

## Nalfurafine hydrochloride

Cat#: orb611576 (MSDS)

### 1. PRODUCT AND COMPANY IDENTIFICATION

#### 1.1 Product identifier

Product name : Nalfurafine (hydrochloride)

CAS No. : 152658-17-8

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

Identified uses : Laboratory chemicals, manufacture of substances.

### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

Not a hazardous substance or mixture.

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

Not a hazardous substance or mixture.

#### 2.3 Other hazards

None.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

Synonyms: TRK-820 (hydrochloride)

Formula: C<sub>28</sub>H<sub>33</sub>ClN<sub>2</sub>O<sub>5</sub>

Molecular Weight: 513.03

CAS No. : 152658-17-8

### 4. FIRST AID MEASURES

#### 4.1 Description of first aid measures

##### Eye contact

Remove any contact lenses, locate eye-wash station, and flush eyes immediately with large amounts of water. Separate eyelids with fingers to ensure adequate flushing. Promptly call a physician.

#### **Skin contact**

Rinse skin thoroughly with large amounts of water. Remove contaminated clothing and shoes and call a physician.

#### **Inhalation**

Immediately relocate self or casualty to fresh air. If breathing is difficult, give cardiopulmonary resuscitation (CPR). Avoid mouth-to-mouth resuscitation.

#### **Ingestion**

Wash out mouth with water; Do NOT induce vomiting; call a physician.

### **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).

### **4.3 Indication of any immediate medical attention and special treatment needed**

Treat symptomatically.

## **5. FIRE FIGHTING MEASURES**

### **5.1 Extinguishing media**

#### **Suitable extinguishing media**

Use water spray, dry chemical, foam, and carbon dioxide fire extinguisher.

### **5.2 Special hazards arising from the substance or mixture**

During combustion, may emit irritant fumes.

### **5.3 Advice for firefighters**

Wear self-contained breathing apparatus and protective clothing.

## **6. ACCIDENTAL RELEASE MEASURES**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Use full personal protective equipment. Avoid breathing vapors, mist, dust or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Refer to protective measures listed in sections 8.

### **6.2 Environmental precautions**

Try to prevent further leakage or spillage. Keep the product away from drains or water courses.

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

Absorb solutions with finely-powdered liquid-binding material (diatomite, universal binders); Decontaminate surfaces and equipment by scrubbing with alcohol; Dispose of contaminated material according to Section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid inhalation, contact with eyes and skin. Avoid dust and aerosol formation. Use only in areas with appropriate exhaust ventilation.

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

Keep container tightly sealed in cool, well-ventilated area. Keep away from direct sunlight and sources of ignition.

Recommended storage temperature: 4°C, sealed storage, away from moisture

\* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

Shipping at room temperature if less than 2 weeks.

### 7.3 Specific end use(s)

No data available.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### Components with workplace control parameters

This product contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

#### Engineering controls

Ensure adequate ventilation. Provide accessible safety shower and eye wash station.

#### Personal protective equipment

**Eye protection** Safety goggles with side-shields.

**Hand protection** Protective gloves.

**Skin and body protection** Impervious clothing.

**Respiratory protection** Suitable respirator.

**Environmental exposure controls** Keep the product away from drains, water courses or the soil. Clean spillages in a safe way as soon as possible.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

**Appearance** Solid

**Odor** No data available

**Odor threshold** No data available

**pH** No data available

**Melting/freezing point** No data available

**Boiling point/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** No data available  
**Vapor pressure** No data available  
**Vapor density** No data available  
**Relative density** No data available  
**Water Solubility** No data available  
**Partition coefficient** No data available  
**Auto-ignition temperature** No data available  
**Decomposition temperature** No data available  
**Viscosity** No data available  
**Explosive properties** No data available  
**Oxidizing properties** No data available

## 9.2 Other safety information

No data available.

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

No data available.

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available.

### 10.4 Conditions to avoid

No data available.

### 10.5 Incompatible materials

Strong acids/alkalis, strong oxidising/reducing agents.

### 10.6 Hazardous decomposition products

Under fire conditions, may decompose and emit toxic fumes.

Other decomposition products - no data available.

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity

Classified based on available data. For more details, see section 2

#### Skin corrosion/irritation

Classified based on available data. For more details, see section 2

#### Serious eye damage/irritation

Classified based on available data. For more details, see section 2

#### Respiratory or skin sensitization

Classified based on available data. For more details, see section 2

#### Germ cell mutagenicity

Classified based on available data. For more details, see section 2

#### Carcinogenicity

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

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

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

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

#### Reproductive toxicity

Classified based on available data. For more details, see section 2

#### Specific target organ toxicity - single exposure

Classified based on available data. For more details, see section 2

#### Specific target organ toxicity - repeated exposure

Classified based on available data. For more details, see section 2

#### Aspiration hazard

Classified based on available data. For more details, see section 2

#### Additional information

This information is based on our current knowledge. However the chemical, physical, and toxicological properties have not been completely investigated.

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

No data available.

### 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

PBT/vPvB assessment unavailable as chemical safety assessment not required or not conducted.

### 12.6 Other adverse effects

No data available.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

#### Product

Dispose substance in accordance with prevailing country, federal, state and local regulations.

#### Contaminated packaging

Conduct recycling or disposal in accordance with prevailing country, federal, state and local regulations.

## 14. TRANSPORT INFORMATION

### DOT (US)

Proper shipping name: Not dangerous goods

UN number: -

Class: -

Packing group: -

### IMDG

Proper shipping name: Not dangerous goods

UN number: -

Class: -

Packing group: -

### IATA

Proper shipping name: Not dangerous goods

UN number: -

Class: -

Packing group: -

## 15. REGULATORY INFORMATION

### SARA 302 Components:

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components:**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards:**

No SARA Hazards.

**Massachusetts Right To Know Components:**

No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components:**

No components are subject to the Pennsylvania Right to Know Act.

**New Jersey Right To Know Components:**

No components are subject to the New Jersey Right to Know Act.

**California Prop. 65 Components:**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or anyother reproductive harm.