



# American International Chemical, Inc.

Corporate Offices: (800) 238-0001

Internet: [www.aicma.com](http://www.aicma.com) Email: [info@aicma.com](mailto:info@aicma.com)

## MATERIAL SAFETY DATA SHEET

### BETAINE HCL

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

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

Date: August 2007

Synonyms: Glycine Betaine Hydrochloride, Achylin, Acidin, Acidine, Acidol, Rubraine Hydrochloride

CAS #: 590-46-5

DOT Hazard Class: Not Regulated

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

Betaine HCL 99% min.

#### SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: A white crystalline granular that can cause burning to the eyes with no unusual hazard if involved in a fire.

POTENTIAL HEALTH EFFECTS:

**Skin:** May cause skin irritation.

**Eyes:** Can cause irritation or burning.

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

**Ingestion:** Not a hazard with normal industrial usage.

CARCINOGENICITY: None Identifiable

#### SECTION 4 - FIRST AID MEASURES

**Skin:** Immediately wash skin with soap and water for at least 15 minutes.

**Eyes:** Immediately flush with plenty of water for at least 15 minutes, holding eye lids apart.

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

**Ingestion:** Wash out mouth with water.

**On All Of The Above:** Consult a physician if symptoms persist.

#### SECTION 5 - FIRE FIGHTING MEASURES

BETAINE HCL

Page 1 of 4

Flash Point: Non Combustible

Flammable Limits: Non Combustible

Extinguishing Media: Use media that is appropriate to treat surrounding fire.

Special Fire Fighting Procedures:

Use fire fighting procedure that is appropriate to treat surrounding fire. All firefighters should use self-contained breathing apparatus and full fire-fighting turn-out gear.

Unusual Fire Explosion Hazard: During a fire, irritating and highly toxic gasses may be generated by thermal decomposition or combustion.

Auto Ignition Temperature: Not Applicable

---

#### **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 that lead to waterways.

---

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

Avoid contact with skin, eyes and clothing. Use with adequate ventilation. Avoid 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.

---

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

RESPIRATORY PROTECTION: Use NIOSH/MSHA approved respirators.

VENTILATION REQUIREMENTS: Ventilate as necessary to eliminate dust from the work area and maintain concentrations below the limit.

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

---

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

Boiling Point: Not Available

BETAINE HCL

Vapor Pressure (MM Hg): Not Available

Vapor Density (AIR=1): Not Applicable

Specific Gravity (H<sub>2</sub>O=1): Not Available

Percent Volatile by Volume (%): Not Applicable

Melting Point: ~245° C

Evaporation Rate (Butyl Acetate=1): Not Applicable

Solubility in Water: Not Available

pH: Not Applicable

---

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

CHEMICAL STABILITY: Stable under normal temperatures and pressures.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Monoxide, Carbon Dioxide, Nitrogen Oxide and Hydrogen Chloride Gas.

KEEP AWAY FROM: Strong oxidizing agents.

---

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

Not Available

---

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

Not Available

---

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

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

RCRA WASTE #: Not Listed

---

### **SECTION 14 - TRANSPORTATION INFORMATION**

D.O.T. SHIPPING NAME: Betaine Hydrochloride

BETAINE HCL

---

**SECTION 15 - REGULATORY INFORMATION**

OSHA STATUS: Not listed

TSCA STATUS: Listed

CERCLA REPORTABLE REQUIREMENTS: (RQ) None

SARA TITLE III INFORMATION:

Section 302 Extremely Hazardous Substance Not listed

Section 313 Toxic Chemicals: Not listed

Section 311/312 Hazard Category: Acute Health Hazard

---

**SECTION 16 - OTHER INFORMATION**

HMIS Rating :	HEALTH	-2
	FLAMMABILITY	-0
	REACTIVITY	-0

Reason for Issue: Changed Date

**This information is given without any warranty or representation. It is believed to be correct but does not claim to be all inclusive and shall be used only as a guide. American International Chemical, Inc., shall not be held liable for any damage resulting from handling or contact with the above product. It is offered solely for your consideration, investigation and verification.**