: No data available
Oxidizing properties: No data available
Explosion limits: No data available

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
No additional information available

10.2. Chemical stability
Stable.

10.3. Possibility of hazardous reactions
No additional information available

10.4. Conditions to avoid
None known.

10.5. Incompatible materials
None known.
10.6. Hazardous decomposition products

None known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| Acute toxicity                              | Not classified |
| Skin corrosion/irritation                   | Not classified |
| Serious eye damage/irritation               | Not classified |
| Respiratory or skin sensitization           | Not classified |
| Germ cell mutagenicity                      | Not classified |
| Carcinogenicity                             | Not classified |
| Reproductive toxicity                       | Not classified |
| Specific target organ toxicity (single exposure) | Not classified |
| Specific target organ toxicity (repeated exposure) | Not classified |
| Aspiration hazard                           | Not classified |
| Symptoms/injuries after inhalation          | May cause irritation to the respiratory tract. |
| Symptoms/injuries after skin contact        | May cause skin irritation. |
| Symptoms/injuries after eye contact         | May cause eye irritation. |
| Symptoms/injuries after ingestion           | No information available. |
| Chronic symptoms                            | Chronic overexposure to mica dust may cause fibrotic pneumoconiosis to develop. Where pneumoconiosis due to overexposure to mica has been demonstrated, signs and symptoms resemble those of silicosis, but X-ray patterns differ. |

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

| Effect on ozone layer                     | No additional information available |
| Effect on the global warming              | No known ecological damage caused by this product. |

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| Sewage disposal recommendations      | Do not dispose of waste into sewer. |
| Waste disposal recommendations       | Landfill. Dispose in a safe manner in accordance with local/national regulations. |
| Ecology - waste materials            | Avoid release to the environment. |

SECTION 14: Transport information

14.1. UN number

Not regulated for transport.

14.2. UN proper shipping name

Not applicable

14.3. Additional information

| Other information                  | No supplementary information available. |

Transport by sea

No additional information available

Air transport

No additional information available
### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

**MUSCOVITE (12001-26-2)**

| TSCA Exemption/Exclusion | Exempt-Naturally Occurring Substances in accordance with 40 CFR 710.4(b). |

**Mica (12001-26-2)**

| Not listed on the United States TSCA (Toxic Substances Control Act) inventory |

#### 15.2. International regulations

**Mica (12001-26-2)**

| Listed on the AICS (Australian Inventory of Chemical Substances) | Listed on the Canadian DSL (Domestic Substances List) |
| Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China) |
| Listed on the Korean ECL (Existing Chemicals List) |
| Listed on NZIoC (New Zealand Inventory of Chemicals) |
| Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances) |
| Listed on the Canadian IDL (Ingredient Disclosure List) |

#### 15.3. US State regulations

**MUSCOVITE(12001-26-2)**

| U.S. - California - Proposition 65 - Carcinogens List | No |
| U.S. - California - Proposition 65 - Developmental Toxicity | No |
| U.S. - California - Proposition 65 - Reproductive Toxicity - Female | No |
| U.S. - California - Proposition 65 - Reproductive Toxicity - Male | No |

**Mica (12001-26-2)**

| U.S. - California - Proposition 65 - Carcinogens List | U.S. - California - Proposition 65 - Developmental Toxicity | U.S. - California - Proposition 65 - Reproductive Toxicity - Female | U.S. - California - Proposition 65 - Reproductive Toxicity - Male | Non-significant risk level (NSRL) |
| No | No | No | No | |

### SECTION 16: Other information

**Abbreviations and acronyms**

| Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose; LC: Lethal Concentration; ATE: Acute Toxicity Estimates; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; TG: Test Guideline; NIOSH: National Institute for Occupational Safety and Health; IARC: International Agency for Research on Cancer; NTP: National Toxicology Program; HMIS: Hazardous Material Information System; CAS No.: Chemical Abstract Service Registration Number; EC No.: European Commission Registration Number; EC Index No.: European Commission Index Number; OECD: The Organisation for Economic Co-operation and Development. |

**HMIS III Rating**

| Health | Flammability | Physical |
| 1 Slight Hazard - irritation or minor reversible injury possible | 0 Minimal Hazard | 0 Minimal Hazard |

Prepared by safety and environmental affairs.

**Date of issue: 11/10/2015**

**Version: 1.0**

SDS US (GHS HazCom 2012) - Custom

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
MUSCOVITE
Safety Data Sheet

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