

SAFETY DATA SHEET

Date Printed: 05/20/2024

Date Revised: 01/15/2022

SECTION 1. IDENTIFICATION

Product Identifier: (5N) 99.999% Magnesium Hexafluorosilicate

Product Code: MG-FSIAT6-05

CAS Number: 16949-65-8

Relevant identified uses of the substance: Scientific research and development

Supplier details:

American Elements
10884 Weyburn Ave.
Los Angeles, CA 90024
Tel: +1 310-208-0551
Fax: +1 310-208-0351
Emergency telephone number:
+1 800-424-9300

SECTION 2. HAZARDS IDENTIFICATION

Statement of Hazard: Contact with acids liberates very toxic gas, Irritant, Respiratory irritant, Toxic

Acute Health Hazard: Irritant to eyes, skin, mucous membranes and respiratory system. May be toxic by ingestion, harmful by skin absorption, and fatal by inhalation.

Chronic Health Hazard: Not Available

HMIS Rating: H: 3 F: 0 P: 0

NFPA Rating: H: 3 F: 0 P: 0

To the best of our knowledge, the toxicological properties of this chemical have not been thoroughly investigated. Use appropriate procedures and precautions to prevent or minimize exposure.

Pictogram:



Signal Word: Danger

Hazard Statement(s): H301 Toxic if swallowed.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H330 Fatal if inhaled.

H335 May cause respiratory irritation.

Precautionary Statement(s): P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P284 Wear respiratory protection.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P302+P352 IF ON SKIN: wash with plenty of soap and water.

P304+P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P313 IF SKIN irritation occurs: Get medical advice/attention.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P406 Store in corrosive resistant/ [] container with a resistant inner liner.

P420 Store away from other materials.

Supplemental Statement(s): EUH032 Contact with acids liberates very toxic gas

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name: Magnesium silicofluoride 98%

CAS Number:

MDL Number:

EINECS Number:

Beilstein Registry Number:

Molecular Formula:

Molecular Weight:

Content: As specified in product name.

16949-65-8

MFCD00016196

241-022-2

Not Available

MgSiF₆ · 6H₂O

274.41

SECTION 4. FIRST AID MEASURES

Eye Contact: Flush eyes with large amounts of water for fifteen minutes. Separate eyelids with fingers. If irritation persists, seek medical attention.

Skin Contact: Wash skin with soap and water. If irritation persists, seek medical attention.

Ingestion: Do not induce vomiting. Seek medical attention.

Inhalation: Move to a fresh air environment. Contact a physician if breathing becomes difficult.

SECTION 5. FIREFIGHTING MEASURES

Flash Point (°C):

Explosion Limits:

Not Available

Not Available

Auto Ignition

Temperature (°C):

Not Available

Carbon dioxide, dry chemical powder, alcohol-resistant foam, or water spray

Extinguishing Media:

Protective Equipment:

Specific Hazards:

Wear self-contained respirator and fully protective impervious suit.

May emit hazardous fumes under fire conditions.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Protection: Wear a self-contained breathing apparatus, rubber boots and gloves, and disposable coveralls. Dispose of coveralls after use. Remove from ignition sources if safe to do so. Follow emergency response plan and contact proper authorities if needed.

Keep unprotected persons away.

Environmental Protection: Keep spills out of sewers and bodies of water. Dike and contain the spill with inert material. Absorb on sand, vermiculite or diatomite.

Transfer material to a container for disposal or recovery. Ventilate area and wash spill site after material pickup is complete.

SECTION 7. HANDLING AND STORAGE

Handling and Storage: Avoid breathing dust, vapor, mist or gas. Avoid contact with skin and eyes. Avoid prolonged or repeated exposure. Use only in a chemical fume hood. Open and handle container with care. Keep ignition sources away.

Store in a tightly closed container in a dry, well-ventilated place.

Sensitivities: Not Available

Storage Temperature (°C):

15 to 30

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Use product in a well ventilated area or under a fume hood. Use proper lab equipment while handling this product. Keep away from incompatible materials for possible risk of hazardous reaction.

Eye Protection: Wear appropriate protective eyeglass or chemical safety goggles. Make sure that there is an eyewash station in your vicinity.

Skin Protection: Wear impervious gloves and protective clothing.

Respiratory Protection: Use a NIOSH approved respirator when exposure limits are exceeded or if irritation or other symptoms are experienced.

Exposure Limits: Country Source Type Value

USA

USA

USA

ACGIH

OSHA

OSHA

TWA

STEL

PEL

3 mg/m³

Not Available

3 mg/m³

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White crystalline powder

Odor: Not Available

Odor Threshold: Not Available

Flash Point (°C): Not Available

Autoignition (°C): Not Available

UEL % by Volume:

LEL % by Volume:

Melting Point (°C): 120

Boiling Point (°C): 212

Evaporation Rate: Not Available

pH Value: Not Available

Density (g/cm³): 1.788

Refractive Index (n_D²⁰): Not Available

Viscosity: Not Available

Solubility in Water: Soluble

Solubility in Other: Not Available

Vapor Pressure (mmHg): Not Available

Vapor Density (Air=1): Not Available

SECTION 10. STABILITY AND REACTIVITY

Stability: Stable under normal temperatures and pressures.

Incompatibility: Strong oxidizing agents, Acids, Strong reducing agents

Reactivity: Product may react with incompatible materials to release other hazardous substances.

Conditions to Avoid: Heat, flame, sparks, other ignition sources.

Hazardous Decomposition Products:

Hydrogen fluoride gas, Magnesium oxides, Silicon oxides

SECTION 11. TOXICOLOGICAL INFORMATION

RTECS Reference:

Target Organs: Not Available

Not Available

Toxicity Data: Not Available

National Toxicology Program (NTP) listed:

Not Available

Carcinogenicity:

International Agency for Research on Cancer (IARC) listed:

Not Available

Potential Symptoms: Not Available

SECTION 12. ECOLOGICAL INFORMATION

Toxicity: Not Available

SECTION 13. DISPOSAL CONSIDERATIONS

Contact a licensed professional waste disposal service. Dispose in a manner consistent with federal, state and local environmental regulations.

SECTION 14. TRANSPORT INFORMATION

DOT Shipping Name: Magnesium Fluorosilicate

DOT UN Number: UN2853

DOT Hazard Class: Class 6.1

DOT Packing Group: PGIII

IMDG: Magnesium Fluorosilicate

IMDG UN Number: UN2853

IMDG Hazard Class: Class 6.1

IMDG Packing Group: PGIII

Marine Pollutant: No

IATA: Magnesium Fluorosilicate

IATA UN Number: UN2853

IATA Hazard Class: Class 6.1

IATA Packing Group: PGIII

SECTION 15. REGULATORY INFORMATION

United States

Superfund Amendments and Reauthorization Act (SARA 313) listed: No

European Union

European Inventory of Existing Chemical Substances (EINECS): 241-022-2

Canada

Canadian Non-Domestic Substances List (NDSL) listed: No

Toxic Substance Control Act (TSCA) listed: Yes

Superfund Amendments and Reauthorization Act (SARA 302) listed: No

Superfund Amendments and Reauthorization Act (SARA 311/312) listed: No
Canadian Domestic Substances List (DSL) listed: Yes

16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.