

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- 2		HMIS Rating: Health- 3 Flammability- 0 Reactivity- 2			
Manufacturer's Name: Diversitech Corporation Address: 2530 Lantrac Court Decatur, Georgia 30035 Information Calls: (770) 593-0900		DOT Hazard Classification: CORROSIVE, LIQUID, acidic, inorganic, NOS (Contains phosphoric acid and hydrofluoric acid) 8, UN3264, PG II DOT Hazard Label: CORROSIVE Identity (trade name as used on label): Foamy Concentrate Acid Evaporator Coil Cleaner & Brightener 8-RS, 8-R			
Date prepared: January 29, 2000 Prepared by: E. Bridges		MSDS Number: 8-R			
EMERGENCY RESPONSE NUMBER: 1(800)255-3924 CHEM-TEL (Chemical emergencies only.)		NOTICE: JUDGMENT BASED ON INDIRECT TEST DATA			
SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION					
COMPONENTS-CHEMICAL NAMES AND COMMON NAMES		CAS Number	OSHA PEL (ppm)	ACGIH TLV (ppm)	Other STEL
Phosphoric Acid		7664-38-2	1 mg/m ³	1 mg/m ³	3 mg/m ³
Hydrofluoric Acid		7664-39-3	3 mg (F)/m ³	3 mg (F)/m ³	6 mg (F)/m ³
					% OR RRG
					< 5
					< 10
Phosphoric acid and hydrofluoric acid are SARA TITLE III, Section 313 ingredient to reporting by manufacturing sector (S. I. C. 20 – 39).					
SECTION 2 - PHYSICAL/CHEMICAL CHARACTERISTICS					
Boiling Point: 214°		Specific Gravity (H₂O=1): 1.070			
Vapor Pressure (mm Hg): 17		Melting Point < 30°F			
Vapor Density (Air = 1): 2.45		Evaporation Rate (Water = 1): 1.0			
Solubility in Water: COMPLETE		Water Reactive: None.			
Appearance and Odor: Clear, pink/red liquid with bland odor.					
SECTION 3 - FIRE AND EXPLOSION HAZARD DATA					
FLASH POINT AND METHOD USED (non-aerosols): None.					
Flammability Limits: LEL: N/A UEL: N/A					
EXTINGUISHER MEDIA: Appropriate to surrounding fire.					
SPECIAL FIRE FIGHTING PROCEDURES: Mists and fumes are corrosive and harmful. Firefighters should wear self-contained breathing apparatus and full protective clothing when fighting fires involving this product.					
Unusual Fire & Explosion Hazards: None.					
SECTION 4 - REACTIVITY HAZARD DATA					
STABILITY [X] STABLE [] UNSTABLE		HAZARDOUS POLYMERIZATION [] WILL [X] WILL NOT OCCUR			
Incompatibility (Mat. to avoid): Do not mix with alkalis or any other chemicals. Do not allow to contact glass.		Conditions to Avoid:			
Hazardous Decomposition Products: None known.					
SECTION 5 - HEALTH HAZARD DATA					
PRIMARY ROUTES OF ENTRY: [X] INHALATION [X] INGESTION [X] SKIN ABSORPTION [X] EYE					
Health Hazards (acute and chronic): None known.					
Inhalation: Mists may irritate respiratory system and cause difficulty in breathing.					
Eye Contact: Severe irritation and possible burns. May cause corneal damage and blindness.		Skin Contact: Irritation and possible chemical burns. Symptoms may be delayed for up to 24 hours.			
Ingestion: Small quantities may cause chemical burns to mouth. May cause gastric distress, diarrhea, and vomiting. May be fatal if swallowed.					

Medical Conditions Generally Aggravated by Exposure: **Unknown.**

EMERGENCY FIRST AID PROCEDURES

Eye Contact: CONTACT PHYSICIAN AND START TREATMENT IMMEDIATELY.

1. **IMMEDIATELY flush eyes for at least 30 minutes** with large amounts of gently flowing water. Hold the eyelids open and away from the eyes during irrigation to allow thorough flushing of the eyes. **DO NOT STOP WASHING EYES EVEN IF YOU THINK THEY ARE COMPLETELY RINSED. DO NOT PUT ANY TREATMENT INTO EYES UNLESS INSTRUCTED TO DO SO BY A PHYSICIAN.**
2. Take victim to a doctor, preferably an eye specialist, as soon as possible after the 30 minute rinse. Ice water compresses should be applied to the eyes while transporting victim.
3. If physician is not immediately available, apply one or two drops of 0.5% PONTCAINE hydrochloride solution or other aqueous, topical ophthalmic anesthetic solution followed by a additional 15 minute irrigation. Do not apply any other medicine unless instructed to do so by a physician. **RUBBING OF EYES MUST BE AVOIDED.**

Skin Contact: CONTACT PHYSICIAN AND START TREATMENT IMMEDIATELY.

1. Move victim immediately under safety shower or other water source and flush affected areas thoroughly with large amounts of tempered running water. Speed of washing off the acid is of primary importance.
2. Remove ALL clothing and footwear while continuing flushing with flowing water. Continue washing for at least 15 minutes.
3. **GET VICTIM TO PHYSICIAN AS QUICKLY AS POSSIBLE AFTER THE 15 MINUTE FLUSHING.**

NOTES TO PHYSICIAN: TREAT AS ANY HYDROFLUORIC ACID BURN. Burns around fingernails or toe nails are difficult to treat as the acid may penetrate the nails. Treatment may require the removal of the nail.

Inhalation: CONTACT PHYSICIAN AND START TREATMENT IMMEDIATELY.

1. Move victim to fresh air. Make sure mouth and throat are clear of obstructions. If necessary, support breathing by artificial respiration.
2. Keep victim warm, quiet and lying down.
3. Do not give stimulants unless instructed by a physician.
4. Do not allow victim to become active for 24 hours. During this period the victim should be examined by a physician and held under observation.

Ingestion: CONTACT PHYSICIAN AND START TREATMENT IMMEDIATELY.

1. Have victim drink 3 – 4 large glasses of water as quickly as possible to dilute the product. Do not induce vomiting. Do not give emetics or baking soda. Never give anything by mouth to an unconscious person.
2. Give several glasses of milk or several ounces of milk of magnesia for their soothing effect. The calcium or magnesium in these compounds also acts as an antidote.
3. GET MEDICAL ATTENTION IMMEDIATELY.

SPECIAL NOTES TO TREATING PHYSICIAN

Medical personnel treating any victim of hydrofluoric acid exposure should be aware of the following possible complications:

- 1- Shock.
- 2- Inhalation of vapors can cause pulmonary edema for which effects may be delayed. In addition, vapors may burn oral tissue causing swelling which may restrict breathing.
- 3- Exposure to significant amounts of hydrofluoric acid by any route may also result in hypocalcemia. Hypocalcemia should be considered a possible risk in all instances of inhalation or ingestion and whenever skin burns exceed 25 square inches (160 sq. cm.) of body surface.

SECTION 6 - CONTROL AND PROTECTIVE MEASURES

Respiratory Protection (specify type): **For normal and approved outdoor use, use of a dust/mist mask is recommended. DO NOT USE INDOORS OR IN ENCLOSED AREAS.**

Protective Gloves: **Rubber or neoprene.**

Ventilation Requirements: **NOT FOR USE IN ENCLOSED AREAS.**

Eye Protection: **Chemical goggles with side shields.**

Other Protective Clothing & Equipment: **Waterproof clothing and footwear as required to prevent skin exposure.**

Work/Hygienic Practices: **Use good housekeeping practices. Wash hands after use and before eating, drinking, smoking or using toilet facilities.**

SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps To Be Taken If Material Is Spilled Or Released:

NOTE: NO CLEANUP SHOULD BE ATTEMPTED UNTIL CLEANUP PERSONNEL ARE EQUIPPED WITH PROTECTIVE GEAR TO PREVENT CONTACT WITH PRODUCT. (Applies to undiluted product.)

SPILLS – Neutralize with sodium bicarbonate(baking soda), sodium carbonate (soda ash) or lime. Pick up neutralized solution using plastic pump or vacuum truck and store in leak proof polyethylene containers until product can be disposed of in a hazardous waste facility. Flush area twice with water to remove any remaining residues. Store wash solution in polyethylene containers for disposal.

Waste Disposal Methods: **DISPOSE OF WASTE IN AN APPROVED HAZARDOUS WASTE FACILITY IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.**

Precautions To Be Taken In Handling & Storage: **Keep container tightly closed when not in use. Read above disposal information before moving any leaking container. Make sure all safety equipment is available and protective clothing is in use before handling this product.**

Other Precautions and/or Special Hazards: **KEEP THIS AND ALL CHEMICALS OUT OF REACH OF CHILDREN.**

Biodegradability: **Biodegradable.**

THE INFORMATION CONTAINED HEREIN is believed to be accurate but is not warranted to be so. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to purchaser or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed.