

**MATERIAL SAFETY DATA SHEET****SECTION 1 - PRODUCT AND COMPANY INFORMATION**

|                      |  |
|----------------------|--|
| PRODUCT NAME:        | (3r)-3-fluoropyrrolidine hydrochloride |
| PB CATALOG NUMBER:   | PB00774-01                             |
| DATE OF PREPARATION: | 5/26/2018 (MM/DD/YYYY)                 |

**COMPANY:**

PharmaBlock (Nanjing) R&D Co. Ltd  
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**SECTION 2 - COMPOSITION / DATA COMPONENTS**

|                    |  |
|--------------------|--|
| Chemical Name:     | (3r)-3-fluoropyrrolidine hydrochloride |
| CAS:               | 136725-55-8                            |
| Molecular Formula: | C4H9ClFN                               |
| Molecular Weight:  | 125.570                                |
| Appearance:        | Pink crystal                           |

**SECTION 3 - HAZARDS IDENTIFICATION**

Harmful if swallowed, inhaled or absorbed through skin. Material may be irritating to tissue of the mucous membranes and upper respiratory tract, eyes and skin.

**SECTION 4 - FIRST AID MEASURES**

**Eye contact:** Immediately flush with plenty of water for at least 15 minutes. If redness, itching or a burning sensation develops, have eyes examined and treated by medical personnel.

**Skin contact:** Wash material off the skin with plenty of soap and water. If redness, itching or a burning sensation develops, get medical attention.

**Swallowed:** Provided the patient is conscious, wash out mouth with water. Vomiting should only be induced under the direction of a physician or a poison control center.

**Inhaled:** Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is labored, give oxygen. Consult medical personnel.

**SECTION 5 - FIRE FIGHTING MEASURES**

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As with most organic compounds, fire is possible at elevated temperatures or by contact with an ignition source.

**Extinguishing Media:**

Use media such as water spray, carbon dioxide, dry chemical powder or appropriate foam.

**Protective equipment:**

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

**Specific hazard(s):**

Emit toxic fumes under fire conditions.

If substance is an organic solid, fine dust dispersed in air in sufficient concentrations in the presence of an ignition source is a potential for a dust explosion hazard.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

**General Method:** Isolate and post spill area. Wear protective clothing and personal protective equipment. Keep unprotected persons and animals out of the area. Keep material out of lakes, streams, ponds and sewer drains. Do not walk through spilled material. Avoid breathing vapors and skin contact. Remove sources of ignition if combustible or flammable vapors may be present and ventilate area.

**Large Spilled:** Large spills should be collected in an appropriate container or absorb with an inert material (e.g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer! If a leak or spill has not ignited, use water spray to disperse the vapors, to protect personnel attempting to stop leak, and to flush spills away from exposures.

**Clean& Neutralize:** To clean and neutralize spill area, tools and equipment, wash with a suitable solution of caustic or soda ash. Follow this by washing with a strong soap and water solution. Absorb, as above, any excess liquid and add to the drums of waste already collected. Repeat if necessary.

**SECTION 7 – HANDLING AND STORAGE****Handling:****User exposure:**

Do not breathe vapor. Do not get in eyes, on skin, on clothing.

**Storage:** Store away from incompatible substances. Keep tightly closed and store in a cool dry place. Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material.

**Waste Disposal:** The substance should be disposed of in accordance with all federal, state, and local regulations. For assistance, contact the District Director of the Environmental Protection Agency.

## SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

### Engineering controls:

Safety shower and eye bath. Use only in a chemical fume hood.

### Personal protective equipment:

**Respiratory:** Government approved respirator.

**Hand:** Compatible chemical-resistant gloves.

**Eye:** Chemical safety goggles.

### General hygiene measures:

Wash contaminated clothing before reuse. Discard contaminated shoes. Wash thoroughly after handling.

## SECTION 9 – PHYSICAL / CHEMICAL PROPERTIES

|                            |         |
|----------------------------|---------|
| Appearance physical state: | crystal |
| Color:                     | pink    |
| Molecular weight:          | 125.570 |

**pH:** N/A

**BP/BP range:** N/A

**MP/MP range:** N/A

**Vapor pressure:** N/A

**Vapor density:** N/A

**Evaporation rate:** N/A

**Viscosity:** N/A

**Flash point:** N/A

**Explosion limits:** N/A

**Flammability:** N/A

**Solubility:** N/A

N/A = Not available

## SECTION 10 – STABILITY AND REACTIVITY

**Stability:** stable

### Conditions to avoid:

Exposure to air may affect product quality.

Exposure to moisture may affect product quality.

**Materials to avoid:** strong oxidizing agents.

### Hazardous decomposition products:

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Carbon monoxide, Carbon dioxide, Nitrogen oxides

**Hazardous polymerization:** will not occur.

## SECTION 11 – TOXICOLOGICAL INFORMATION

### **Inhalation:**

Material is irritation to mucous membranes and upper respiratory tract.

### **Multiple routes:**

May be harmful by inhalation, ingestion, or skin absorption. Causes eye and skin irritation.

### **Signs and symptoms of exposures:**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## SECTION 12 – ECOLOGICAL INFORMATION

Data not yet available.

## SECTION 13 – DISPOSAL CONSIDERATIONS

### **Appropriate method of disposal of substance or preparation:**

Contact a licensed professional waste disposal service to dispose of this material. This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

## SECTION 14 – TRANSPORT INFORMATION

**Non-hazardous for air transport:** Non-hazardous for air transport.

## SECTION 15 – REGULATORY INFORMATION

Data not available

## SECTION 16 – OTHER INFORMATION

**Disclaimer:** For R&D use only. Not for drug, household or other uses.

### **Warranty:**

The information in this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.