

## SAFETY DATA SHEET

Issue Date 15-Dec-2025  
Revision Number 2.05

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

**Product identifier**

**Product Name** (S)-(+)-3-Fluoropyrrolidine Hydrochloride  
**Other means of identification**  
**Product Code(s)** 327-90051,323-90053

**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 4  |
| <b>Skin corrosion/irritation</b>                        | Category 2  |
| <b>Serious eye damage/eye irritation</b>                | Category 2A |
| <b>Specific target organ toxicity (single exposure)</b> | Category 3  |
| <b>Category 3 Respiratory irritation</b>                |             |

**Pictograms****Signal word**

Warning

**Hazard statements**

H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H302 - Harmful if swallowed  
H335 - May cause respiratory irritation

**Precautionary statements-(Prevention)**

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product  
Wear protective gloves/protective clothing/eye protection/face protection Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area

**Precautionary statements-(Response)**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention  
IF ON SKIN: Wash with plenty of soap and water If skin irritation occurs: Get medical advice/attention Take off contaminated clothing and wash before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell Rinse mouth

**Precautionary statements-(Storage)**

Store in a well-ventilated place. Keep container tightly closed 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>4</sub>H<sub>8</sub>FN·HCl

| Chemical Name                             | Molecular weight | CAS RN      | Weight-% |
|-------------------------------------------|------------------|-------------|----------|
| (S)-(+)-3-Fluoropyrrolidine Hydrochloride | 125.57           | 136725-53-6 | 97       |

**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**

Water spray (fog). 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** Prevent further leakage or spillage if safe to do so.

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

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Technical measures** Avoid contact with strong oxidizing agents.  
**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, store in well-ventilated place at room temperature (preferably cool). Keep container tightly closed.

**Packaging materials** Glass.

**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** Dust mask ( JIS T 8151 )  
**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**

**Appearance**

**Odor**

**pH**

White - light yellow  
 crystals - crystalline powder  
 no data available  
 no data available

|                                                        |                       |
|--------------------------------------------------------|-----------------------|
| Melting point/freezing point                           | 184 - 188 °C          |
| Boiling point, initial boiling point and boiling range | no data available     |
| 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                    | no data available     |
| Solubilities                                           | methanol : 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

None under normal processing

### Conditions to avoid

Extremes of temperature and direct sunlight

### Incompatible materials

Strong oxidizing agents

### Hazardous decomposition products

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Nitrogen oxides (NO<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**

Not regulated

UN/ID No

Not applicable

Proper shipping name:

UN classification

Subsidiary hazard class

Packing group

Marine pollutant

Not applicable

**IATA**

Not regulated

UN/ID No

-

Proper shipping name:

UN classification

Subsidiary hazard class

Packing group

Environmentally Hazardous

Substance

Not applicable

**IMDG**

Not regulated

UN/ID No

-

Proper shipping name:

UN classification

Subsidiary hazard class

Packing group

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 |
|---------------|--------|----------|----------------------|
|---------------|--------|----------|----------------------|

|                                                         |             |    |                 |
|---------------------------------------------------------|-------------|----|-----------------|
| (S)-(+)-3-Fluoropyrrolidine Hydrochloride - 136725-53-6 | 136725-53-6 | 97 | Values %<br>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 NumberNot applicable

**16. OTHER INFORMATION**

Issue Date 15-Dec-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