

AWSM Industries, LLC
MATERIAL SAFETY DATA SHEET
SODIUM SILICOFLUORIDE

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Sodium Silicofluoride

OTHER/GENERIC NAMES: Sodium Fluorosilicate, Sodium Hexafluorosilicate.

PRODUCT CODES: ACH-38191-06

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)

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENT NAME:</u>	<u>CAS NO.</u>	<u>% WT</u>
Sodium Silicofluoride	16893-85-9	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*

SECTION 3: HAZARDS IDENTIFICATION

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. In the event of fire, material can release toxic hydrogen fluoride gas.

POTENTIAL HEALTH HAZARDS

EYES: May cause irritation of eyes

SKIN: May cause irritation of the skin.

SKIN ABSORPTION: Not know to be absorbed through the intact 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 irritation of the mucous membranes and respiratory tract and bronchospasms. May be toxic if inhaled.

DELAYED EFFECTS: None reported.

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

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INGREDIENT NAME**NTP STATUS****IARC STATUS****OSHA LIST**

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.

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: 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.

INGESTION: SEEK MEDICAL ATTENTION IMMEDIATELY. Give water to dilute. Do not induce vomiting unless directed by licensed medical personnel. Advise medical personnel of possible fluoride exposure.

ADVICE TO PHYSICIAN: Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT:	Not flammable
FLASH POINT METHOD:	Not applicable
AUTOIGNITION TEMPERATURE:	Not applicable
UPPER FLAME LIMIT (volume % in air)	Not applicable
LOWER FLAME LIMIT (volume % in air)	Not applicable
FLAME PROPAGATION RATE (solids)	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. If exposed to fire or excessive heat, product can release toxic hydrogen fluoride gas.

Product will not burn. 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

Pick up released product with appropriate implements and return to original container if reusable. If not reusable, place in appropriate containers for disposal. Appropriate personal protective equipment cited in Section 8 should be worn during all clean-up operations. Material collected during clean-up operations may be contaminated and should be treated as hazardous unless specific testing, including TCLP shows the collected material to be non-hazardous. Releases may be reportable to local, state, and /or federal authorities. See Sections 12 & 15.

SECTION 7: HANDLING AND STORAGE

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. Wet mopping or vacuuming is recommended to clean up any dusts that may be generated during handling and processing. Wash hands and face thoroughly before eating, drinking or smoking.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

EYE PROTECTION: 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.

RESPIRATORY PROTECTION: 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.

GENERAL RECOMMENDATIONS: 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.

PROTECTIVE GLOVES: Polymeric gloves are recommended to prevent possible irritation. PVC, neoprene, or similar materials are recommended.

EXPOSURE GUIDELINES:

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<u>INGREDIENT NAME</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>OTHER LIMIT</u>
Sodium Silicofluoride	2.5 mg/m ³	2.5 mg/m ³	-----

¹ = Limit established by Industry Standard.

² = Workplace Environmental Exposure Level (AIHA).

³ = Biological Exposure Index (ACGIH).

OTHER EXPOSURE LIMITS FOR POTENTIAL DECOMPOSITION PRODUCTS:

None

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	White Powder
PHYSICAL STATE:	Solid
ODOR:	Odorless
SPECIFIC GRAVITY (H₂O = 1):	85-90 lb./ft ³
SOLUBILITY IN WATER (weight %):	0.65 g/100 g at 63 °F
pH:	6.5 – 7.5 (Saturated Solution)
BOILING POINT:	Not applicable
MELTING POINT:	Decomposes at 932 °F (500 °C)
VAPOR PRESSURE:	Not applicable
VAPOR DENSITY (air= 1.0):	Not applicable
EVAPORATION RATE:	Not applicable
% VOLATILES:	Not Volatile

SECTION 10: STABILITY AND REACTIVITY

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

The acute lethal oral toxicity for rats is approximately 125 mg per kilogram of body weight. This is equivalent to approximately 6.5 grams for the average human. Chronic bony fluorosis is a very rare condition and is not expected to develop if exposures are maintained below mandated or recommended exposure limits.

SECTION 12: ECOLOGICAL INFORMATION

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

SECTION 13: DISPOSAL CONSIDERATIONS

As supplied, product is considered non-hazardous. 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.

SECTION 14: TRANSPORT INFORMATION

US DOT HAZARD CLASS: 6.1, PG III
US DOT ID NUMBER: UN 2674
PROPER SHIPPING NAME: Sodium Fluorosilicate
LABEL: Toxic.

SECTION 15: REGULATORY INFORMATION

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.

The Reportable Quantity (RQ) for releases to the environment is 1,000 pounds.

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

SECTION 16: OTHER INFORMATION

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

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CHANGES TO MSDS FROM PREVIOUS ISSUE DATE ARE DUE TO THE FOLLOWING:

New Format.

OTHER INFORMATION:

All information, statements, data, advice and/or recommendations, including, without limitation, those relating to storage, loading/unloading, piping and transportation (collectively referred to herein as "information") are believed to be accurate and reliable. However, no representation or warranty, express or implied, is made as to its completeness, accuracy, fitness or a particular purpose or any other matter, including, including, without limitation, that the practice of application of any such information is free of patent infringement or other intellectual property misappropriation. AWSM Industries, LLC is not engaged in the business of providing technical, operational, engineering or safety information for a fee, and therefore, any such information provided herein has been furnished as an accommodation and without charge. All information provided herein is intended for use by persons having requisite knowledge, skill and experience in the chemical industry. AWSM Industries, LLC shall not be responsible or liable for the use, application or implementation of the information, provided herein, and all such information is to be used at the risk, and in the sole judgment and discretion, of such persons, their employees, advisors, and agents.

Date Created	Created By	Replaces	Area	Product/ Process	Special
9/27/05	JD	01/01/05	MSDS	SSF	SMC