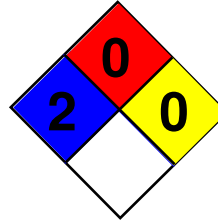


Sodium Aluminum Tetrafluoride

In an emergency, call CHEMTREC at 800-424-9300 or MEMC Pasadena at 713-740-1501

NaAlF ₄	
HEALTH	2
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	



SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name:	Sodium Aluminum Tetrafluoride
Chemical Name:	Sodium Tetrafluoroaluminate
Chemical Formula:	NaAlF ₄
Synonyms:	SAF, Aluminate tetrafluorosodium, Aluminate (1-), Tetrafluoro-, sodium, (T-4)
Company Name:	MEMC Pasadena 3000 N. South Street Pasadena, Texas 77503 713-740-1501

SECTION 2: COMPOSITION & INFORMATION ON INGREDIENTS

Substance Name	Contents	CAS No.	OSHA PEL	ACGIH TLV
Sodium Aluminum Tetrafluoride	100%	13821-15-3	2.5 mg/m ³ as Fluoride	2.5 mg/m ³ as Fluoride

SECTION 3: HAZARDS IDENTIFICATION

NFPA 704 Rating:	Health 2, Fire 0, Reactivity 0, Special None
Skin Contact:	Causes skin irritation. Repeated or prolonged skin contact may cause dermatitis due to dryness of powder.
Eye Contact:	Causes eye irritation.
Ingestion:	Toxic and irritating to the gastrointestinal tract. May react with gastric acid to produce highly corrosive hydrogen fluoride.
Inhalation:	Irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.

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SECTION 4: FIRST AID MEASURES

Inhalation:	Remove to fresh air. If breathing is difficult, give oxygen and seek medical attention.
Eye Contact:	Flush with copious amounts of water for at least 15 minutes. If irritation persists, seek medical attention.
Skin Contact:	Remove contaminated clothing. Wash affected area with soap and water. Rinse thoroughly. If irritation persists or other symptoms are observed, seek medical advice.
Ingestion:	Rinse out mouth and drink copious amounts of water. In case of irritation or other symptoms, seek medical attention.

SECTION 5: FIRE FIGHTING MEASURES

Flammability Classification (Per 49 CFR Part 173 Subpart D):	Non flammable
Known or Anticipated Hazardous Products of Combustion:	None known.
Extinguishing Media:	Water, dry chemical or carbon dioxide.
Fire Fighting Instructions:	Use firefighting measures which suit the environment and take into account other materials which may be involved. Wear self-contained breathing apparatus and protective clothing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personnel Protection:	Wear protective equipment including rubber gloves and eye protection. Ensure adequate ventilation. Keep unprotected personnel away.
Environmental Protection:	Take precautions to ensure material does not contaminate the ground or enter the drainage system.
Cleanup/Collection:	Ensure adequate ventilation. Avoid raising dust. Transfer material to sealed containers for disposal.

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SECTION 7: HANDLING AND STORAGE

Handling:	Avoid contact with eyes, skin and clothing. Avoid generation of dust. Keep containers tightly sealed.
Storage:	Store in a cool, dry location away from heat, sparks, and open flame. Do not store with oxidizing agents, acids, or bases.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Ventilation and Engineering Controls:	Safety shower and eye wash. Mechanical exhaust recommended.
Respiratory Protection:	Use respirators and components tested and approved under appropriate government standards such as NIOSH (U.S.) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate, use a dust mask type N95 (U.S.) or type P1 (EN 143) respirator.
Eye Protection:	Chemical safety goggles.
Hand Protection:	Wear chemical resistant gloves.
Body Protection:	Use body protection appropriate for task. An apron or other impermeable body protection is suggested.
General Hygiene Measures:	Keep away from foodstuffs, beverages and feed. Remove all soiled/contaminated clothing immediately. Wash hands before breaks and at the end of work. Avoid contact with eyes and skin.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Grey powder
Odor:	Slight odor
Physical state at atmospheric conditions:	Solid
pH:	Not applicable
Sublimation Temperature (at 1 atm):	Not determined
Solubility in Water:	Insoluble
Melting Point:	625-720° C
Boiling Point:	Unknown
Specific gravity/Density:	Unknown
Molecular Weight:	125.96
Flammability:	Not applicable
Flash Point:	Not applicable
Flammability Limits in Air:	Not applicable
Auto Ignition temperature:	Not applicable

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SECTION 10: STABILITY AND REACTIVITY

Chemical Stability:	Stable
Conditions to Avoid:	Avoid generation of airborne dusts
Incompatibility with Other Materials:	Oxidizing agents, acids, bases
Hazardous Decomposition, Reaction And Oxidation (other than burning) Products:	Hydrogen fluoride
Hazardous Polymerization:	Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

RTECS Number:	Not available
Acute Toxicity:	Unknown
Chronic and Subchronic Data:	Sodium aluminum tetrafluoride is an inert material that seems to have little adverse effect on lungs and does not appear to produce significant organic disease or toxic effects when exposures are kept under reasonable control.
Special Studies:	None known to MEMC Pasadena, Inc.
Suspected cancer agent:	Sodium aluminum tetrafluoride is not found on the following lists: FEDERAL OSHA Z LIST, IARC, NTP, and California and therefore is neither considered to be nor suspected to be a cancer-causing agent by these agencies.
Irritancy of product:	Sodium aluminum tetrafluoride is irritating to respiratory system.
Sensitization of product:	Sodium aluminum tetrafluoride is not known to be a sensitizer to humans upon prolonged or repeated contact.
Reproductive toxicity information:	Listed below is information concerning the effects of Sodium aluminum tetrafluoride on the human reproductive system.
Mutagenicity:	No human mutagenic effects have been described for Sodium aluminum tetrafluoride.
Embryotoxicity:	No human embryotoxic effects have been described for Sodium aluminum tetrafluoride.
Teratogenicity:	No human teratogenic effects have been described for Sodium aluminum tetrafluoride.
Reproductive Toxicity:	No human reproductive effects have been described for Sodium aluminum tetrafluoride.

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SECTION 12: ECOLOGICAL INFORMATION

Ecological Effects: Take care to prevent material from entering the ground, water courses or drainage systems.

SECTION 13: DISPOSAL CONSIDERATIONS

Consult local, state or national regulations to endure proper disposal.

SECTION 14: TRANSPORTATION INFORMATION

This material is considered as non-hazardous and non-regulated as defined by 49 CFR 172 101.

SECTION 15: REGULATORY INFORMATION

ADDITIONAL U.S. REGULATIONS:

U.S. Sara Reporting Requirements: Sodium Aluminum Tetrafluoride is subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act, as follows:

<u>CHEMICAL NAME</u>	<u>SARA 302</u> (40 CFR 355, Appendix A)	<u>SARA 304</u> (40 CFR Table 302.4)	<u>SARA 313</u> (40 CFR 372.65)
Sodium Aluminum Tetrafluoride	No	No	No

U.S. SARA Threshold Planning Quantity: Not applicable.

U.S. CERCLA Reportable Quantity (RQ): Not applicable.

U.S. TSCA Inventory Status: Sodium Aluminum Tetrafluoride is listed on the TSCA Inventory.

Other U.S. Federal Regulations: Sodium Aluminum Tetrafluoride is not subject to the reporting requirements of CFR 29 1910.1000.

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65): Sodium Aluminum Tetrafluoride is not on the California Proposition 65 lists.

Pennsylvania Right to Know: Sodium Aluminum Tetrafluoride - No

New Jersey Right to Know: Sodium Aluminum Tetrafluoride - Yes

Canadian Regulatory Information: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL – Yes, NDSL – No.

EU Risk Phrases:

R31, 36/37/38 Contact with acids liberates toxic gas. Irritating to eyes, respiratory system and skin.

S36/37/39 Wear suitable protective clothing, gloves, and eye/face protection.

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SECTION 16: OTHER INFORMATION

Disclaimer

MEMC Pasadena, Inc. cannot guarantee that these are the only hazards that exist. Users are solely responsible for the safe storage, handling, use and disposal of this material, and for compliance with the applicable laws, regulations and accepted practices. MEMC Pasadena, Inc. makes no representations or warranties; either expressed or implied, of merchantability, fitness for a particular purpose, or any other nature.