



# American International Chemical, Inc.

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## MATERIAL SAFETY DATA SHEET

### GUANIDINE NITRATE

#### SECTION 1 - CHEMICAL PRODUCT AND COMPANY INFORMATION

American International Chemical, Inc. 135 Newbury Street Framingham, MA 01701	Emergency Number: Chemtrec Information Number:	800-424-9300 703-527-3887 800-238-0001
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Date: August 2007

Synonyms: Guanidine Mononitrate

CAS #: 506-93-4

DOT Hazard Class: Oxidizer UN 1467

#### SECTION 2 - COMPOSITION AND INFORMATION ON INGREDIENTS

Guanidine Nitrate 95%+

#### SECTION 3 - HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW:** White odorless crystal that is moderately irritating to the skin, eyes and respiratory tract. Irritating and/or toxic fumes may be generated during a fire. Containers may explode when exposed to heat.

**POTENTIAL HEALTH EFFECTS:**

**Skin:** Prolonged contact may cause redness.

**Eyes:** Moderate irritant - continued contact may cause corneal injury.

**Ingestion:** Slightly toxic, may cause nausea and vomiting.

**Inhalation:** Will irritate respiratory system.

**CARCINOGENICITY:** Not listed under OSHA, IARC, or NTP.

#### SECTION 4 - FIRST AID MEASURES

**Skin:** Remove contaminated clothing and wash off with soap and water.

**Eyes:** Flush with plenty of water for at least 15 minutes.

**Inhalation:** Remove to the fresh air. Give oxygen if breathing is difficult.

**Ingestion:** Wash out mouth. Drink plenty of water to dilute or induce vomiting.

**On All Of The Above:** If conditions persist seek medical attention.

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### **SECTION 5 - FIRE FIGHTING MEASURES**

Flash Point: Not Applicable

Flammable Limits: > 360°C

Extinguishing Media: Use water, carbon dioxide, dry powder or foam.

Special Fire Fighting Procedures: Wear self-contained breathing apparatus and protective clothing. Use water to cool exposed containers. Water stream directed into fire may cause frothing with subsequent spread of fire.

Unusual Fire Explosion Hazards: Irritating and/or toxic gases or fumes may be generated by thermal decomposition or combustion. Closed containers may rupture or explode when exposed to extreme heat.

Auto Ignition Temperature: Not Applicable

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### **SECTION 6 - ACCIDENTAL RELEASE MEASURES**

Isolate hazard area and deny entry to unnecessary or unprotected personnel.

Contain spill, sweep up, collect and place in a disposal container. Avoid runoff into storm sewers and ditches which lead to waterways.

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### **SECTION 7 - HANDLING AND STORAGE**

Avoid contact with skin, eyes and clothing. Avoid dust formation and breathing dust. Use normal personal hygiene and housekeeping. Store in cool dry area away from other incompatible materials. Product is slightly hygroscopic and should be stored in a dry area to prevent moisture pick up and caking.

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### **SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION**

RESPIRATORY PROTECTION: Use NIOSH/MSHA approved respirators.

VENTILATION REQUIREMENTS: Ventilate as necessary to eliminate vapor or dust from the work area.

SKIN AND EYE PROTECTION:

Use rubber or neoprene gloves, chemical goggles and clothing sufficient to protect skin from dust.

WORK, HYGIENIC PRACTICES:

As required to protect skin and eyes from dust, safety showers and/or eye wash should be available. Do not leave food or smoke in work area. Wash thoroughly and remove or clean any contaminated clothing.

EXPOSURE LIMITS: None Established

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### **SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

Boiling Point: Not Applicable

Vapor Pressure (MM Hg): Not Applicable

Vapor Density (AIR=1): Not Applicable

Specific Gravity (H2O=1): 1.44 g/cm<sup>3</sup>

Bulk Density: ~ 700 kg/m<sup>3</sup>

Percent Volatile by Volume (%): Not Applicable

Melting Point: 417°F or 214°C

Evaporation Rate (Butyl Acetate=1): Not Applicable

Solubility in Water: Appreciable 200 g/L @ 30°C

pH: 4.9 @ 165g/L

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#### **SECTION 10 - STABILITY AND REACTIVITY**

CHEMICAL STABILITY: Stable under normal temperatures and pressures.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: Acid fumes, oxides of carbon toxic nitrogen compounds.

KEEP AWAY FROM: Strong Acids, bases or oxidants. Decomposition starts at 214°C.

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#### **SECTION 11 - TOXICOLOGICAL INFORMATION**

LD<sub>50</sub> - Oral - Rat - 1,260 mg/kg

LD<sub>50</sub> - Dermal - Rabbit - > 2,000 mg/kg

Not a Mutagenic in Ames Test

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#### **SECTION 12 - ECOLOGICAL INFORMATION**

Not available

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#### **SECTION 13 - DISPOSAL CONSIDERATIONS**

Dispose of in accordance with all federal, state and local regulations.

RCRA WASTE #: Not Listed

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**SECTION 14 - TRANSPORTATION INFORMATION**

D.O.T. SHIPPING NAME:.....Guanidine Nitrate  
TECHNICAL SHIPPING NAME:.....Guanidine Nitrate  
D.O.T. HAZARD CLASS:.....5.1  
U.N./N.A. NUMBER.....1467  
PRODUCT RQ (lbs.).....None  
D.O.T. LABEL.....Guanidine Nitrate, UN# 1467, Class 5.1, Group III  
D.O.T. PLACARD.....Oxidizer  
PRODUCT LABEL.....Oxidizer

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**SECTION 15 - REGULATORY INFORMATION**

TSCA (TOXIC SUBSTANCE CONTROL ACT):  
This product is listed on the TSCA Inventory.

SARA TITLE III INFORMATION:

Section 302 Extremely Hazardous Substance: Unlisted

Section 313 Toxic Chemicals: Unlisted

Section 311/312 Hazard Category: Reactive, Immediate (acute) Health Hazard

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**SECTION 16 - OTHER INFORMATION**

HMIS	Health	1
	Flammability	1
	Reactivity	1

Reason for Issue: Changed Date

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