



# Material Safety Data Sheet

Material Name: Ketamine Hydrochloride Injection  
10mg/mL

## \*\*\* Section 1 - Chemical Product and Company Identification \*\*\*

### Manufacturer Information

Bioniche Pharma  
272 E Deerpath Road  
Suite 304  
Lake Forest, IL 60045

Phone: 888-258-4199

Emergency # 888-875-1671

## \*\*\* Section 2 - Hazards Identification \*\*\*

### Emergency Overview

May cause eye, skin, gastrointestinal, and/or respiratory tract irritation.

### Potential Health Effects: Eyes

May cause irritation.

### Potential Health Effects: Skin

May cause irritation.

### Potential Health Effects: Ingestion

Not considered a likely route of exposure under normal product use. May cause gastrointestinal irritation if swallowed.

### Potential Health Effects: Inhalation

Not considered a likely route of exposure under normal product use. May cause respiratory tract irritation.

### HMIS Ratings: Health: 1 Fire: 0 HMIS Reactivity 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe \* = Chronic hazard

## \*\*\* Section 3 - Composition / Information on Ingredients \*\*\*

CAS #	Component
7732-18-5	Water
1867-66-9	Cyclohexanone, 2-(O-chlorophenyl)-2-(methylamine)-, hydrochloride
7647-14-5	Sodium chloride
121-54-0	Benzethonium chloride

## \*\*\* Section 4 - First Aid Measures \*\*\*

### First Aid: Eyes

Flush immediately with water for at least 15 minutes. Do not rub eyes.

### First Aid: Skin

For skin contact, flush with large amounts of water. If irritation persists, get medical attention.

### First Aid: Ingestion

If ingestion of a large amount does occur, seek medical attention.

### First Aid: Inhalation

Move person to non-contaminated air. If the affected person is not breathing, apply artificial respiration.

## \*\*\* Section 5 - Fire Fighting Measures \*\*\*

### General Fire Hazards

See Section 9 for Flammability Properties.

None

### Hazardous Combustion Products

Not determined

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## Extinguishing Media

Use extinguishing media appropriate for surrounding fire.

## Fire Fighting Equipment/Instructions

Firefighters should wear full protective gear.

NFPA Ratings: Health: 1 Fire: 0 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

## \*\*\* Section 6 - Accidental Release Measures \*\*\*

### Containment Procedures

Contain the discharged material.

### Clean-Up Procedures

Wear appropriate protective equipment and clothing during clean-up. Use sand or perlite or vermiculite as an absorbent for large spills of this material.

### Evacuation Procedures

Isolate area. Keep unnecessary personnel away.

### Special Procedures

Avoid contact with skin and eyes.

## \*\*\* Section 7 - Handling and Storage \*\*\*

### Handling Procedures

Wash hands after handling and before eating.

### Storage Procedures

Keep this material in a cool, well-ventilated place.

## \*\*\* Section 8 - Exposure Controls / Personal Protection \*\*\*

### A: Component Exposure Limits

ACGIH, OSHA, and NIOSH have not developed exposure limits for any of this product's components.

### Engineering Controls

Use general ventilation and use local exhaust, where possible, in confined or enclosed spaces.

### PERSONAL PROTECTIVE EQUIPMENT

#### Personal Protective Equipment: Eyes/Face

Wear safety glasses; chemical goggles (if splashing is possible).

#### Personal Protective Equipment: Skin

Use impervious gloves.

#### Personal Protective Equipment: Respiratory

Not normally needed.

#### Personal Protective Equipment: General

Eye wash fountain is recommended.

## \*\*\* Section 9 - Physical & Chemical Properties \*\*\*

Appearance: Clear

Physical State: Liquid

Vapor Pressure: ND

Boiling Point: ND

Solubility (H<sub>2</sub>O): Slight

Evaporation Rate: ND

Octanol/H<sub>2</sub>O Coeff.: ND

Flash Point Method: ND

Lower Flammability Limit (LFL): ND

Auto Ignition: ND

Odor: None

pH: ND

Vapor Density: ND

Melting Point: ND

Specific Gravity: ND

VOC: ND

Flash Point: ND

Upper Flammability Limit (UFL): ND

Burning Rate: ND

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## \*\*\* Section 10 - Chemical Stability & Reactivity Information \*\*\*

### Chemical Stability

This is a stable material.

### Chemical Stability: Conditions to Avoid

None

### Incompatibility

Not Determined

### Hazardous Decomposition

Not Determined

### Possibility of Hazardous Reactions

Will not occur.

## \*\*\* Section 11 - Toxicological Information \*\*\*

### Acute Dose Effects

#### A: General Product Information

No information available for the product.

#### B: Component Analysis - LD50/LC50

##### Water (7732-18-5)

Oral LD50 Rat: >90 mL/kg

##### Cyclohexanone, 2-(O-chlorophenyl)-2-(methylamine)-, hydrochloride (1867-66-9)

Oral LD50 Rat: 447 mg/kg

##### Sodium chloride (7647-14-5)

Inhalation LC50 Rat: >42 g/m<sup>3</sup>/1H; Oral LD50 Rat: 3 g/kg; Dermal LD50 Rabbit: >10 g/kg

##### Benzethonium chloride (121-54-0)

Oral LD50 Rat: 368 mg/kg

### Carcinogenicity

#### A: General Product Information

No information available for the product.

#### B: Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP.

## \*\*\* Section 12 - Ecological Information \*\*\*

### Ecotoxicity

#### A: General Product Information

No information available for the product.

#### B: Component Analysis - Ecotoxicity - Aquatic Toxicity

##### Sodium chloride (7647-14-5)

###### Test & Species

96 Hr LC50 Lepomis macrochirus

9675 mg/L [flow-through]

###### Conditions

96 Hr LC50 Lepomis macrochirus

12946 mg/L [static]

96 Hr LC50 Pimephales promelas

7650 mg/L [static]

48 Hr EC50 Daphnia magna

1000 mg/L

## \*\*\* Section 13 - Disposal Considerations \*\*\*

### US EPA Waste Number & Descriptions

#### Component Waste Numbers

No EPA Waste Numbers are applicable for this product's components.

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## Disposal Instructions

All wastes must be handled in accordance with local, state and federal regulations.  
See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

### \*\*\* Section 14 - Transportation Information \*\*\*

## US DOT Information

Shipping Name: Not Regulated

### \*\*\* Section 15 - Regulatory Information \*\*\*

## US Federal Regulations

### Component Analysis

None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

### State Regulations

#### Component Analysis - State

None of this product's components are listed on the state lists from CA, MA, MN, NJ, PA, or RI.

#### Component Analysis - WHMIS IDL

No components are listed in the WHMIS IDL.

### Additional Regulatory Information

### Component Analysis - Inventory

Component	CAS #	TSCA	CAN	EEC
Water	7732-18-5	Yes	DSL	EINECS
Cyclohexanone, 2-(O-chlorophenyl)-2-(methylamine)-, hydrochloride	1867-66-9	No	No	EINECS
Sodium chloride	7647-14-5	Yes	DSL	EINECS
Benzethonium chloride	121-54-0	Yes	DSL	EINECS

### \*\*\* Section 16 - Other Information \*\*\*

## Other Information

The information herein is presented in good faith and believed to be accurate as of the effective date given. However, no warranty, expressed or implied, is given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

## Key/Legend

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration., NJTSR = New Jersey Trade Secret Registry.