

Material Safety Data Sheet

Slip Free Systems, Inc.
Acid Etch Floor Treatment

Manufacturer:	Slip Free Systems, Inc 1929 County Road 129 Pearland, TX 77581	Chemist:	Medhat Badawi
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Section 1: Material Identification and Information

Components-Chemical Names & Common Names	%	OSHA PEL	ACGIH TLV	Other Limits Recommended
Hydrofluoric Acid, Tech Grade	<4%	3PPM	3PPM	
CAS # 7664-39-3				
Phosphoric Acid				
Cas# 7664-38-2		1mg/m3	1mg/m3	
2-Butoxyethanol		25PPM	Skin TWA	
Cas# 111-76-2				
H2o				Inert Ingredient

Section 2: Physical / Chemical Characteristics

Boiling Point	214F	Specific Gravity (H2o-1)	1.05 Ph+0-1
Vapor Pressure <small>(mm Hg & Temperature)</small>	N/E	Melting Point	N/A
Vapor Density (Air-1)	N/E	Evaporation rate	N/E
Solubility in Water	Complete	Water Reactive	No
D.O.T. Corrosive liquids, poisonous, N.O.S 8 UN 2922, PG11			
Appearance & Odor	Clear Yellow Liquid with Sharp Acid Odor		

Section 3: Fire & Explosion Hazard Data

Flash Point & Method Used	None	Auto-Ignition temperature	None	Flammability Limits in Air % by Volume	LEL N/E	UEL N/E
Extinguisher Media	Water to Cool, containers exposed to fire.					
Special Fire Fighting Procedures	Use self contained breathing apparatus and protective clothing.					
Unusual Fire and Explosion Hazards	Hydrofluoric acid corrodes most metals releasing flammable and explosive concentrations of hydrogen.					

Note: N/A=Not Applicable N/E=Not Established N/I= No Information

Section 4: Reactivity Hazard Data

Stability?	Stable	Conditions to Avoid	None Known
Incompatibility (Materials to Avoid)	Sulfides, Cyanides, Metals-Reaction with metals release hydrogen gas.		
Hazardous Decomposition Products	Reaction with the above may release poisonous cyanide or hydrogen sulfide.		
Hazardous Polymerization?	Will Not Occur	Conditions to Avoid?	None Known

Section 5: Health Hazard Data

Primary Routes of Entry	Inhalation, Skin Absorption, Ingestion	Carcinogen Listed in?	Not Listed
Health Hazards:	Acute: Severe damage to lungs, skin, eyes if inhaled or contacted. Chronic: If vapor inhaled lung injury may be delayed.		
Signs and Symptoms of Exposure	Severe burns which may or may not be immediately visible or painful.		
Medical Conditions generally aggravated by exposure:	Asthma like conditions.		
Emergency First Aid Procedures:	Seek medical assistance for further treatment, observation and support if necessary.		
Eye Contact	Flush immediately with cool water for 15 minutes or more and get immediate medical attention.		
Skin Contact	Flush immediately with cool water for 15 minutes or more while removing contaminated clothing and get immediate medical attention.		
Inhalation	Immediately get fresh air, administer oxygen, if not breathing give artificial respiration. Get immediate medical attention.		
Ingestion	DO NOT INDUCE VOMITING. Immediately drink large quantity of milk or water . get immediate medical attention.		

Section 6: Control & Protective Measures

Respiratory Protection	Use of NIOSH approved respirator for hydrofluoric acid vapor is a must.		
Protective Gloves:	Chemical Resistant Gloves	Eye Protection:	Chemical Resistant Safety Goggles
Ventilation to be used:	Local exhaust, mechanical exhaust or special exhaust.		
Other Protective Clothing or Equipment:	Always keep a clean supply of water for flushing eyes, skin and surfaces.		
Hygienic Work Practice:	Use good personal hygiene practices.		

Section 7: Precautions for Safe Handling and Use / Leak Procedures

Steps to be taken if material is spilled or released:	Small amounts-rinse with water Large amounts: Do not breathe vapor, get in eyes or on skin –neutralize with lime or baking soda. If possible avoid getting product in drains or water ways.								
Waste Disposal Methods:	In accordance with local, state and federal regulation.								
Precautions to be taken in handling and storage:	Store in cool dry area with good ventilation.								
Other precautions and special hazards:	Avoid breathing vapor; avoid contact with eyes and skin. Do not ingest. Use with adequate ventilation.								
NFPA Rating	Health=4	Flammability=0	Reactivity=0	Special=0	HMIS Rating	Health=4	Flammability=0	Reactivity=0	Personal Protection=H

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