

MATERIAL SAFETY DATA SHEET

This MSDS complies with OSHA'S Hazard Communication Standard 29 CFR 1910.1200 and OSHA Form 174

IDENTITY AND MANUFACTURER'S INFORMATION						
NFPA Rating: Health-3; Flammability-0; Reactivity-1; Special - Acid			HMS Rating: Health-3; Flammability-0; Reactivity-1; Personal Protection-D			
Manufacturer's Name: VERAX CHEMICAL CO.			DOT Hazard Classification: Corrosive			
Address: 20102 Broadway Ave. Snohomish, WA 98296			Identity (trade name as used on label): HD ALUMINUM CLEANER			
Date Prepared: 09/26/2005		Prepared By: GP		MSDS Number: HDAL Revision -2		
Information Calls: (425)481-5353			NOTICE: JUDGEMENT BASED ON INDIRECT TEST DATA			
EMERGENCY RESPONSE NUMBER: 1(425)481-5353						
SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION						
COMPONENTS-CHEMICAL NAMES AND COMMON NAMES (Hazardous Components 1% or greater; Carcinogens 0.1% or greater)		Hazard	SARA III LIST	OSHA PEL (ppm)	ACGIH TLV (ppm)	Carcinogen Ref. Source **
Sulfuric Acid 10% cas 7664-93-9		Corrosive		Stel 3	1 mg/m3	
Hydrofluoric Acid (5-10%) cas 7664-39-3		Corrosive		3 ppm	3 ppm	
SECTION 2 - PHYSICAL/CHEMICAL CHARACTERISTICS						
Boiling Point: 212°F			Specific Gravity (H2O=1): 1.091			
Vapor Pressure: PSIG @ 70°F (Aerosols):			Vapor Pressure (Non-Aerosols)(mm Hg and Temperature): ND			
Vapor Density (Air = 1): 1			Evaporation Rate (water = 1): <1			
Solubility in Water: Complete			Melting Point: NA pH @ 77F: <1			
Appearance and Odor: Clear amber liquid, medium viscosity. Pungent.						
SECTION 3 - FIRE AND EXPLOSION HAZARD DATA						
FLAMMABILITY as per USA FLAME PROJECTION TEST (aerosols) N/A		Auto Ignition Temperature N/A	Flammability Limits in Air by % in Volume: % LEL: N/A % UEL: N/A			
FLASH POINT AND METHOD USED (non-aerosols): None			EXTINGUISHER MEDIA: Any suitable media for surrounding fire			
SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus approved by NIOSH and full protective clothing. Use water spray to keep containers cool.						
Unusual Fire & Explosion Hazards: Reaction with certain metals generates flammable and potentially explosive hydrogen gas. Considerable heat is evolved when contacted with many substances. Heat increases pressure and may explode container.						
SECTION 4 - REACTIVITY HAZARD DATA						
STABILITY [X] STABLE [] UNSTABLE			HAZARDOUS POLYMERIZATION [] WILL [X] WILL NOT OCCUR			
Incompatibility (Mat. to avoid): 1) Glass, concrete and other silicon-bearing materials: yield silicon tetrafluoride gas. 2) Carbonates, sulfides and cyanides: yield toxic gasses. 3) Alkalis, some oxides, fluorine and other water-reactive materials: cause strong exothermic reactions that can be violent. 4) Common metals: yield hydrogen gas, a fire and explosive hazard and a reactive hazard. 5) Corrosive to many materials, including leather, rubber and many organics.			Conditions to Avoid: Extreme heat or cold.			
Hazardous Decomposition Products: Hydrogen fluoride gas.						
SECTION 5 - HEALTH HAZARD DATA						
PRIMARY ROUTES OF ENTRY: [X] INHALATION [] INGESTION [X] SKIN ABSORPTION [X] EYE [] NOT HAZARDOUS						
ACUTE EFFECTS: Eye contact may cause severe burns. Skin contact: Both liquid and vapor can cause burns which may not be immediately painful or visible. Hydrofluoric acid will penetrate skin and attack underlying tissues and bone. Inhalation: Irritation of nose, throat and respiratory system. Concentrated vapors can cause nose and throat burns, lung inflammation and pulmonary edema. Also depletes calcium levels in the body if not promptly treated. can cause damage to mucous membranes and other tissues and may be fatal.						
CHRONIC EFFECTS: Dermatitis, chronic irritation and congestion of respiratory tract, depletion of calcium levels in the body. Bone and joint changes (Fluorosis).						
Carcinogens: None Known to be present						
Signs and Symptoms of Exposure: Vapors may be irritating to eyes, nose, throat and lungs.						
Medical Conditions Generally Aggravated by Exposure: Skin, eye, bone, respiratory, cardiac diseases.						
EMERGENCY FIRST AID PROCEDURES						
Eye Contact: Flush with water for 15 minutes while lifting eyelids. Get medical attention.						
Skin Contact: Wash with soap and water for 15 to 20 minutes. Remove contaminated clothing. Launder before re-use. Get medical attention as soon as possible. Apply magnesia paste. Hydrofluoric exposure needs special treatment.						
Inhalation: Remove to fresh air. If not breathing give artificial respiration and call a physician.						
Ingestion: DO NOT INDUCE VOMITING. Drink large amounts of water to dilute. Several glasses of milk or several ounces of milk of magnesia may be given for their soothing effect. Get medical attention.						
SECTION 6 - CONTROL AND PROTECTIVE MEASURES						
Respiratory Protection (specify type): NIOSH approved respirator for acid fumes.						
Protective Gloves: Acid resistant gloves in gaultlet style.			Eye Protection: Chemical safety goggles (plastic lenses) and face shield.			
Ventilation Requirements: Sufficient to reduce vapor and acid mists below permissible TLV levels..						
Other Protective Clothing & Equipment: Chemical resistant boots and apron. Immediately remove clothes in case of contact with product.						
Hygienic Work Practices: Handle with EXTREME care. Ordinary good housekeeping procedures. Wash hands thoroughly after handling. Avoid food contamination. KEEP OUT OF REACH OF CHILDREN. Read product directions before use.						
SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE						
Steps To Be Taken If Material Is Spilled Or Released: Wear protective equipment as described in Section 6. Contain spill and cautiously dilute with large amounts of water. Neutralize carefully with soda ash or lime. Provide good ventilation. Flush residue in accordance with applicable disposal regulations Attempt to keep unneutralized product out of sewer.						
Waste Disposal Methods: Contact local authorities for proper disposal.						
Precautions To Be Taken In Handling & Storage: Do not breathe vapor or mist. Use only with adequate ventilation. Avoid all contact with skin, eyes and clothing, even dilute solution. Store in cool, dry place away from other chemicals.						
Other Precautions &/or Special Hazards: KEEP OUT OF REACH OF CHILDREN. Dilute by adding product to water. Keep container tightly closed when not in use.						
SECTION 8 - TRANSPORTATION REQUIREMENTS (D.O.T. Classification)						
Shipping Name: corrosive Liquid NOS Hazard Class: 8 I.D. No.: UN1760 Pkg. Group: II (Phosphoric acid/hydrofluoric acid)						

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind.

** Chemical Listed as Carcinogen or Potential Carcinogen. [a] NTP [b] IARC Monograph [c] OSHA [d] Not Listed [e] Animal Data Only

