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Manufacturer's CAGE: 1P573

Safety Data Sheet

Date Effective: December 1, 2015

SPI # 01784-MB, 01785-MB, 01786-MB, 01787-MB, 01791-CA, 01791-MB, 01792-AB, 01792-CA, 01792MB, 01804-BA, 01804-CA, 01805-CA, 01805-MB, 01806-MB, 01806A-MB, 01806A-BA, 01868-CA, 01868-MB, 01869-CA, 01869-MB, 01870-CA, 01870-MB, 01871-BA, 01871-CA, 01871-MB, 01872-AB, 01872-CA, 01872-MB, 01873-CA, 01873-MB, 01874-CA, 01874-MB, 01875-CA, 01875-MB, 01876-CA, 01876-MB, 01877-MB, 01878-MB, 01879-MB, 01880-MB, 01900-MB, 01900-CA, 01918-CF, 01920-MB, 01921-MB, 01923-MB, 01923-CA, 01925-MB, 01926-MB
Mica Sheets and Disks

Section 1: Identification

Chemical Name/Synonyms ..... Mica

Product Use.....Substrates for thin film coatings in research and microscopy

Chemical family ..... Potassium alumina silicates

Emergencies
Contacting CHEMTREC:

24 Hour Emergency Use Only #'s...
Within USA and Canada: 1-800-424-9300
Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

Product or Trade Name ..... SPI-Chem™ Mica Sheets and Discs

CAS #'s 12001-26-2

Chemical Formula..... $K_2O.Al_2O_3.SiO_2.2H_2O$

Section 2: Hazard Identification

OSHA CLASSIFICATION / GHS CLASSIFICATION:
This product is considered to be a manufactured article and is not hazardous under its conditions of intended use.

This product does not contain any PBT or vPvB substances.

Hazardous Material Information System USA
- Health 1
- Fire Hazard 0
- Reactivity 0
- Personal Protection .....

NFPA Rating (estimated)

Health	1
Flammability	0
Reactivity	0

Emergency overview:

Supplied in thin sheets, or cut discs. Not considered hazardous. The materials can be cleaved ("micaceous cleavage") to expose freshly cleaved surface, a procedure that is generally not expected to generate a particulates hazard. If the material is cut with a scissors, or scored with a diamond scribe, then it could be expected that particulates would be generated.

Potential Health Hazards:

Skin:

Not considered hazardous, though dust, if generated could be irritating.

Eyes:

Not considered hazardous. May cause mechanical irritation if particles are generated and they should get into the eye.

Inhalation:

Not a route of exposure under normal usage, unless the materials is excessively cut or even ground, to generate dust particles. May be harmful if inhaled over a long period of time and may also cause delayed lung injury. Always avoid breathing dust of this material.

Ingestion:

Not a route of exposure. Not considered hazardous.

Delayed Effects:

None known.

Conditions Aggravated by Exposure:

No known conditions are aggravated by this material.

Effects of Over Exposure:

Shortness of breath or dry cough are the first symptoms. If such symptoms occur, remove to fresh air and contact physician.

Carcinogenicity:

Mica is not listed as a carcinogen or potential carcinogen by the National Toxicology Program of the U. S. Public Health Service, nor has it been found to be a carcinogen or potential carcinogen by OSHA or the International Agency for Research on Cancer. Many commercial micas are contaminated with respirable free silica (quartz) but the high purity mica supplied by SPI Supplies, especially if used as intended will not liberate any such silica, even at low levels.

For Generated Dusts:

RTECS: VV8760000
ACGIH TLV-TWA: 3 mg/m^3, total dust
MSHA STANDARD – air: TWA 20 mppcf (million particles per cubic foot)
OSHA PEL: 8H TWA 20 mppcf, respirable dust
NIOSH Recommended Exposure Level (REL):

NIOSH REL to Silicates (<1% brystalline silica): MICA-air: 10H TWA 3 mg/m^3

Section 3: Composition

INGREDIENT NAME	CAS NUMBER	WEIGHT %
Potassium alumina silicates	**12001-26-2**	**99+%**

Section 4: First Aid Measures

Take proper precautions to ensure your own health and safety before attempting to rescue and providing first aid. For specific information refer to the Emergency Overview in Section of this MSDS.

Skin:

Not hazardous if used as microscopy substrate materials. If particulates are being generated and the skin is contaminated, wash thoroughly with soap and water.

Eyes:
None needed under normal usage. If material comes into contact with the eye, flush eyes with water while holding eyelids apart to ensure complete irrigation. When cleaving, always wear safety glasses.

Inhalation:
None needed under normal usage. If particulates are being generated, then victim should be at once removed to fresh air and if respiratory distress continues, a physician contacted.

Ingestion:
None needed.

Advice to physician:
None

Section 5: Fire Fighting Measures

Flammable Properties

Flash Point: Non-flammable, Non explosive
Flash Point Method: Not applicable.
Autoignition Temperature: Not determined.

Upper flame limit (volume % in air):
Not applicable. Non-volatile solid. Lower flame limit (Volume % in air): Not applicable. Non-volatile solid.

Flame propagation rate (solids):
Not determined.

OSHA Flammability class:
Not determined.

Extinguishing Media:
Not applicable

Unusual Fire and Explosion Hazards:

None known

Special Fire Fighting Precautions/Instructions:
None

Section 6: Accidental Release Measures

In Case of Spill or Other Release:

Always wear recommended personal protective equipment, including safety glasses, lab coat, and respirator if airborne particulates level will exceed exposure limits. Collect and place in a solid waste container. Material is not dangerous if spilled. Wash away with water or vacuum with high efficiency HEPA filter. Powder or flakes of the material could become slippery and constitute a "slip and fall" hazard.

Section 7: Handling and Storage

Normal Handling:
Always wear recommended personal protective equipment, including safety glasses, lab coat, and a respirator if airborne levels of particulates exceed recommended exposure limits.
Use normal personal hygiene and good housekeeping.

Storage Recommendations:
No special recommendations. However, to extend the shelf life of the products, we would recommend that material be stored in dry environment.

Section 8: Exposure Controls and Personal Protection

Engineering Controls:
None needed if material is used as it was intended to be used, that is, as a substrate for microscopy research and testing.

Personal Protective Equipment:
Safety glasses if cleaving or cutting operations are anticipated.

Skin Protection:
Not normally required unless cutting or grinding is contemplated.

Eye Protection:
As a general practice in manufacturing areas, safety glasses that conform to ANSI Z87.1 should be worn.

Respiratory Protection:
Under normal usage, not normally required. A NIOSH/MSHA approved respirator should be worn in areas where the PEL/TLV is exceeded.

Additional Recommendations:
None.

Exposure Guidelines

Exposure Limits: ACGIH: TWA 3 mg/m^3 (resp)

Section 9: Physical and Chemical Properties

Appearance: Semi clear to gray translucent sheets
Physical state: Solid.
Odor: None.
Specific Gravity (water = 1.0): 2.7
Solubility in Water (weight %): None
PH: Not applicable.
Boiling Point: Not applicable.
Melting Point: Not applicable
Vapor Pressure: None at room temperature
Vapor Density (air = 1.0): Not applicable
Evaporation Rate: Does not evaporate or sublime
% Volatiles: Negligible.
Flash Point: Not applicable.

Section 10: Stability and Reactivity

Stability:
Normally stable.

Incompatibilities:
None known.

Hazardous Decomposition Products:
Will not occur.

Hazardous Polymerization:
Will not occur.

Section 11: Toxicological Information

Immediate (Acute) Effects:
Not determined.

Delayed (Subchronic and Chronic) Effects:
None known.

Other Data:

None.

Section 12: Ecological Information

Exotoxicity:
Exotoxicity is expected to be low based on the zero water solubility of the material. Material is considered inert and not expected to be biodegradable or toxic.

Bioaccumulation:
Not expected to occur.

Section 13: Disposal Considerations

RCRA

Is the unused product a RCRA hazardous waste if discarded? No.

Other Disposal Considerations:

Dispose of in compliance with Federal, state and local government regulations. Usually considered an inert packaging material that can be recycled or landfilled.

The information offered here is for the product as shipped. Use and/or alterations to the product such as mixing with other materials may significantly change the characteristics of the material and alter the RCRA classification and the proper disposal method.

Section 14: Transport Information

US DOT Hazard Class: Not regulated.
US DOT ID Number: Not applicable, none assigned.

Section 15: Regulatory Information

Toxic Substances Control Act (TSCA)
TSCA Inventory Status: Listed on the TSCA Inventory.

Other TSCA Issues: None.

SARA TITLE III/CERCLA: None

INGREDIENT NAME SARA/CERCLA RQ (lb) SARA EHS TPQ (lb)
No ingredients listed in this section.

INGREDIENT NAME COMMENT
No ingredients listed in this section.

State Right-To-Know
Mica is listed in the Pennsylvania and Massachusetts Right-To-Know Lists.

California Prop. 65: None present

WHMIS Classification (CANADA):
Not a controlled substance. (Considered to be a manufactured article.)

European Classification:
Not a controlled substance. (Considered to be a manufactured article.)

Section 16: Other Information

Disclaimer of Liability:

Caution! Do not use SPI Supplies products or materials in applications involving implantation within the body; direct or indirect contact with the blood pathway; contact with bone, tissue, tissue fluid, or blood; or prolonged contact with mucous membranes. Products offered by SPI Supplies are not designed or manufactured for use in implantation in the human body or in contact with internal body fluids or tissues. SPI Supplies will not provide to customers making devices for such applications any notice, certification, or information necessary for such medical device use required by US FDA (Food and Drug Administration) regulation or any other statute. SPI Supplies and Structure Probe, Inc. make no representation, promise, express warranty or implied warranty concerning the suitability of these materials for use in implantation in the human body or in contact with internal body tissues of fluids.

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