

# MATERIAL SAFETY DATA SHEET

ANATRACE, INC.  
434 WEST DUSSEL DRIVE  
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Chemical Emergency (24-hr):  
- Within U.S. & Canada (800-424-9300)  
- International (703-527-3887)

Effective Date: 02./01/2006 Revised:

**NAME: GUANIDINE HYDROCHLORIDE CAT. NO: G1000**

**MF:** (NH<sub>2</sub>)<sub>2</sub>C=NH • HCl / **FW:** 95.53 **CAS NO:** 50-01-1

**CHIP R & S Phrases:** R:22 Harmful if swallowed. R:36/38 Irritating to eyes and skin.  
S:22 Do not breathe dust.

**HAZARDS IDENTIFICATION: CHIP:** Harmful \ **HCS:** Toxic

**FIRST-AID MEASURES EYES:** Flush with water for 15 minutes. Seek medical advice if irritation persists.

**SKIN:** Flush with water, then wash thoroughly with soap and water. Remove contaminated clothing and wash before reuse. Seek medical attention if irritation persists.

**INHALATION:** Remove the victim from exposure and move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Keep victim quiet and warm. Seek immediate medical attention.

**INGESTION:** Drink water and seek immediate medical attention. Avoid alcoholic beverages. Never give anything by mouth to an unconscious person.

**FIRE-FIGHTING INFORMATION** Use media suitable to extinguish the supporting or surrounding fire. Wear NIOSH (or equivalent) approved self contained breathing apparatus. For small fires only: use carbon dioxide, dry powder or foam. May emit fumes of hydrochloric acid when heated to decomposition.  
Flash Point = No data available.

**ACCIDENTAL RELEASE MEASURES** Wear appropriate personal protective equipment and clothing including lab coat, safety goggles, rubber or neoprene gloves and NIOSH-approved respirator. Collect in a manner that does not create dust and place in a suitable waste container. Avoid contact of material with skin or eyes. Use adequate ventilation.

**HANDLING AND STORAGE** Wear appropriate personal protective equipment and clothing including lab coat, safety goggles, rubber or neoprene gloves and NIOSH-approved respirator. Avoid contact of material with skin or eyes. Use adequate ventilation. Store ambient, in a cool dry area. Product is slightly hygroscopic and should be stored in a dry area to prevent moisture pick up and caking.

**PERSONAL PROTECTION** Wear appropriate personal protective equipment and clothing including lab coat, safety goggles, rubber or neoprene gloves and NIOSH-approved respirator. A qualified industrial hygienist should evaluate the need for respiratory protection. Use respiratory protection approved by NIOSH (or equivalent) and appropriate to the hazard. Avoid contact of material with skin or eyes. Mechanical ventilation or local exhaust as needed to control exposure to dust, vapors or mists. Access to a safety shower and eye-wash. HMIS Rating: H=1 \ F=0 \ R=0

## **PHYSICAL AND CHEMICAL PROPERTIES**

Appearance: White crystalline powder Boiling Point: No data available  
Vapor Pressure: No data available Vapor Density: >1  
Solubility (Water): Soluble Specific Gravity: 1.345 g/ml (H<sub>2</sub>O=1)  
Percent Volatile: No data available Evaporation Rate: No data available  
Chemical formula: C-H5-N3 HCl Melting Point: 183°C (361°F)

**STABILITY AND REACTIVITY** Product is stable. Avoid excessive heat. Material is hygroscopic; avoid moisture. Emits fumes of hydrochloric acid when heated to decomposition. Hazardous polymerization will not occur. Hazardous decomposition products include: Oxides of nitrogen, hydrogen chloride, carbon dioxide and carbon monoxide.

## **TOXICOLOGICAL INFORMATION EFFECTS OF OVEREXPOSURE:**

**EYES:** Dust or vapors may cause irritation or burning upon contact.

**SKIN:** Causes severe irritation to skin and hypersensitive individuals may experience an allergic reaction. May be absorbed through skin.

**INHALATION:** May cause irritation to the respiratory tract.

**INGESTION:** Chronic ingestion or excessive dosage may cause nausea, diarrhea, neurological disturbances (hyperirritability, tremor, ataxia, seizures), atrial fibrillation, hypotension, hypoglycemia, increased creatinine & bone marrow suppression. Cause severe irritation to skin, eyes & mucous membranes; harmful if swallowed, inhaled or absorbed through skin.

**TARGET ORGAN(S):** Bone Marrow and Nerves.

## **ADDITIONAL INFORMATION:**

Irritation, mutation and toxicity data listed in RTECS under MF4300000.

Oral Rat LD50 = 475 mg/kg. Toxic effects may include altered sleep time, excitement, hypermotility, diarrhea, muscle contraction, irritability, convulsions dyspnea.

Definitions: RTECS = Registry of Toxic Effects of Chemical Substances

**ECOLOGICAL INFORMATION** No information available

**DISPOSAL CONSIDERATIONS** Dispose of material in accordance with applicable local, state, and federal regulations.

**TRANSPORTATION INFORMATION US DOT / IATA:** Not Regulated.

**REGULATORY INFORMATION RCRA -** No applicable information.

**SARA 302 -** This material does not have a RQ or TPQ.

**SARA 313 -** This material is not reportable under 313.

**EPA TSCA Section 8(b) -** Chemical Inventory.

**Exposure Limits -** Not established.

**California Proposition 65 -** No applicable information.

This bulletin is for your guidance and is based upon information and tests believed to be reliable. Anatrace makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages thereto. The date is offered solely for your consideration, investigation, and verification. These suggestions should not be confused with either state, municipal, or insurance requirements, or with national safety codes, and constitute no warranty. Any use of these data and information must be determined by the user to be in accordance with applicable Federal, State and local regulations.