

## SAFETY DATA SHEET

Issue Date 19-Nov-2025  
Revision Number 1.08

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier**

**Product Name** 2,2-Difluoro-2-(fluorosulfonyl)acetic Acid  
**Other means of identification**  
**Product Code(s)** 049-34161,047-34162

**Recommended use of the chemical and restrictions on use**

**Recommended Use** For research use only.  
**Uses advised against** Seek expert judgment when using for purposes other than those recommended.

**Details of the supplier of the safety data sheet**

<b>Manufacturer Address</b>	<b>Distributor</b>
FUJIFILM Wako Pure Chemical Corporation	FUJIFILM Irvine Scientific
1-2, Doshomachi 3-Chome,	E. Warner Avenue, Santa Ana, CA 92705-5505, U.S.A.: +1 949 261 7800
Chuo-ku Osaka 540-8605, Japan	Fax: +1 949 261 6522
Tel : +81-6-6203-3741	
Fax: +81-6-6201-5964	

## 2. HAZARDS IDENTIFICATION

**GHS classification****Classification of the substance or mixture**

<b>Acute toxicity - Oral</b>	Category 2
<b>Acute toxicity - Dermal</b>	Category 1
<b>Skin corrosion/irritation</b>	Category 1

**Pictograms****Signal word** Danger**Hazard statements**

H314 - Causes severe skin burns and eye damage  
H300 - Fatal if swallowed  
H310 - Fatal in contact with skin

**Precautionary statements-(Prevention)**

Do not get in eyes, on skin, or on clothing Do not eat, drink or smoke when using this product Do not breathe dust/fume/gas/mist/vapors/spray Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary statements-(Response)**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
Immediately call a POISON CENTER or doctor/physician IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician Rinse mouth Do NOT induce vomiting

**Precautionary statements-(Storage)**

Store locked up

**Precautionary statements-(Disposal)**

Dispose of contents/container to an approved waste disposal plant

**Others****Other hazards** Not available**3. COMPOSITION/INFORMATION ON INGREDIENTS****Single Substance or Mixture** Substance**Formula** C<sub>2</sub>HF<sub>3</sub>O<sub>4</sub>S

Chemical Name	Molecular weight	CAS RN	Weight-%
2,2-Difluoro-2-(fluorosulfonyl)acetic acid	178.09	1717-59-5	97.0

**Impurities and/or Additives:** Not applicable**4. FIRST AID MEASURES****First aid measures****Eye contact** Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.**Skin contact** Wash skin with soap and water.**Inhalation** Remove to fresh air.**Ingestion** Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.**Most important symptoms and effects, both acute and delayed****Symptoms** No information available.**Indication of any immediate medical attention and special treatment needed****Note to physicians** Treat symptomatically.**5. FIRE-FIGHTING MEASURES****Suitable Extinguishing media**Carbon dioxide (CO<sub>2</sub>). Foam. Extinguishing powder. Sand.**Specific hazards arising from the chemical**

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

**Explosion data****Sensitivity to Mechanical** none.**Impact****Sensitivity to Static Discharge** none.**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

**Personal precautions, protective equipment and emergency procedures** Ensure adequate ventilation, especially in confined areas.

#### Environmental precautions

**Environmental precautions** See Section 12 for additional ecological information.

#### Methods and material for containment and cleaning up

**Methods and material for containment and cleaning up** Absorb dry sand, earth, sawdust and the waste. Collect empty container that can be sealed.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

#### Precautions for safe handling

**Technical measures** Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use with local exhaust ventilation.

**Protective measures** Handle in accordance with good industrial hygiene and safety practice.

#### Conditions for safe storage, including any incompatibilities

**Storage conditions** Keep container protect from light tightly closed. Store in a cool (2-10 °C) place. Packed with an inert gas.

**Packaging materials** Polyethylene.

**Incompatible materials** Strong oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Engineering controls

In case of indoor workplace, seal the source or use a local exhaust system. Provide the safety shower facility, and hand- and eye-wash facility. And display their position clearly.

**Exposure limits** Not applicable

#### Personal protective equipment

**Respiratory protection** Protective mask

**Hand protection** chemical protective gloves ( JIS T 8116 )

**Eye protection** protective eyeglasses or chemical safety goggles (JIS T 8147)

**Skin and body protection** Long-sleeved work clothes

#### General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Form

**Color**

Colorless - brown

**Turbidity**

clear - slightly muddy

**Appearance**

liquid

**Odor**

no data available

**pH**

no data available

**Melting point/freezing point**

no data available

**Boiling point, initial boiling point and boiling range**

153 °C

**Flash point**

no data available

Evaporation rate:	no data available
Flammability (solid, gas):	no data available
Upper/lower flammability or explosive limits	
Upper:	no data available
Lower:	no data available
Vapour pressure	no data available
Vapour density	no data available
Specific Gravity / Relative density	1.723 - 1.729 g/mL
Solubilities	water , Ethanol , acetone : soluble .
n-Octanol/water partition coefficient:(log Pow)	no data available
Auto-ignition temperature:	no data available
Decomposition temperature:	no data available
Viscosity (coefficient of viscosity)	no data available
Dynamic viscosity	no data available
Particle characteristics	no data available

## 10. STABILITY AND REACTIVITY

### Stability

**Chemical stability** May be altered by light.

**Reactivity** no data available

### Hazardous reactions

Corrodes glass.

### Conditions to avoid

Extremes of temperature and direct sunlight, Heat, flames and sparks, static electricity, spark

### Incompatible materials

Strong oxidizing agents

### Hazardous decomposition products

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Sulfur oxides (SO<sub>x</sub>), Halides

## 11. TOXICOLOGICAL INFORMATION

**Acute toxicity** no data available

**Skin irritation/corrosion** no data available

**Serious eye damage/ irritation** no data available

**Respiratory or skin sensitization** no data available

**Reproductive cell mutagenicity** no data available

**Carcinogenicity** no data available

**Reproductive toxicity** no data available

**STOT-single exposure** no data available

**STOT-repeated exposure** no data available

**Aspiration hazard** no data available

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

no data available

### Persistence and degradability

No information available

**Bioaccumulative potential**

No information available

**Mobility**

no data available

**Mobility in soil**

No information available

**Other Data**

No information available

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods**

**Disposal of wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Precautionary including method of disposing contaminated packaging** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**14. TRANSPORT INFORMATION****DOT**

**UN/ID No** UN2922  
**Proper shipping name:** Corrosive liquid, toxic, n.o.s. (2,2-Difluoro-2-(fluorosulfonyl)acetic acid)  
**UN classification** 8  
**Subsidiary hazard class** 6.1  
**Packing group** I  
**Marine pollutant** Not applicable

**IATA**

**UN/ID No** UN2922  
**Proper shipping name:** Corrosive liquid, toxic, n.o.s. (2,2-Difluoro-2-(fluorosulfonyl)acetic acid)  
**UN classification** 8  
**Subsidiary hazard class** 6.1  
**Packing group** I  
**Environmentally Hazardous Substance** Not applicable

**IMDG**

**UN/ID No** UN2922  
**Proper shipping name:** Corrosive liquid, toxic, n.o.s. (2,2-Difluoro-2-(fluorosulfonyl)acetic acid)  
**UN classification** 8  
**Subsidiary hazard class** 6.1  
**Packing group** I  
**Marine pollutant (Sea)** Not applicable

**15. REGULATORY INFORMATION****US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS RN	Weight-%	SARA 313 - Threshold Values %
2,2-Difluoro-2-(fluorosulfonyl)acetic acid - 1717-59-5	1717-59-5	97.0	N/A

**SARA 311/312 Hazard Categories**

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations****California Proposition 65**

This product does not contain any chemicals regulated by Proposition 65

**U.S. State Right-to-Know Regulations**

This product does not contain any substances regulated by state right-to-know regulations

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

**16. OTHER INFORMATION**

**Issue Date** 19-Nov-2025

**Revision Note**

No information available

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet