

215 S.E. 6th Ave.
HILLSBORO, OR 97123

SECTION I

PRODUCT CODE NUMBER 01-0173 *TLV: _____
 MANUFACTURER'S NAME Powalt Corporation Bus. East: (215) 587-7695 Bus. West: (503) 238-7230
 EMERGENCY INFORMATION Other #1: (502) 395-7121
 Other #2: (503) 228-7655
 MANUFACTURER'S ADDRESS Three Parkway, Philadelphia, PA 19102
 PRODUCT Muriatic Acid, 20 Pume COMMON NAME: Hydrogen Chloride (Aqueous)
 GENERIC NAME _____ CHEMICAL NAME Hydrochloric Acid
 CHEMICAL FAMILY Acid DOT PROPER SHIPPING NAME TT: RQ Hydrochloric Acid;
Corrosive Material;
 WARNING STATEMENTS _____ Reportable Quantity (RQ) is 5,000 lbs. UN1789 Placarded Corrosive
C: RQ Hydrochloric Acid; Corrosive Material;
UN1789 Placarded Corrosive

SECTION II - INGREDIENTS

	C.A.S. #	%	% OSHA	TLV	NFP
Hydrogen Chloride	7647-01-0	31.5%	32 Corrosive		3-0

* Threshold limit value set by (A) DSHA, (B) ACGIH, (C) See Section III, (D) Other, (NE) Not Established (Units are in PPM unless otherwise specified)

SECTION III - PHYSICAL DATA

APPROXIMATE BOILING RANGE: (20.2% H.C.L.) 110°C/ 23°F VAPOR PRESSURE: 28.05 @ 20 C 68 F
 VAPOR DENSITY: N/A SOLUBILITY IN WATER: 67% at 30 C
 SPECIFIC GRAVITY: 1.1600 @ 15.5/15.5 C PERCENT VOLATILE: 100
 EVAPORATION RATE: _____ APPROXIMATE BULK DENSITY: _____

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT RANGE: None EXTINGUISHING MEDIA: N/A
 FIRE FIGHTING PROCEDURES: Keep containers cool. If this can be accomplished safely, move containers away from fire area. Nonflammable, but reacts with most metals to evolve hydrogen gas which may cause fire or explosion in air.
 UNUSUAL FIRE AND EXPLOSION HAZARDS: _____

SECTION V - EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT: Flush with plenty of water for 15 minutes. Get medical attention. Flush with water for additional 15 minutes if physician has not arrived.
 SKIN CONTACT: Wash with soap and water. Get medical attention. Contaminated clothing - remove and launder. Contaminated shoes - destroy. Do not apply oils or ointments to other burned areas unless physician prescribes.
 INHALATION: Remove to fresh air. If not breathing give artificial respiration. Give oxygen. Get medical attention.
 INGESTION: Do not induce vomiting. Get medical attention. Drink plenty of lime water or milk of magnesia.

SECTION VI - PHYSIOLOGICAL EFFECTS AND HEALTH INFORMATION

ACUTE EFFECTS TLV 0.01 mg/m³ (as Cu) mist or dust

Copper Sulfate is toxic. Inhalation of dusts or solution mists of copper salts can cause ulceration of nasal septum and nasopharyngeal congestion of the mucous membranes. Repeated or prolonged skin contact may cause irritation and eczema. Particulate or solution in the eyes may cause conjunctivitis, ulceration or clouding of the cornea. Ingestion can cause severe G.I. tract irritation, abdominal pain, salivation, nausea, and hemorrhagic gastritis. It's unpleasant taste and prompt emetic effect upon ingestion can reduce oral toxicity. Ingestion of 10g (as CuSO₄) has resulted in death.

SECTION VII - REACTIVITY DATA

STABILITY (Conditions to Avoid): This is a stable material in closed containers at room temperature under normal storage and handling conditions.

Material is acidic when dissolved in water. The solution can react with magnesium metal to evolve flammable hydrogen gas. Loses water of hydration by slowly efflorescing in air or rapidly on heating (-2H₂O at 30C, - 4H₂O at 110C, and -5H₂O at 250C) to yield white, anhydrous cupric sulfate. Contact with this anhydrous salt will ignite hydroxylamine at temperatures > 400C, it decomposes to cupric oxide and sulfur oxide.

HAZARDOUS POLYMERIZATION (Conditions to Avoid): Does not occur.

SECTION VIII - SPILL OR LEAK PROCEDURES

PROCEDURES IN CASE OF RELEASE OR SPILL. Notify safety personnel of spills. Provide adequate ventilation. Clean-up personnel need protection against inhalation of dust or mist. Sweep up or vacuum, avoid dusting conditions, and place in appropriate container for reclamation or disposal. Absorb liquid spills on vermiculite or dry sand. Flush residue with much water. WASTE DISPOSAL METHOD: Bury scrap in an approved landfill. Treatment with lime to precipitate insoluble basic copper salts may be desirable. Follow federal, State and Local regulations.

SECTION IX - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: When dusty conditions prevail, use a high efficiency particulate filter respirator or a self-contained breathing apparatus; a full facepiece is required above TLV. VENTILATION: Provide general and local exhaust ventilation as needed to meet TLV requirements. Wear body protective clothing appropriate for the work situation to minimize skin contact. PROTECTIVE GLOVES: Use rubber gloves to prevent repeated or prolonged skin contact. Soiled clothing to be laundered before reuse. EYE PROTECTION: Prevent eye contact by wearing chemical safety goggles where splashing is possible. Eyewash stations and washing facilities should be available to areas of use and OTHER PROTECTIVE EQUIPMENT: handling.

SECTION X - STORAGE AND SPECIAL PRECAUTIONS

HANDLING AND STORING PRECAUTIONS: Store in closed containers in a cool, dry, well-ventilated area away from sources of heat, and reducing agents. Use good housekeeping practices to prevent accumulation of dust. Avoid breathing dust or solution mist. Minimize skin contact by using proper gloves and apron and follow good personal hygiene. Do not ingest. Keep out of eyes.

SECTION XI - DOCUMENTARY INFORMATION

PRODUCT CODE NUMBER:

ISSUE DATE: May 1984

REPLACES MSDS NUMBER:

PREVIOUS PRODUCT CODE NUMBER:

PREVIOUSLY ISSUED: