

JUL 27 1993

**MATERIAL SAFETY DATA SHEET**  
**Emergency Telephone (414) 251-4977**

Name: **Alliance Group, Inc.** Address: N114 W18621 Clinton Drive  
City: Germantown State: Wisconsin Zip Code: 53022  
Product name: **Scale Purge**  
Product code: **0105**

**Section II - Hazardous Ingredient**

CAS Number	Chemical Component	%	TLV ppm	Hazard Data
7647-01-0	Hydrochloric Acid	20	ceiling 5 ppm	Corrosive

**Section III - Physical Data**

Solid:	Liquid: X	Appearance:	Colorless/Lt. Yellow
Specific Gravity:	1.1	Odor:	Pungent Odor
Solubility in water:	Complete	Freezing Point:	-63°F.
% Volatiles:	100% pH: 1.0	Evaporation Rate (nBuAc):	>1
Vapor Density (air=1):	1.27	Vapor Pressure (MM HG):	35 @25 C

**Section IV - Fire and Explosive Data**

Flash Point: None Flammable Limits lfl N.A. ufl N.A.

Extinguishing Media: For fires in area use appropriate media. For example CO<sub>2</sub>, foam, dry chemical, water fog

Special Fire Hazards and Equipment Required: Evacuate area of unprotected personnel. Firefighters should use self-contained breathing apparatus (NIOSH-Approved) and wear impervious protective gear. Product generates heat upon addition of water, with possible spattering. Run-off from fire control may cause pollution. Neutralize run-off with lime, soda ash, etc.. to prevent corrosion of metals and formation of hydrogen gas.

Unusual Fire Explosion Hazards: Product may react with some metals (ex. Aluminum, Zinc, Tin, etc.) to release flammable hydrogen gas. Heat can cause evolution of gaseous hydrogen chloride.

**Section V - Reactive Hazards**

Product Stable: No Yes X Hazardous Polymerization: will not occur

Conditions to avoid: Contact with water may cause violent reaction with evolution of heat. To dilute add product slowly to lukewarm water, not water to product.

Incompatibility: Alkaline products, metals such as Aluminum, Zinc, Tin, etc.. Strong oxidizing agents, cyanides, sulfides. Formaldehyde.

Hazardous Decomposition Products: Hydrogen Chloride gas evolution caused by heat. May react with certain metals to produce flammable hydrogen gas.

Hazardous gases are evolved on contact with chemicals such as Cyanides, Sulfides, Carbides, etc..

---

---

### Section VI - Health Hazards

---

---

Eyes: Corrosive Severe damage-burning, irritation, tissue destruction  
Small quantities can result in permanent damage and loss of vision.

Skin: Corrosive Burns and tissue damage. May cause dermatitis.

Ingestion: Corrosive Can cause severe or permanent damage to linings of the mouth, esophagus, and stomach and other tissues with which contact is made

Inhalation: Severe irritation and possible damage to upper respiratory tract and to the lung tissue depending on the extent of exposure

Principal Routes of Absorption: Topical, inhalation, ingestion

Target Organs: Skin, Respiratory System, Eyes

Acute effects of Overexposure: See above

Chronic Effects of Overexposure: Workers with frequent exposure should be monitored for eye, respiratory, and skin irritation.

---

---

*First Aid Procedure* - Never give fluids or induce vomiting if patient is unconscious or having convulsions.  
**CALL A PHYSICIAN**

---

---

Eyes: **IMMEDIATELY** flush eyes with plenty of cool water for at least 15 minutes holding lids apart. Call a physician immediately.

Skin: Flush area with large amounts of water while removing clothing for at least 15 minutes. If irritation persists, seek medical attention. Do not reuse clothing or shoes until cleaned.

Ingestion: **DO NOT INDUCE VOMITING.** Give victim several glasses of water and call a physician immediately. If unconscious or in convulsions, take immediately to a hospital or physician.

Inhalation: Remove victim to fresh air. If breathing is labored, administer oxygen. Obtain immediate medical attention. If not breathing, give artificial respiration, preferably mouth to mouth.

---

---

### Section VII - Normal Handling Procedures

---

---

Precautions to be taken in Handling and Storage: Keep container tightly closed when not in use. Store in dry, well-ventilated secure area. Do not store in containers other than approved by supplier. Relieve pressure in drums weekly. Highly corrosive to most metals with evolution of hydrogen gas. Store away from incompatible materials. Avoid contact with skin and

eyes. Do not swallow. Use with adequate ventilation. Avoid prolonged or repeated breathing of vapors. Wash thoroughly after handling. Avoid dust or mist formation. Do not eat, drink, or smoke in work area.

**Protective Equipment:**

Eyes: Face shield and chemical goggles do not wear contact lenses.

Gloves: Rubber, acid proof, gauntlet - type.

Other: Rubber apron, gauntlets, impervious clothing, eye wash, safety shower.

Ventilation Requirements: Do not use in unventilated, closed area. Keep levels below recommended exposure limits. If recommended exposure limits are exceeded wear NIOSH Approved respirator.

Corrosive Action on Materials: Extremely corrosive (inhibited to prevent corrosion on steel)

---

---

**Section VIII - Spill or Leak Control Procedures**

---

---

Steps to be taken in case of spills: Evacuate unprotected personnel from area. Maintain adequate ventilation. Use proper safety equipment. Wear protective clothing (see section VII). Stop leak. Contain spill and put in proper containers for disposal. Flush remaining area with water and neutralize slowly and carefully with soda ash or lime. Collect and store in labelled, approved drum for disposal. Flush area with plenty of water.

Waste disposal methods: Contact local environmental authorities. Dispose of at approved Waste Treatment Facility. If approved, neutralize material and flush to sewer. DO NOT PRESSURIZE, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, flame, sparks, or other sources of ignition.

---

---

The above information is believed to be accurate and discloses the known hazards for this product as of this date. No additional warranties are made.

Date: April 22, 1991 By: D.C. Miller

	HMIS	NFPA
HEALTH	3	3
FLAMMABILITY	0	0
REACTIVITY	1	0
KEY: 0-MINIMAL	1-SLIGHT	2-MODERATE
		3-SERIOUS
		4-SEVERE