

# AWSM Industries, LLC

## MATERIAL SAFETY DATA SHEET

### MAGNESIUM SILICOFLUORIDE

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#### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

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**PRODUCT NAME:** Magnesium Silicofluoride  
**OTHER/GENERIC NAMES:** Magnesium Fluorosilicate  
**PRODUCT CODES:** ACH-38130-00  
**PRODUCT USE:** Industrial  
**DISTRIBUTOR:** AWSM Industries, LLC  
12 Route 17 North, Suite 309  
Paramus, NJ 07652

**TELEPHONE:** (201) 845-4666  
(Monday-Friday, 8:30 AM – 5:00 PM)

**CHEMTREC PHONE:** 1800-424-9300  
(24 Hours/Day, 7 Days/Week)

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#### SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

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<u>INGREDIENT NAME:</u>	<u>CAS NO.</u>	<u>% WT</u>
Magnesium Silicofluoride	16949-65-8	98 +

Trace impurities and additional material names not listed above may also appear in Section 15 towards the end of the MSDS. These materials may be listed for local "Right-to-Know" compliance and for other reasons.

**OSHA Hazard Communication Standard:** *This product is considered hazardous under the OSHA Hazard Communication Standard*

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#### SECTION 3: HAZARDS IDENTIFICATION

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**EMERGENCY OVERVIEW:** A colorless, odorless solid that is toxic if swallowed or inhaled. Causes eye irritation with risk of serious eye damage. May cause allergic skin reaction. Contact with acids liberates toxic hydrogen fluoride gas.

#### POTENTIAL HEALTH HAZARDS

**EYES:** May cause severe irritation of eyes  
**SKIN:** May cause severe irritation of the skin.  
**INGESTION:** MAY BE FATAL IF LARGE AMOUNTS ARE INGESTED. May cause abdominal pain diarrhea, vomiting, excess salivation, and painful spasms of the limbs.  
**INHALATION:** May cause severe irritation of the mucous membranes and respiratory tract and bronchospasms.  
**DELAYED EFFECTS:** Chronic exposure may cause fluorosis.

Ingredients found on one of the three OSHA designated carcinogen lists are listed below.

<u>INGREDIENT NAME</u>	<u>NTP STATUS</u>	<u>IARC STATUS</u>	<u>OSHA LIST</u>
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No ingredients listed in this section

**Chronic and Carcinogenicity:** Prolonged exposure may cause dermatitis. The product has not been identified as a carcinogen or potential carcinogen. Pre-existing skin, lung, central nervous system, and kidney conditions may be aggravated by exposure to the components of the product. Exposure to fluorides at concentrations well above the TLV or PEL may cause a chronic bony fluorosis. See Section 11.

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#### **SECTION 4: FIRST AID MEASURES**

**SKIN:** Wash thoroughly with mild soap and water. Seek medical attention if irritation or chemical burns develop. Remove any contaminated clothing and launder thoroughly before reuse.

**EYES:** Flush with tepid water for at least 20 minutes holding the eyelids wide open. Seek medical attention.

**INHALATION:** Remove exposed person to fresh air. If breathing is difficult, oxygen may be administered. If breathing has stopped, artificial respiration should be started immediately. Seek medical attention.

**INGESTION:** SEEK IMMEDIATE MEDICAL ATTENTION. Give water to dilute. Do not induce vomiting unless directed by licensed medical personnel. Advise medical personnel of possible fluoride exposure. Never give anything by mouth to an unconscious individual.

**ADVICE TO PHYSICIAN:** Treat symptomatically.

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#### **SECTION 5: FIRE-FIGHTING MEASURES**

##### **FLAMMABLE PROPERTIES**

<b>FLASH POINT:</b>	Not flammable
<b>FLASH POINT METHOD:</b>	Not applicable
<b>AUTOIGNITION TEMPERATURE:</b>	Not applicable
<b>UPPER FLAME LIMIT (volume % in air)</b>	Not applicable
<b>LOWER FLAME LIMIT (volume % in air)</b>	Not applicable
<b>FLAME PROPAGATION RATE (solids)</b>	Not applicable

##### **EXTINGUISHING MEDIA:**

If involved in a fire, use water.

##### **SPECIAL FIRE FIGHTING PRECAUTIONS/INSTRUCTIONS:**

As in any fire, wear self-contained breathing apparatus (SCBA) (MSHA/NIOSH) approved or equivalent and full protective equipment. Use water to keep fire-exposed containers cool.

Although this product will not burn, at temperatures over 100 °C it will decompose into very toxic fluoride fumes. Fire fighters should avoid all bodily contact and wear full protective gear. Material in or near fires should be cooled with a water spray or fog if compatible with fire fighting techniques for the other materials involved in the fire. A self-contained breathing apparatus operating in the positive pressure mode and full fire fighting gear should be worn for combating fires. Water used to fight fires should be contained. See Section 12.

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#### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

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**IN CASE OF SPILL OR OTHER RELEASE:** (Always wear recommended personal protective equipment.)  
Provide ventilation to spill area. Collect and place in an approved, labeled waste container. Avoid raising dust. Do not allow to enter into sewers or waterways.

Spills and releases may have to be reported to Federal and/or local authorities. See section 15 regarding reporting requirements.

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#### **SECTION 7: HANDLING AND STORAGE**

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Do not store with or near incompatible materials cited in Section 10. Store in tightly closed containers out of contact with the elements. Appropriate personal protective equipment cited in Section 8 should be worn during handling. Good housekeeping and engineering practices should be employed to prevent the generation and accumulation of dusts. Wash hands and face thoroughly before eating, drinking or smoking.

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#### **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

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##### **ENGINEERING CONTROLS:**

Local exhaust ventilation should be provided to maintain exposures below the limits cited in Section 2. Design details for local exhaust ventilation systems may be found in the latest edition of "Industrial Ventilation: A Manual of Recommended Practice" published by the ACGIH Committee on Industrial Ventilation, PO Box 16153, Lansing, MI, 48910. The need for local exhaust ventilation should be evaluated by a professional industrial hygienist. Local exhaust systems should be designed by a professional engineer.

##### **PERSONAL PROTECTIVE EQUIPMENT**

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|---------------------------------|--|
| <b>EYE PROTECTION:</b>          | Chemical protective goggles are recommended where there is the possibility of eye contact with the product. Safety glasses with side-shields are recommended for all other operations.   |
| <b>RESPIRATORY PROTECTION:</b>  | If exposures may exceed the limits cited in Section 2, use, as a minimum, a NIOSH approved ½ face-piece respirator with cartridges approved for particulate matter with an exposure limit of not less than 0.05 mg/M3. If exposures exceed 10 times the limits cited in Section 2, consult your respiratory protection equipment supplier or a professional industrial hygienist for selection of the proper equipment. The evaluation of the need for respiratory protection should be made by a professional industrial hygienist. |
| <b>GENERAL RECOMMENDATIONS:</b> | A polymeric coated apron or other body covering is recommended where regular work clothing may become contaminated with the product. All soiled or dirty clothing and personal protective equipment should be thoroughly cleaned before reuse.   |
| <b>PROTECTIVE GLOVES:</b>       | Polymeric gloves are recommended to prevent possible irritation. PVC, neoprene, or similar materials are recommended.  |

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**EXPOSURE GUIDELINES:**

<u>INGREDIENT NAME</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>OTHER LIMIT</u>
Magnesium Silicofluoride	2.5 (As F-)	2.5 (As F-)	-----

<sup>1</sup> = Limit established by Industry Standard.

<sup>2</sup> = Workplace Environmental Exposure Level (AIHA).

<sup>3</sup> = Biological Exposure Index (ACGIH).

**OTHER EXPOSURE LIMITS FOR POTENTIAL DECOMPOSITION PRODUCTS:**

None

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**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

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<b>APPEARANCE:</b>	White Granular Crystals
<b>PHYSICAL STATE:</b>	Solid
<b>ODOR:</b>	Odorless
<b>SPECIFIC GRAVITY (H<sub>2</sub>O = 1):</b>	1.79/cc
<b>SOLUBILITY IN WATER (weight %):</b>	64.8 g/100 g at 64 °F
<b>pH:</b>	3.1 (1 % Aqueous Solution)
<b>BOILING POINT:</b>	Not applicable
<b>MELTING POINT:</b>	248 °F (120 °C) Decomposes
<b>VAPOR PRESSURE:</b>	Not applicable
<b>VAPOR DENSITY (air= 1.0):</b>	Not applicable
<b>EVAPORATION RATE:</b>	Not applicable
<b>% VOLATILES:</b>	Not Volatile

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**SECTION 10: STABILITY AND REACTIVITY**

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**NORMALLY STABLE:**

Product is stable. Hazardous polymerization will not occur.

**INCOMPATIBILITIES:**

Do not store with or near strong acids or alkaline materials. Avoid contact with iron-containing materials. May react with strong mineral acids to liberate hydrogen fluoride or hydrofluoric acid which are highly toxic and corrosive.

**HAZARDOUS DECOMPOSITION PRODUCTS:**

Toxic and corrosive fluoride gases.

**SPECIAL SENSITIVITY:**

None that are known.

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**SECTION 11: TOXICOLOGICAL INFORMATION**

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The acute lethal oral toxicity for rats is approximately 125 mg per kilogram oral rat.

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**SECTION 12: ECOLOGICAL INFORMATION**

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Fluorides can be highly toxic to aquatic and terrestrial flora and fauna. Care should be taken to prevent the product from entering the environment.

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**SECTION 13: DISPOSAL CONSIDERATIONS**

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It should be disposed of in an EPA approved landfill in accordance with all local, state, and federal regulations. If used or waste product is disposed of, testing, including TCLP, should be conducted to determine hazard characteristics. Empty containers will contain product residues. Do not use for any purpose other than to store product.

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**SECTION 14: TRANSPORT INFORMATION**

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**US DOT HAZARD CLASS:** 6.1, PG III  
**US DOT ID NUMBER:** UN 2853  
**PROPER SHIPPING NAME:** Magnesium Fluosilicate  
**LABEL:** Toxic.

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**SECTION 15: REGULATORY INFORMATION**

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This product is not reportable under Section 313 of the Superfund Amendments and Reauthorization Act of 1986.

**OSHA Hazard Communication Categories:** Irritant, Lung Hazard, Skin Hazard, Kidney Hazard.

**SARA Hazard Categories:** Acute Hazard, Chronic Hazard.

All components of the product are included in the Toxic Substances Control Act (TSCA) Inventory.

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**SECTION 16: OTHER INFORMATION**

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**CURRENT ISSUE DATE:** SEPTEMBER, 2005  
**PREVIOUS ISSUE DATE:** JANUARY 1, 2005

**CHANGES TO MSDS FROM PREVIOUS ISSUE DATE ARE DUE TO THE FOLLOWING:**  
New Format.

OTHER INFORMATION:

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