U.S. SILICA COMPANY
SAFETY DATA SHEET

1. IDENTIFICATION

Product identifier: FLORISIL®, Grades A, B, PR
(FLORISIL® is a registered trademark of U.S. Silica Company

Chemical Name or Synonym:
Silicic Acid, Magnesium Salt

Recommended use of the chemical and restrictions on use: (non-exhaustive list) chromatography; decolorization of oils, fats, and waxes; catalytic agent, thin layer chromatography

Manufacturer:
U.S. Silica Company
24275 Katy Freeway, Suite 600
Katy, TX 77494
U.S.A

Phone: 800-243-7500
Emergency Phone: 301-682-0600
Fax: 301-682-0690

2. HAZARD(S) IDENTIFICATION

Classification:

Physical	Health
Not Hazardous	Not Hazardous

Label Elements: Not hazardous in accordance with the OSHA Hazard Communication Standard 29CFR1910.1200 (2012) or Canadian WHMIS.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS No.	Percent
Silicic Acid, Magnesium Salt (magnesium silicate)	1343-88-0	99-100%

4. FIRST-AID MEASURES

Inhalation: First aid is not generally required. If irritation develops from breathing dust, move the person from the overexposure and seek medical attention if needed.
Skin contact: First aid is not required.
Eye contact: Wash immediately with plenty of water. Do not rub eyes. If irritation persists, seek medical attention.
Ingestion: First aid is not required.
Most important symptoms/effects, acute and delayed: Particulates may cause abrasive eye injury. Inhalation of dust may cause respiratory tract irritation. Symptoms of exposure may include cough, sore throat, nasal congestion, and sneezing.
Indication of immediate medical attention and special treatment, if necessary: Immediate medical attention is not required.

5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media: Use extinguishing media appropriate for surrounding fire.

Specific hazards arising from the chemical: Product is not flammable, combustible or explosive.

Special protective equipment and precautions for fire-fighters: None required.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures: Wear appropriate protective clothing and respiratory protection (see Section 8). Avoid generating airborne dust during clean-up.

Environmental precautions: No specific precautions. Report releases to regulatory authorities if required by local, state and federal regulations.

Methods and materials for containment and cleaning up: Avoid dry sweeping. Do not use compressed air to clean spilled product. Use water spraying/flushing, vacuum, or wet before sweeping.

7. HANDLING AND STORAGE

Precautions for safe handling:
Avoid generating and breathing dust. Avoid contact with eyes.

Conditions for safe storage, including any incompatibilities: No special storage required.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure guidelines:

Component	OSHA PEL	ACGIH TLV	NIOSH REL
Silicic Acid, Magnesium Salt (magnesium silicate) (as particulates not otherwise classified)	5 mg/m3 TWA (respirable dust) 15 mg/m3 TWA (total dust)	None Established	None Established

Appropriate engineering controls: Use adequate general or local exhaust ventilation to maintain concentrations in the workplace below the applicable exposure limits listed above.

Respiratory protection: If it is not possible to reduce airborne exposure levels to below the OSHA PEL or other applicable limit with ventilation, use the table below to assist you in selecting respirators that will reduce personal exposures to below the OSHA PEL. This table is part of the OSHA Respirator Standard 29CFR1910.134(d). ***Assigned protection factor (APF)*** means the workplace level of respiratory protection that a respirator or class of respirators is expected to provide to employees when the employer implements a continuing, effective respiratory protection program as specified by the Standard. For example, an APF of 10 means that the respirator should reduce the airborne concentration of a particulate by a factor of 10, so that if the workplace concentration of a particulate was 150 ug/m3, then a respirator with an APF of 10 should reduce the concentration of particulate to 15 ug/m3. In additional a cartridge change-out schedule must be developed based on the concentrations in the workplace.

1. -- Assigned Protection Factors[5]

Type of respirator[1], [2]	Quarter mask	Half mask	Full facepiece	Helmet/ hood	Loose-fitting facepiece
1. Air-Purifying Respirator	5	[3]10	50	.....	.....
2. Powered Air-Purifying Respirator (PAPR)	.....	50	1,000	[4]25/1,000	25
3. Supplied-Air Respirator (SAR) or Airline Respirator					
• Demand mode	.....	10	50	.....	.....
• Continuous flow mode	.....	50	1,000	[4]25/1,000	25
• Pressure-demand or other positive-pressure mode	.....	50	1,000	.....	.....
4. Self-Contained Breathing Apparatus (SCBA)					
• Demand mode	.....	10	50	50	.....
• Pressure-demand or other positive-pressure mode (e.g., open/closed circuit)	.....	.....	10,000	10,000	.....

Notes:

[1]Employers may select respirators assigned for use in higher workplace concentrations of a hazardous substance for use at lower concentrations of that substance, or when required respirator use is independent of concentration.

[2]The assigned protection factors in Table 1 are only effective when the employer implements a continuing, effective respirator program as required by this section (29 CFR 1910.134), including training, fit testing, maintenance, and use requirements.

[3]This APF category includes filtering facepieces, and half masks with elastomeric facepieces.

[4]The employer must have evidence provided by the respirator manufacturer that testing of these respirators demonstrates performance at a level of protection of 1,000 or greater to receive an APF of 1,000. This level of performance can best be demonstrated by performing a WPF or SWPF study or equivalent testing. Absent such testing, all other PAPRs and SARs with helmets/hoods are to be treated as loose-fitting facepiece respirators, and receive an APF of 25.

[5]These APFs do not apply to respirators used solely for escape. For escape respirators used in association with specific substances covered by 29 CFR 1910 subpart Z, employers must refer to the appropriate substance-specific standards in that subpart. Escape respirators for other IDLH atmospheres are specified by 29 CFR 1910.134 (d)(2)(ii).

Skin protection: Maintain good industrial hygiene. Protection recommended for workers suffering from dermatitis or sensitive skin.

Eye protection: Safety glasses with side shields or goggles recommended if eye contact is anticipated.

Other: None known.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White grain or powder.

Physical state: Solid	**Color:** White
Odor: Odorless	**pH:** Not applicable
Melting point/freezing point: Not determined	**Boiling point/range:** Not determined
Flash point: Not applicable	**Evaporation rate:** Not applicable
Flammable limits: LEL: Not applicable	**UEL:** Not applicable
Vapor pressure: Not applicable	**Relative vapor density:** Not applicable
Density: 2.51 g/cc	**Solubility(ies):** Insoluble in water. Soluble in hydrofluoric acid.
Partition coefficient: n-octanol/water: N/A	**Auto-ignition temperature:** Not applicable
Decomposition temperature: Not determined	**Flammability:** Not applicable
Particle characteristics: Not determined	**Kinematic viscosity:** Not applicable

10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal conditions of use.
Chemical stability: Stable
Possibility of hazardous reactions: Contact with powerful oxidizing agents, such as fluorine, chlorine trifluoride and oxygen difluoride, may cause fires.
Conditions to avoid: Avoid generation of dust in handling and use.
Incompatible materials: Powerful oxidizers such as fluorine, chlorine trifluoride, and oxygen difluoride and hydrofluoric acid.
Hazardous decomposition products: FLORISIL® will dissolve in hydrofluoric acid and produce a corrosive gas, silicon tetrafluoride.

11. TOXICOLOGICAL INFORMATION

Acute effects of exposure:
Inhalation: Inhalation of dust may cause respiratory tract irritation. Symptoms of exposure may include cough, sore throat, nasal congestion, and sneezing.
Ingestion: Ingestion in an unlikely route of exposure. If dust is swallowed, it may irritate the mouth and throat.
Skin contact: No adverse effects are expected.
Eye contact: Particulates may cause abrasive injury.

Chronic effects: None known.

Numerical measures of toxicity:
Silicic Acid, Magnesium Salt: LD50 oral rat >5000 mg/kg. LD50 dermal rabbit >2000 mg/kg (no adverse effects were observed at maximum dose). LC50 inhalation rat >20 mg/L/1 hour (no adverse effects were observed).

12. ECOLOGICAL INFORMATION

Ecotoxicity: Silicic Acid, Magnesium Salt: Based on test data for a similar substance, this material is not expected to be toxic to aquatic organisms..
Persistence and degradability: Silicic Acid, Magnesium Salt is not degradable.
Bioaccumulative potential: Silicic Acid, Magnesium Salt is not bioaccumulative.
Mobility in soil: Silicic Acid, Magnesium Salt is not mobile in soil.

Other adverse effects: No data available

13. DISPOSAL CONSIDERATIONS

Discard any product, residue, disposable container or liner in full compliance with national regulations.

14. TRANSPORT INFORMATION

The following applies to all modes of transportation.

UN number: None
UN proper shipping name: Not regulated
Transport hazard classes(es): None
Packing group, if applicable: None
Environmental hazards: None

Transport in bulk according to IMO instruments: Not determined
Special precautions: None known.

15. REGULATORY INFORMATION

UNITED STATES (FEDERAL AND STATE)

TSCA Status: All ingredients are listed on the EPA TSCA inventory or exempt.

RCRA: This product is not classified as a hazardous waste under the Resource Conservation and Recovery Act, or its regulations, 40 CFR §261 et seq.

CERCLA: This product is not classified as a hazardous substance under regulations of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 40 CFR §302.

Emergency Planning and Community Right to Know Act (SARA Title III): This product contains the following chemicals subject to SARA 302 or SARA 313 reporting: None above the de minimus concentrations.

Clean Air Act: This product is not processed with or does not contain any Class I or Class II ozone depleting substances.

California Proposition 65: This product does not contain listed substances.

CANADA

Domestic Substances List: U. S. Silica Company products, as naturally occurring substances, are on the Canadian DSL.

OTHER NATIONAL INVENTORIES

Australian Inventory of Industrial Chemicals (AIIC): All of the components of this product are listed on the AICS inventory or exempt from notification requirements.

China: All of the components of this product are listed on the IECSC inventory or exempt from notification requirements.

Japan Ministry of International Trade and Industry (MITI): All of the components of this product are existing chemical substances as defined in the Chemical Substance Control Law Registry

Korea Existing Chemicals Inventory (KECI) (set up under the Toxic Chemical Control Law):
Listed on the ECL.

New Zealand: All of the components of this product are listed on the HSNO inventory or exempt from notification requirements.

Philippines Inventory of Chemicals and Chemical Substances (PICCS): Listed for PICCS.

Taiwan: All of the components of this product are listed on the CSNN inventory or exempt from notification requirements.

16. OTHER INFORMATION

Date of preparation/revision: March 26, 2025 – Update to OSHA Hazardous Communication Standard 2024

Hazardous Material Information System (HMIS):
Health 0
Flammability 0
Physical Hazard 0
Protective Equipment None Required
* For further information on health effects, see Sections 2, 8 and 11 of this SDS.

National Fire Protection Association (NFPA):
Health 0
Flammability 0
Instability 0

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