

**MATERIAL SAFETY DATA SHEET**

Per 29 CFR 1910.1200

DATE PREPARED : 1/1/90

**SECTION I.**

**BRULIN & COMPANY. INC.** P.O. BOX 270, INDIANAPOLIS, IN 46206-0270 (317) 923-3211

WEST COAST FACTORY  
Richmond, California

SOUTHEASTERN FACTORY  
Tampa, Florida

24 HOUR EMERGENCY NUMBER

CHEMTREC 1-800-424-9300

IDENTITY (As listed on label):  
**BOWLAIDE**

Health: 3  
HMIS HAZARD RATINGS: Flammability: 0  
Reactivity: 0

**SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION**

Hazardous Components (Specific Chemical Identity: Common Name(s))	CAS #	OSHA PEL	ACGIH TLV-TWA	OTHER LIMITS RECOMMENDED	PERCENT
* Hydrochloric Acid, Muriatic Acid	7647-01-0	5 PPM	5 PPM	None	23.5

SECTION 313 SUPPLIER NOTIFICATION

The toxic chemical(s) listed above which are marked with an (\*) are subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

**SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS**

Boiling Point:	212 F	Specific Gravity (H <sub>2</sub> O=1):	1.12
Vapor Pressure (mm Hg):	Approx. 17 @ 68 F	Melting Point:	Approx. 30 F
Vapor Density (Air=1):	Greater than 1	Evaporation Rate (water=1):	1.0
Solubility in Water:	Complete		

Appearance and Odor: White opaque liquid, sharp odor

**SECTION IV - FIRE AND EXPLOSION HAZARD DATA**

Flash Point (Method Used): None  
 Flammable Limits LEL None UEL None  
 Extinguishing Media: Water fog, carbon dioxide, dry chemical  
 Special Fire Fighting Procedures: Wear full protective clothing and self contained breathing apparatus.  
 Unusual Fire and Explosion Hazards: Reacts with active metals such as aluminum, zinc, magnesium, etc. to produce flammable hydrogen gas.

**SECTION V - REACTIVITY DATA**

Stability Unstable  Stable   
 Conditions to Avoid: None  
 Incompatibility (Materials to Avoid): Strong alkalis, active materials  
 Hazardous Decomposition or Byproducts: Hydrogen chloride  
 Hazardous Polymerization: May Occur  May Not Occur   
 Conditions to Avoid: None

**SECTION VI - HEALTH HAZARD DATA**

Route(s) of Entry: Ingestion? Yes Skin? Yes Inhalation? Yes Eyes?  
 Health Hazards (Acute and Chronic): Ingestion - May cause severe burns of the mucous membranes of the mouth, esophagus, and stomach. May be fatal in severe cases. Inhalation - Acute overexposure may cause severe irritation of the upper respiratory tract. If inhaled deeply, edema of the lungs may occur. Skin - Direct contact with concentrated solutions may cause skin burns. Chronic exposure may result in dermatitis. Eyes - Contact with liquid or vapors may cause severe irritation or even burns. Permanent damage or even blindness may result if not treated quickly.  
 Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No  
 Signs and Symptoms of Exposure: Ingestion causes pain in the throat and stomach. The lips and mouth usually turn white, and later brown. There may be difficulty in swallowing, nausea, and vomiting. In severe cases, collapse and unconsciousness may occur. Eye contact with the liquid or vapors may cause painful burns. Skin contact may cause severe irritation seen as redness. Inhalation may cause coughing, burning of the throat, and a choking sensation.  
 Medical Conditions Generally Aggravated by Exposure: None known  
 Emergency & First Aid Procedures:  
     Eye Contact: Flush with large quantities of water for 15 minutes lifting upper and lower lids occasionally. Call physician.  
     Inhalation: Remove to fresh air. Administer oxygen if breathing is difficult.  
     Skin Contact: Wash with mild soap and water. Remove contaminated clothing and launder before reuse.  
     Ingestion: DO NOT INDUCE VOMITING. If conscious, give large quantities of water or milk. Get immediate medical attention.

**SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE**

Steps to be Taken in Case Material is Released or Spilled: Small Spill: Cover spill with soda ash to neutralize and flush with plenty of water. Large Spill: Wear full protective clothing and boots. Contain spill to prevent contamination of waterways. Ventilate the area well and pump into containers for reclamation or disposal. Neutralize residues with soda ash or lime and flush with plenty of water.  
 Waste Disposal Method: Dispose according to Federal, State and Local laws and 40 CFR.  
 Precautions to be Taken in Handling and Storing: Keep containers closed when not in use and store in a cool, dry place.

**SECTION VIII - CONTROL MEASURES**

Respiratory Protection (Specify Type): If TLV is exceeded, use a NIOSH/MSHA approved respirator suitable for acid vapor and mist. Contact your Safety Equipment Supplier for recommendations.  
 Ventilation: Provide sufficient mechanical (general and/or local exhaust) to maintain exposure below TLV(s).  
 Protective Gloves: Impervious rubber gloves such as neoprene  
 Eye Protection: Goggles. Do not wear contact lenses.

**PRODUCT NAME: BOWLAIDE**

PRODUCT NUMBER: 201004

Other Protective Clothing or Equipment: As necessary to prevent skin contact. Safety showers and eye wash fountains recommended if splashing is likely to occur.

Work/Hygienic Practices: Avoid breathing vapors or spray mists.