

## MATERIAL SAFETY DATA SHEET

## SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: MURIATIC ACID  
 PRODUCT NUMBER (S):  
 PRODUCT DESCRIPTION: HYDROCHLORIC ACID  
 DATE PREPARED: 5/4/99  
  
 MANUFACTURER NAME: ALLIED UNIVERSAL CORPORATION  
 MANUFACTURER ADDRESS: 8350 N.W. 93rd STREET  
 MIAMI, FL 33166-2098  
  
 MANUFACTURER PHONE: 305 888-2623  
  
 SUPPLIER NAME AND ADDRESS: ALLIED UNIVERSAL CORPORATION  
 8350 N.W. 93rd STREET  
 MIAMI, FL 33166-2098  
  
 SUPPLIER PHONE: (305) 888-2623  
  
 EMERGENCY PHONE - 24 HOURS: CALL CHEM-TEL, INC. (800) 255-3924

## SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT	WT. %	OSHA PEL	ACGIH TLV	CAS REGISTRY #
Hydrogen Chloride	31.45-37.0	5.0 ppm	5.0 ppm	7647-01-0

## SECTION 3 HAZARDS IDENTIFICATION

## EMERGENCY OVERVIEW

## POTENTIAL HEALTH EFFECTS:

INHALATION: SEVERE IRRITATION OF THE UPPER RESPIRATORY TRACT, RESULTING IN COUGHING, BURNING OF THE THROAT AND A CHOKING SENSATION

EYE CONTACT: CAUSES SEVERE IRRITATION AND PAINFUL BURNS OF THE EYES AND EYELIDS. MAY CAUSE PROLONGED OR PERMANENT VISUAL IMPAIRMENT TO TOTAL LOSS OF SIGHT.

SKIN CONTACT: CAN CAUSE SEVERE BURNS, MAY LEAD TO DERMATITIS.

INGESTION: CAUSES SEVERE BURNS OF THE MUCOUS MEMBRANES OF THE MOUTH, ESOPHAGUS AND STOMACH, DIFFICULTY IN SWALLOWING, INTENSE THIRST, NAUSEA AND VOMITING.

CHRONIC: CORROSIVE, CAN CAUSE SEVERE AND PAINFUL BURNS ON CONTACT WITH ANY PART OF THE BODY.

HMIS HAZARD CODE: HEALTH: 3 FLAMMABILITY: 0 REACTIVITY: 0

## SECTION 4 FIRST AID MEASURES

INHALATION: REMOVE FROM CONTAMINATED AREA. IF BREATHING HAS STOPPED, CLEAR AIRWAY AND BEGIN MOUTH-TO-MOUTH ARTIFICIAL RESPIRATION, WHICH

MAY BE SUPPLEMENTED BY THE USE OF A BAG-MASK RESPIRATOR OR MANUALLY-TRIGGERED OXYGEN SUPPLY. CONTACT PHYSICIAN IMMEDIATELY.

EYE CONTACT: IMMEDIATELY FLUSH THE EYES WITH LARGE QUANTITIES OF RUNNING WATER FOR A MINIMUM OF 15 MINUTES. HOLD EYELIDS APART TO ENSURE RINSING THE ENTIRE SURFACE OF THE EYES AND LIDS. OBTAIN MEDICAL ATTENTION AS SOON AS POSSIBLE.

SKIN CONTACT: IMMEDIATELY REMOVE CONTAMINATED CLOTHING UNDER A SAFETY SHOWER. FLUSH ALL AFFECTED AREAS WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. DO NOT ATTEMPT TO NEUTRALIZE WITH CHEMICAL AGENTS. OBTAIN MEDICAL ADVISE IMMEDIATELY.

INGESTION: DO NOT INDUCE VOMITING. IMMEDIATELY GIVE LARGE QUANTITIES OF WATER OR MILK. IF VOMITING DOES OCCUR, GIVE FLUIDS AGAIN. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. CALL PHYSICIAN OR NEAREST POISON CONTROL CENTER IMMEDIATELY.

#### SECTION 5 FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: NON COMBUSTIBLE

GENERAL HAZARD: MAY IGNITE OTHER COMBUSTIBLE MATERIAL; VIOLENT REACTION WITH WATER. FLAMMABLE, POISONOUS GASES MAY ACCUMULATE IN TANKS AND HOPPER CARS.

FIRE FIGHTING INSTRUCTIONS: USE DRY CHEMICAL OR CARBON DIOXIDE. DO NOT APPLY WATER.

FIRE FIGHTING EQUIPMENT: FIRE FIGHTERS SHOULD WEAR FULL PROTECTIVE CLOTHING AND SELF-CONTAINED BREATHING APPARATUS (POSITIVE PRESSURE IF AVAILABLE).

HAZARDOUS COMBUSTION PRODUCTS: NONE

#### SECTION 6 ACCIDENTAL RELEASE MEASURES

SPILLS SHOULD BE HANDLED IMMEDIATELY BY NEUTRALIZATION AND DILUTION OF THE SPILLED PRODUCT BY THE USE OF SODA ASH (SODIUM CARBONATE) LIME (CALCIUM HYDROXIDE) OR LIMESTONE (CALCIUM CARBONATE) WITH LARGE AMOUNTS OF WATER. IF INSIDE A CLOSED SPACE, PROVIDE AMPLE VENTILATION AS SODA ASH, LIME AND LIMESTONE WILL EVOLVE CARBON DIOXIDE.

#### SECTION 7 HANDLING AND STORAGE

HYDROGEN GAS MAY FORM DURING STORAGE AND PRODUCE EXPLOSIVE CONDITIONS. STORE IN CORROSION PROOF VESSEL AND/OR TANK. RUNOFF TO SEWERS MAY CREATE FIRE OR EXPLOSION HAZARD.

#### SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

##### ENGINEERING CONTROLS

VENTILATION: ADEQUATE TO KEEP SULPHURIC ACID CONCENTRATIONS BELOW

APPLICABLE STANDARDS.

PERSONAL PROTECTION

RESPIRATOR: 50 mg/m<sup>3</sup> - FULL FACE GAS MASK WITH ACID/GAS CARTRIDGE,  
80 mg/m<sup>3</sup> - TYPE C FULL-FACE SUPPLIED AIR RESPIRATOR, OVER 80 mg/m<sup>3</sup>  
- SELF-CONTAINED BREATHING APPARATUS.

PROTECTIVE CLOTHING: ACID-PROOF CLOTHING, GLOVES, SHOES, HAND GEAR,  
CHEMICAL SPLASH GOGGLES, FULL-FACE SHIELD, EYE WASH AND SAFEETY SHOWER

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

VAPOR PRESSURE: 50-60mm Hg @ 20 DEG C	VAPOR DENSITY: N/A
SPECIFIC GRAVITY: 1.1600-1.1884	PHYSICAL STATE: LIQUID
SOLUBILITY IN WATER: VERY SOLUABLE	EVAPORATION RATE: N/A
pH: N/A	BOILING POINT: 110 DEG C
FREEZING POINT: -53 DEG C	VISCOSITY: N/A
ODOR: SHARP, PUNGENT, IRRITANT	APPEARANCE: LIQUID

SECTION 10 STABILITY AND REACTIVITY

GENERAL: STABLE

INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID: CONTACT WITH METAL,  
COMBUSTIBLE MATERIALS, WATER, ORGANIC MATERIALS, NITRATES, CARBINES,  
CHLORATES, CYANIDES, METALLIC SULFIDES, BASES, OTHER ACIDS AND METALS.

HAZARDOUS DECOMPOSITION: SULPHUR OXIDES AND HYDROGEN IN THE PRESENCE  
OF METALS.

SECTION 11 TOXICOLOGICAL INFORMATION

NONE

SECTION 12 ECOLOGICAL INFORMATION

NONE

SECTION 13 DISPOSAL CONSIDERATIONS

DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.

SECTION 14 TRANSPORT INFORMATION

DOT (Department Of Transportation)

PROPER SHIPPING NAME:	HYDROCHLORIC ACID
UN/NA NUMBER:	UN1789
HAZARD CLASS:	8
PACKING GROUP:	II

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SECTION 15 REGULATORY INFORMATION

NONE

SECTION 16 OTHER INFORMATION

NONE