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Web: [www.GBiosciences.com](http://www.GBiosciences.com), Email: [technical@GBiosciences.com](mailto:technical@GBiosciences.com) [Rev 10.3.11/IA-JK]  
**Emergency Contact:** Chemtrec 800-424-9300

**Product:** Guanidine Hydrochloride

**Catalog #:** BC85, BC88 & RC-057

| <u>Components</u>       | <u>Catalog#</u> | <u>Quantity</u> |
|-------------------------|-----------------|-----------------|
| Guanidine Hydrochloride | BC85            | 250g            |
| Guanidine Hydrochloride | BC88            | 500g            |
| Guanidine Hydrochloride | RC-057          | 1kg             |

## Material Safety Data Sheet

### Section 1: Chemical Identification

**Name:** Guanidine Hydrochloride

**Catalog #:** a component of product Cat # BC85, BC88 & RC-057 indicated above

### Section 2: Composition/Information on Ingredients

Guanidine Hydrochloride  
Empirical formula:  $\text{NH}_2\text{CNHNH}_2\cdot\text{HCl}$   
FW = 95.54      **CAS#: 50-01-1**

### Section 3: Hazards Identification

#### **Emergency Overview**

**OSHA Hazards:** Target Organ Effect, Toxic by ingestion, Irritant

**Target Organs:** Bone marrow, Nerves.

#### **GHS Classification**

Acute toxicity, Inhalation (Category 5)

Acute toxicity, Oral (Category 4)

Skin irritation (Category 2)

Eye irritation (Category 2A)

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

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:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

#### **HMIS Classification**

**Health hazard:** 2

**Chronic Health Hazard:** \*

**Flammability:** 0

**Physical hazards:** 0

**NFPA Rating**

**Health hazard:** 2

**Fire:** 0

**Reactivity Hazard:** 0

**Potential Health Effects**

**Inhalation** May be harmful if inhaled. Causes respiratory tract irritation.

**Skin** May be harmful if absorbed through skin. Causes skin irritation.

**Eyes** Causes eye irritation.

**Ingestion** Toxic if swallowed.

**Section 4: First-Aid Measures**

**After eye contact:** Immediately flush eyes with copious amounts of water for at least 15 minutes.

**After skin contact:** Immediately wash skin with soap and copious amounts of water.

**After Inhalation:** Remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

**After swallowing:** Wash out mouth with water provided person is conscious. Call a physician. Wash contaminated clothing before reuse.

**Section 5: Fire Fighting Measures**

**Extinguishing Agents:** Water spray, Carbon dioxide, dry chemical powder or appropriate foam.

**Special fire fighting procedures:** None Needed

**Unusual fire and explosions hazards:** None known

**Section 6: Accidental Release Measures**

**Human Safety Precautions:** Wear chemical safety goggles, rubber boots and heavy rubber gloves.

**Cleaning/Collecting Measures:** Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

**Section 7: Handling and Storage**

Refer to section 8.

**Section 8: Exposure Controls/Personal Protection****Personal protective equipment:**

Chemical safety goggles, compatible chemical-respirator, NIOSH/MSHA-approved respirator, and safety shower and eye bath.

**General Protective and Hygiene Measures:**

Mechanical exhaust required. Avoid contact with eyes, skin and clothing. Wash hands thoroughly after handling. Irritant. Keep tightly closed. Store in a cool dry place.

**Section 9: Physical and Chemical Properties**

**Form:** Solid (crystalline powder)

**Color:** White

**Odor:** Odorless

## **Section 10: Stability and Reactivity**

**Thermal Decomposition/Conditions to be avoided:** No decomposition if used according to specifications.

**Dangerous Reactions:** No dangerous reactions known.

**Dangerous Products of Decomposition:** Carbon oxides, nitrogen oxides.

## **Section 11: Toxicological Information**

### **Acute toxicity**

#### **Oral LD50**

LD50 Oral - rat - 475 mg/kg

Remarks: Behavioral:Altered sleep time (including change in righting reflex). Behavioral:Excitement. Diarrhoea

LD50 Oral - mouse - 571 mg/kg

Remarks: Behavioral:Altered sleep time (including change in righting reflex). Behavioral:Muscle contraction or spasticity. Behavioral:Irritability.

LD50 Oral - rat - 1,120 mg/kg

#### **Inhalation LC50**

LC50 Inhalation - rat - 4 h - 5.3 mg/l

#### **Dermal LD50**

no data available

#### **Other information on acute toxicity**

no data available

### **Potential health effects**

**Inhalation** May be harmful if inhaled. Causes respiratory tract irritation.

**Ingestion** Toxic if swallowed.

**Skin** May be harmful if absorbed through skin. Causes skin irritation.

**Eyes** Causes eye irritation.

**Section 12: Ecological Information** Data not yet available.

## **Section 13: Disposal Considerations**

### **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Hand over to hazardous waste disposers. Observe all federal, state and local environmental regulations.

## **Section 14: Transport Information**

**ADR/RID:** Not dangerous goods

**IMDG:** Not dangerous goods

**IATA:** Not dangerous goods

## **Section 15: Regulatory information**

Irritating to eyes, respiratory system and skin. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

## **Section 16: Other Information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Genotech shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.

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