

# SAFETY DATA SHEET

## GUANIDINE HYDROCHLORIDE

### SECTION 1: CHEMICAL AND COMPANY IDENTIFICATION

**BioShop Canada Inc.**  
5480 Mainway  
Burlington, Ontario L7L 6A4  
1-800-234-1179  
Emergency Telephone No.: 905-466-3832  
Chemical Name: Guanidine hydrochloride  
Synonym: N/A  
Catalog Number: GUA001/GUA003/GUA999

### SECTION 2 HAZARDS IDENTIFICATION

#### GHS Classification

#### CLASSIFICATION:

Acute toxicity: Category 4  
Acute toxicity, inhalation Category 5  
Skin irritant: Category 2  
Eye irritant, Category 2A

#### PICTOGRAM:



**SIGNAL WORD:** WARNING

#### HAZARD STATEMENTS:

H302- Harmful if swallowed  
H315- Causes skin irritation  
H319- Causes serious eye irritation  
H333- May be harmful if inhaled

#### PRECAUTIONARY STATEMENTS:

P261-Avoid breathing dust/fume/gas/mist/vapors/spray.  
P305+P351+P338- if in eyes: rinse cautiously with water for several minutes. remove contact lenses if present and easy to do. Continue rinsing.

#### Potential Health Effects:

Inhalation: may be harmful if inhaled.  
Skin: may be harmful if absorbed through skin  
Eyes: causes eye irritation  
Ingestion: harmful if swallowed

### SECTION 3 COMPOSITION/ INGREDIENTS

**Molecular formula:** CH<sub>5</sub>N<sub>3</sub>.HCl  
**Molecular weight:** 95.53 g/mol

	CAS #	EC-No.	%
Guanidine Hydrochloride	50-01-1	200-002-3	100

### SECTION 4 FIRST AID MEASURES

**Eyes:** Flush eyes with plenty of water. Consult a physician.  
**Skin:** In case of contact, flush area immediately with water. Get medical aid if irritation persists.  
**Inhalation:** Remove victim to fresh air. If breathing becomes difficult, give oxygen. Consult a physician.  
**Ingestion:** Wash mouth with water. Do NOT induce vomiting. Consult a physician if you feel unwell.

### SECTION 5 FIRE FIGHTING MEASURES

**Flammability:** not flammable  
**Flash Point:** N/A  
**Autoignition Temperature:** not determined  
**Extinguishing Media:** Use water spray, foam, dry chemical or carbon dioxide.  
**Explosion Data:** Not available

### SECTION 6 ACCIDENTAL RELEASE MEASURES

**Personal precautions:**  
Ventilate the area. Wear appropriate protective equipment. Avoid contact with skin, eyes and clothing.  
**Methods for containment and clean up:**  
If safe to do so, contain further leakage. Sweep and place in a closed container. Dispose according to local regulations.

### SECTION 7 HANDLING AND STORAGE

**Handling:** Do not get in eyes, on skin, or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse.  
**Storage Conditions:** Room temperature. Keep cool and dry.

### SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure limits:**  
ACGIH, NIOSH, OSHA, none listed  
Use adequate ventilation. Avoid dust generation.  
**Personal protective Equipment:** Wear appropriate safety glasses and protective gloves/clothing. Use approved NIOSH respirator.  
**Engineering Measures:** eye wash stations, ventilation systems, showers  
**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety practice. wash hands before and after handling product.

### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** White powder  
**Odor:** N/A  
**Odor Threshold:** : no information found  
**Melting Point:** 185-189° C  
**Boiling Point:** no information found  
**Specific Gravity:** no information found

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## GUANIDINE HYDROCHLORIDE

**Vapor Density:** no information found  
**Vapor pressure:** no information found  
**Water Solubility:** soluble in water (573g/L)  
**pH:** 4.5-6 at 573 g/L  
**Flammability:** No  
**Flash point:** N/A  
**Ignition temperature:** no information found  
**Autoignition temperature:** no information found  
**Lower explosion limit:** no information found  
**Upper explosion limit:** no information found

D2B, Toxic material Causing Other Toxic Effects  
Moderate eye irritant

### SECTION 16 ADDITIONAL INFORMATION

Prepared By: M.Kierdelewicz  
Date Prepared: Aug 10/2022  
Phone: (800) 234-1179

The information provided on this Material Safety Data Sheet is furnished in good faith and without warranty of any kind. The above information is believed to be correct and should be used only as a guide. BioShop Canada Inc. shall not be held liable for any damage resulting from the handling or from the contact with the above product.  
Observe all federal, provincial and state laws concerning health, safety and pollution.

### SECTION 10 STABILITY AND REACTIVITY:

**Stability:** Stable at normal room temperature and pressure  
**Conditions to avoid:** dust generation  
**Incompatibility:** strong oxidizing agents, reducing agents.  
**Hazardous Decomposition Products:** fumes of carbon monoxide, carbon dioxide and oxides of nitrogen.  
**Hazardous Polymerization:** Has not been reported

### SECTION 11 TOXICOLOGICAL PROPERTIES

#### Exposure Limits:

LD50/LC50:  
Oral LD50-rat-500mg/kg

**Epidemiology:** No data available  
**Teratogenicity:** No data available  
**Reproductive Effects:** No data available  
**Neurotoxicity:** No data available  
**Mutagenicity:** No data available  
**Carcinogenicity:** not listed by ACGIH, IARC, NTP, or CA

### SECTION 12 ECOLOGICAL INFORMATION

**Ecotoxicity:**  
No information found

### SECTION 13 DISPOSAL CONSIDERATION

**Waste Disposal:** Care should be exercised when burning in chemical incinerator.. Observe all Federal, provincial and local regulations.

### SECTION 14 TRANSPORT INFORMATION

#### Shipping Information:

**DOT (US):**  
Not regulated  
**IMDG**  
Not regulated  
**IATA:**  
Not regulated

### SECTION 15 REGULATORY INFORMATION

**Canada:**  
WHMIS: