

SAFETY DATA SHEET

Version: v1

Revision Date: 2025-09-14

Print Date: 2025-09-21

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : Sodium fluoride
Product Number : S111587
Brand : aladdin
CAS-No. : 7681-49-4

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances.

1.3 Company

Company : ALADDIN SCIENTIFIC CORPORATION
Address : 14078 Meridian Parkway,
Riverside, CA. 92518
Telephone : +1 (833) 552-7181
Fax : no data available

1.4 Emergency telephone number

CHEMTREC®, Inside the USA : 1-800-424-9300
CHEMTREC®, Outside the USA :

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute oral toxicity Category 3

Skin Corrosion/Irritation Category 2

Serious Eye Damage/Eye Irritation Category 2

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

H301	Toxic if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
Precautionary statement(s)	
P264	Wash hands [and ...] thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P321	Specific treatment (see ... on this label).
P330	Rinse mouth.
P302+P352	IF ON SKIN: wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
P362+P364	Take off contaminated clothing and wash it before reuse.
P405	Store locked up.
P501	Dispose of contents/container to an approved waste disposal plant.
P264+P265	Wash hands [and ...] thoroughly after handling. Do not touch eyes.
P301+P316	IF SWALLOWED: Get emergency medical help immediately.
P337+P317	If eye irritation persists: Get medical help.
P332+P317	If skin irritation occurs: Get medical help.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Contact with acids liberates very toxic gas

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms	: chemifluor disodium difluoride
Formula	: NaF
Molecular weight	: 41.99
CAS No.	: 7681-49-4
EC-NO.	: 231-667-8

Component	Classification	Concentration
Sodium fluoride		
	no data available	analytical standard, $\geq 99.93\%$

SECTION 4: First aid measures

4.1 Description of first aid measures

Phone: +1 (833) 552-7181 Email: QualityAssurance@aladdinsci.com Website: <https://www.aladdinsci.com/>

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

General advice

Show this material safety data sheet to the doctor in attendance.

If inhaled

Remove to fresh air. Get medical attention if symptoms occur. If not breathing, give artificial respiration.

In case of skin contact

Wash off immediately with plenty of water for at least 15 minutes. Get medical attention.

In case of eye contact

In the case of contact with eyes, Rinse immediately with plenty of water and seek medical advice.

If swallowed

Do NOT induce vomiting. Call a physician or poison control center immediately.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5: Firefighting measures**5.1 Extinguishing media****Suitable extinguishing media**

Water spray. Carbon dioxide (CO₂). Dry chemical. Chemical foam.

Unsuitable extinguishing media

no data available

5.2 Special hazards arising from the substance or mixture

no data available

5.3 Advice for firefighters

wear self-contained breathing and full protective gear.

5.4 Further information

Use water spray to cool unopened containers.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

6.2 Environmental precautions

Should not be released into the environment. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Sweep up and shovel into suitable containers for disposal. Do not let this chemical enter the environment. Avoid dust

Phone: +1 (833) 552-7181 Email: QualityAssurance@aladdinsci.com Website: <https://www.aladdinsci.com/>

formation.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.

7.2 Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Moisture sensitive. Store at room temperature.

7.3 Specific end use(s)

no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of Regulation (EU)2016/425 and the standard EN 374 derived from it.

Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a fullface particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and

approved under appropriate government standards such as NIOSH (US) or CEN(EU).

Control of environmental exposure

If safety requires, prevent further leakage or spillage. Do not let the product enter the sewer.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

a) Appearance	form: Powder color: White to Off-White
b) Odour	no data available
c) Odour Threshold	no data available
d) pH	no data available
e) Melting point/freezing point	993°C
f) Initial boiling point and boiling range	1704°C
g) Flash point	no data available
h) Evaporation rate	no data available
i) Flammability (solid, gas)	no data available
j) Upper/lower flammability or explosive limits	no data available
k) Vapour pressure	no data available
l) Vapour density	no data available
m) Relative density	1.035
n) Water solubility	no data available
o) Partition coefficient: n-octanol/water	no data available
p) Auto-ignition temperature	no data available
q) Decomposition temperature	no data available
r) Viscosity	no data available
s) Explosive properties N	no data available
t) Oxidizing properties N	no data available

9.2 Other safety information

no data available

SECTION 10: Stability and reactivity**10.1 Reactivity**

Exposure to acid releases highly toxic gases.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Exposure to acid releases highly toxic gases. Producing hazardous gases or harmful smoke when in contact with the right item: acid

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

10.4 Conditions to avoid

Exposed to moisture. Danger of glass reaction

10.5 Incompatible materials

glass

10.6 Hazardous decomposition products

Gaseous hydrogen fluoride (HF)

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - Male and Female -148.5 mg/kg (US-EPA)

Remarks: (ECHA)

Inhalation: No data available

Transcutaneous: No data available

Skin corrosion/irritation

Note: Irritating to the skin.

Serious eye damage/eye irritation

Eyes - Rabbit Result: Eye irritation -24 hours Note: Moderate eye irritation

Respiratory or skin sensitisation

Buehler Guinea Pig Test - Guinea Pig Result: Negative Remarks: (ECHA)

Germ cell mutagenicity

Test type: Mutation (mammalian cell test): Negative Metabolic activation: No metabolic activation Result: Negative
Remarks: (ECHA) Test type: Ames test Testing System: Salmonella Typhimurium Metabolic activation: with or without
metabolic activation effect Result: Negative Remarks: (ECHA) Test type: In vivo genotoxicity Species: Mouse Route of
infection: Oral route Result: Negative

Carcinogenicity

This product is not or does not contain components listed as carcinogens by IARC, ACGIH, EPA, and NTP

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Additional Information

Registration of Toxic Effects of Chemical Substances: WB0350000

Fluoride ions can reduce serum calcium ion concentration, which may lead to fatal hypocalcemia.

Long term or frequent exposure can lead to:, damage to the lungs

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

To our knowledge, the chemical, physical, and toxic properties of this substance have not been fully studied.

Other hazards cannot be ruled out.

Operate in accordance with good industrial hygiene and safety regulations.

Liver - Irregular - Based on Human Evidence

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish: NOEC (Cyprinodon variegatus): 500 mg/l Exposure time: 96 hours Test type: mortality rate

LC50 (Gambusia affinis): 925 mg/l Exposure time: 96 hours Remarks: (IUCLID) LC50 (Oncorhynchus mykiss): 200 mg/l Exposure time: 96 hours

Toxicity to Daphnia magna and other aquatic invertebrates: EC50 (Daphnia magna): 338 mg/l Exposure time: 48 hours Remarks: (IUCLID)

Toxicity to algae/aquatic plants: IC50 (Desmodesmus subspicatus): 850 mg/l Exposure time: 72 hours Remarks: (IUCLID)

Toxicity to Daphnia magna and other aquatic invertebrates (chronic toxicity): NOEC (Daphnia magna): 8.9 mg/l Exposure time: 21 days Test type: Static test Remarks: (ECHA)

Toxicity to microorganisms: EC0 (Pseudomonas putida): 231 mg/l Exposure time: 16 hours Remarks: (for anions) (maximum allowable toxicity concentration) (IUCLID) EC50 (activated sludge): 2930 mg/l Exposure time: 3 hours Method: ISO 8192 Remarks: (IUCLID)

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

no data available

SECTION 13:

13.1 Disposal considerations

Product

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

DOT (US)

UN number: UN1690

Packing group: III

Class: 6.1

Proper shipping name: Sodium fluoride, solid

Reportable Quantity(RQ): no data available

Poison Inhalation Hazard: no data available

Environmental Hazards: No

IMDG

UN number: UN1690

Packing group: III

EMS-No: no data available

Proper shipping name: Sodium fluoride, solid

IATA

UN number: UN1690

Packing group: III

Class: 6.1

Proper shipping name: Sodium fluoride, solid

SECTION 15: Regulatory information

Please note that waste disposal should also meet local regulations. If applicable, the chemical meets the requirements of the Regulations on the Safety Management of Hazardous Chemicals (adopted by the State Council on December 4, 2013).

SECTION 16: Other information

Prepared By

Regulatory Affairs

ALADDIN SCIENTIFIC CORPORATION

Email: QualityAssurance@aladdinsci.com

Creation Date

11-Jun-2025

Revision Date

14-Sep-2025

Print Date

21-Sep-2025

Revision Summary

SDS sections updated v1

Disclaimer

Copyright Aladdin Co. Ltd. License granted to make unlimited paper copies for internal use only. 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. Aladdin Co. Ltd. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.