

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Sodium fluoroacetate

Product Number : 31220  
Brand : Fluka

Supplier : Sigma-Aldrich  
3050 Spruce Street  
SAINT LOUIS MO 63103  
USA

Telephone : +1 800-325-5832  
Fax : +1 800-325-5052  
Emergency Phone # (For both supplier and manufacturer) : (314) 776-6555

Preparation Information : Sigma-Aldrich Corporation  
Product Safety - Americas Region  
1-800-521-8956

### 2. HAZARDS IDENTIFICATION

#### Emergency Overview

##### OSHA Hazards

Target Organ Effect, Highly toxic by inhalation, Highly toxic by ingestion, Highly toxic by skin absorption

##### Target Organs

Heart, Central nervous system, Male reproductive system.

##### GHS Classification

Acute toxicity, Oral (Category 1)  
Acute toxicity, Inhalation (Category 1)  
Acute toxicity, Dermal (Category 1)  
Acute aquatic toxicity (Category 1)

##### GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H300 + H310 Fatal if swallowed or in contact with skin  
H330 Fatal if inhaled.  
H400 Very toxic to aquatic life.

Precautionary statement(s)

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.  
P264 Wash hands thoroughly after handling.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/ protective clothing.  
P284 Wear respiratory protection.  
P302 + P350 IF ON SKIN: Gently wash with plenty of soap and water.  
P310 Immediately call a POISON CENTER or doctor/ physician.

#### HMIS Classification

**Health hazard:** 4  
**Chronic Health Hazard:** \*  
**Flammability:** 0  
**Physical hazards:** 0

**NFPA Rating**

**Health hazard:** 4  
**Fire:** 0  
**Reactivity Hazard:** 0

**Potential Health Effects**

**Inhalation** May be fatal if inhaled. May cause respiratory tract irritation.  
**Skin** May be fatal if absorbed through skin. May cause skin irritation.  
**Eyes** May cause eye irritation.  
**Ingestion** May be fatal if swallowed.

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**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Synonyms : Fluoroacetic acidsodium salt  
Gifblaar poison

Formula :  $C_2H_2FNaO_2$   
Molecular Weight : 100.02 g/mol

Component	Concentration
<b>Sodium fluoroacetate</b>	
CAS-No.	62-74-8
EC-No.	200-548-2
Index-No.	607-169-00-5
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**4. FIRST AID MEASURES**

**General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**

Flush eyes with water as a precaution.

**If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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**5. FIREFIGHTING MEASURES**

**Conditions of flammability**

Not flammable or combustible.

**Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special protective equipment for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

**Hazardous combustion products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen fluoride, Sodium oxides

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**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions**

Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**Methods and materials for containment and cleaning up**

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**7. HANDLING AND STORAGE****Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

**Conditions for safe storage**

Keep container tightly closed in a dry and well-ventilated place.

Keep in a dry place.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Components with workplace control parameters**

Components	CAS-No.	Value	Control parameters	Basis
Sodium fluoroacetate	62-74-8	TWA	0.05 mg/m <sup>3</sup>	USA. ACGIH Threshold Limit Values (TLV)
Remarks	Central Nervous System impairment Nausea Cardiac impairment Danger of cutaneous absorption			
		TWA	0.05 mg/m <sup>3</sup>	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
	Skin designation			
		TWA	0.05 mg/m <sup>3</sup>	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
	Skin notation			
		STEL	0.15 mg/m <sup>3</sup>	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
	Skin notation			
		TWA	0.05 mg/m <sup>3</sup>	USA. NIOSH Recommended Exposure Limits
	Potential for dermal absorption			
		ST	0.15 mg/m <sup>3</sup>	USA. NIOSH Recommended Exposure Limits
	Potential for dermal absorption			

**Personal protective equipment****Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face 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).

**Hand 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.

**Eye protection**

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin and body protection**

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

**Hygiene measures**

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

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**9. PHYSICAL AND CHEMICAL PROPERTIES****Appearance**

Form	powder
Colour	white

**Safety data**

pH	no data available
Melting point/freezing point	Melting point/range: 200 °C (392 °F)
Boiling point	no data available
Flash point	no data available
Ignition temperature	no data available
Autoignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Vapour pressure	no data available
Density	no data available
Water solubility	no data available
Partition coefficient: n-octanol/water	no data available
Relative vapour density	no data available
Odour	no data available
Odour Threshold	no data available
Evaporation rate	no data available

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**10. STABILITY AND REACTIVITY****Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

no data available

**Conditions to avoid**

Avoid moisture.

**Materials to avoid**

Strong oxidizing agents, Strong acids

**Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen fluoride, Sodium oxides  
Other decomposition products - no data available

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**11. TOXICOLOGICAL INFORMATION****Acute toxicity****Oral LD50**

LD50 Oral - rat - 0.1 mg/kg

**Inhalation LC50****Dermal LD50**

LD50 Dermal - rat - 48 mg/kg

**Other information on acute toxicity**

no data available

**Skin corrosion/irritation**

no data available

**Serious eye damage/eye irritation**

no data available

**Respiratory or skin sensitization**

no data available

**Germ cell mutagenicity**

Genotoxicity in vitro - mouse - Other cell types

Host-mediated assay

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**

Reproductive toxicity - rat - Oral

Paternal Effects: Testes, epididymis, sperm duct.

Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

no data available

**Teratogenicity**

no data available

**Specific target organ toxicity - single exposure (Globally Harmonized System)**

no data available

**Specific target organ toxicity - repeated exposure (Globally Harmonized System)**

no data available

**Aspiration hazard**

no data available

**Potential health effects**

**Inhalation** May be fatal if inhaled. May cause respiratory tract irritation.  
**Ingestion** May be fatal if swallowed.  
**Skin** May be fatal if absorbed through skin. May cause skin irritation.  
**Eyes** May cause eye irritation.

**Signs and Symptoms of Exposure**

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea, Vomiting

**Synergistic effects**

no data available

**Additional Information**

RTECS: AH9100000

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**12. ECOLOGICAL INFORMATION**

**Toxicity**

Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - 39 mg/l - 96.0 h

Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 350 mg/l - 48 h

**Persistence and degradability**

no data available

**Bioaccumulative potential**

no data available

**Mobility in soil**

no data available

**PBT and vPvB assessment**

no data available

**Other adverse effects**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Very toxic to aquatic life.

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**13. DISPOSAL CONSIDERATIONS**

**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**

Dispose of as unused product.

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**14. TRANSPORT INFORMATION**

**DOT (US)**

UN number: 2629 Class: 6.1 Packing group: I

Proper shipping name: Sodium fluoroacetate

Reportable Quantity (RQ): 10 lbs

Marine pollutant: No

Poison Inhalation Hazard: No

**IMDG**

UN number: 2629 Class: 6.1 Packing group: I

EMS-No: F-A, S-A

Proper shipping name: SODIUM FLUOROACETATE

Marine pollutant: No

**IATA**

UN number: 2629 Class: 6.1 Packing group: I

Proper shipping name: Sodium fluoroacetate

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## 15. REGULATORY INFORMATION

### OSHA Hazards

Target Organ Effect, Highly toxic by inhalation, Highly toxic by ingestion, Highly toxic by skin absorption

### SARA 302 Components

The following components are subject to reporting levels established by SARA Title III, Section 302:

	CAS-No.	Revision Date
Sodium fluoroacetate	62-74-8	2007-07-01

### SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313:

	CAS-No.	Revision Date
Sodium fluoroacetate	62-74-8	2007-07-01

### SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard

### Massachusetts Right To Know Components

	CAS-No.	Revision Date
Sodium fluoroacetate	62-74-8	2007-07-01

### Pennsylvania Right To Know Components

	CAS-No.	Revision Date
Sodium fluoroacetate	62-74-8	2007-07-01

### New Jersey Right To Know Components

	CAS-No.	Revision Date
Sodium fluoroacetate	62-74-8	2007-07-01

### California Prop. 65 Components

	CAS-No.	Revision Date
WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. Sodium fluoroacetate	62-74-8	2007-09-28

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## 16. OTHER INFORMATION

### Further information

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