

SAFETY DATA SHEET

SECTION I: PRODUCT AND COMPANY IDENTIFICATION

Manufacturer:	Ver-tech Labs	Product Name:	Pro I	
	6801 Bleck Drive	Product Code:	EXTII0	
	Rockford, MN 55373	Recommended Use:	Low pH Presoak	
	I-877-866-9742	Revision Date:	5/27/2015	

Chemical Emergency: Infotrac: 1-800-535-5053

SECTION 2: HAZARDS IDENTIFICATION

GHS Hazard Classification		
Acute Toxicity - Dermal	Category 2	
Acute Toxicity - Oral	Category 3	
Acute Toxicity - Inhalation	Category 3	
Skin Corrosion	Category I	
Serious Eye Damage	Category I	
Corrosive to Metals	Category	

Signal Word **DANGER!**



Haza

Hazard Statements	Precautionary Statements - Prevention
Fatal in contact with skin	Do not get in eyes, on skin, or on clothing
Toxic if swallowed	Wash thoroughly after handling
Toxic if inhaled	Do not eat, drink or smoke when using this product
Causes severe skin burns and eye damage	Wear protective gloves/protective clothing/eye protection/face protection
Causes serious eye damage	Avoid breathing fumes/gas/mists/vapors/spray
May be corrosive to metals	Use only outdoors or in a well-ventilated area
	Keep only in original container

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician

IF ON SKIN (or hair): Remove all contaminated clothing immediately. Rinse skin with water/shower

Wash contaminated clothing before reuse.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing

Absorb spillage to prevent material damage

Precautionary Statements - Storage

Store locked up Store in a well ventilated place. Keep container tightly closed Store in a corrosive resistant container with a resistant inner liner

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards Not Otherwise Classified:

Causes severe burns which may not be immediately painful or visible. May cause hypocalcemia (depletion of calcium in the body) which may be fatal. Specialized medical treatment is required for all exposures.

SECTION 3: INFORMATION ON HAZARDOUS INGREDIENTS

Product is a mixture according to 29 CFR 1910.1200.

Hazardous Components

Hazardous Ingredients	Cas #	Weight %
Hydrofluoric Acid	7664-39-3	5 - 10%
2-butoxyethanol	111-76-2	0 - 5%
Proprietary Blend	Trade Secret	15 - 30%

Specific chemical identity and/or exact percentage of components has been withheld in accordance with a trade secret claim according to Appendix E 29 CFR 1910.1200.

SECTION 4: FIRST-AID	MEASURES	
First Aid Measures	MLAURLU	
General Advice:	Immediate attention is required. Contains Strong Acid. Harmful or fatal if swallowed. Causes severe burns to eyes, skin, and respiratory tract. Wear protective clothing when handling this product. Keep out of reach of children. Use with care.	
Eye Contact:	Immediate medical attention is required. Immediately flush with cool running water for at least 30 minutes while holding eyelids apart. Do not rub affected area. Remove contact lenses if applicable. Take the victim to a doctor, preferably an eye specialist, as soon as possible. Ice water compresses may be applied to the eyes while transporting the victim to the doctor. Rubbing of the eyes is to be avoided.	
Skin Contact:	Immediate medical attention is required. Remove victim from the contaminated area and immediately wash the burned area with plenty of water. Remove all contaminated clothing while washing continuously. After thorough washing for at least 5 minutes, the burned area should be immersed in a solution of 0.13% iced aqueous Benzalkonium Chloride. Alternately, 2.5% calcium gluconate gel may be continuously massaged into the burn area. For burns not responsive to topical treatment, a physician may inject 2.5 - 5% aqueous calcium gluconate beneath, around, and in the burned area.	
Ingestion:	If swallowed, call immediately for emergency medical assistance. Ingestion of Hydrofluoric Acid is a life-threatening emergency. DO NOT induce vomiting. Have the victim drink several large glasses of water or milk to dilute the acid. If possible, give several ounces of milk of magnesia or any calcium containing antacid. Never give anything by mouth to an unconscious person.	
Inhalation:	Remove to fresh air. Call a physician or poison control center immediately. Calcium gluconate, 2.5% in normal saline may be given by nebulizer with oxygen. Victim should be examined by a physician and held under observation for at least 24 hours.	
Most Important Symp	toms and Effects	
Symptoms:	Severe burns to eyes, skin, and respiratory tract.	
Indication of any imm	ediate medical attention and special treatment needed	
=	Treat symptomatically as described above.	
SECTION 5: FIRE-FIGH	TING MEASURES	
Flammable Properties		
Flammability:	Not considered to be a fire hazard.	
Explosive Prop:	Not considered to be an explosive hazard.	
Extinguishing Media		
Suitable:	Use dry chemical, CO2, water spray (fog) or foam.	
Unsuitable:	DO NOT USE WATER	
Specific Hazards Arisi	ng from Chemical	
Hazards:	The product causes burns of eyes, skin and mucous membranes. Thermal decomposition may lead to release of irritating and	
	toxic vapors. In the event of fire and/or explosion do not breathe fumes.	
Protective equipment	and precautions for fire-fighters	
Fire-Fight Method:	In the event of a fire, fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA)	
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SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Evacuate personnel to safe areas. Isolate hazard area and deny entry. Stay upwind of spill/leak. Use personal protective equipment. Avoid contact with skin, eyes or clothing.

Environ. Precautions: Prevent release to the environment if possible. Dike large spills to prevent material from entering streams or sewer systems. **Clean-Up Method:** Soak-up with inert absorbent material and place into appropriate container for disposal. Clean contaminated area thoroughly with water. Prevent product from entering drains.

SECTION 7: HANDLING AND STORAGE

Handling:	Wear personal protective equipment. Ensure all equipment is compatible with Hydrofluoric Acid. Avoid contact with skin, eyes	
	and clothing. Wash hands before eating, drinking, or smoking. Remove contaminated clothes and wash before reuse. Use in a	
	ventilated area.	
Storage:	Store in closed containers in cool, dry, well-ventilated area. Avoid overheating or freezing. Keep in properly labeled containers	
	and out of reach of children.	

Incomp. Materials:

Glass and silicate-containing materials. Alkalis. Carbonates. Sulfides. Metals. Oxidizing agents. Strong reducing agents. Water.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION **Exposure Guidelines**

Hazardous Chemical	OSHA PEL	ACGIH TLV
Hydrofluoric Acid	2.5 mg/m3	2 ррт
2-butoxyethanol	50 ppm	20 ррт
Proprietary Blend	Not Determined	Not Determined

Appropriate Engineering Controls

Ensure adequate ventilation, especially in confined areas. Eng. Controls:

Personal Protection Equipment (PPE)

Eyes: Recommend goggles or face shield, giving complete protection of eyes. **Respiratory:** In case of insufficient ventilation wear suitable respiratory equipment. Use NIOSH approved respiratory protection. Skin: Avoid skin contact. Recommend chemical resistant gloves and complete suit protecting against chemicals.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties **Physical State: Freezing Point:** Not determined Liquid **Appearance:** Clear liquid **Boiling Point:** Not determined Color: Colorless to light amber **Evaporation Rate:** Not determined Odor: Extremely acrid Vapor Pressure: Not determined **Odor Threshold:** Not determined Vapor Density: Not determined 0 - 1.0 DH: **Relative Density:** Not determined Flash Point: Not determined Flammability: Not determined Water Solubility: Soluble in water **Explosive Limits:** Not determined Viscosity: Not determined Part. Coefficient: Not determined **Specific Gravity:** 1.01 **Auto-ignition Temp:** Not determined **Melting Point:** Not determined Decomp. Temp: Not determined

SECTION 10: STABILITY AND REACTIVITY

Stability:	Stable under ordinary conditions of use and storage.
Haz. Decomposition:	Thermal decomposition can lead to release of irritating and toxic gases and vapors.
Haz. Polymerization:	No information available.
Incompatibilities:	Glass and silicate-containing materials. Alkalis. Carbonates. Sulfides. Metals. Oxidizing agents. Strong reducing agents. Water.
Conditions to Avoid:	Heat, moisture and incompatibles.

SECTION II: TOXICOLOGY INFORMATION

Component Information

Hazardous Chemical	LD50 Oral	LD50 Dermal
Hydrofluoric Acid	Not Determined	Not Determined
2-butoxyethanol	1,300 mg/kg (rat)	> 2,000 mg/kg (rat)
Proprietary Blend	Not Determined	Not Determined

Potential Health Effects

Exposure Routes: Eye Contact, Dermal Contact, Ingestion, Inhalation

Acute Toxicity:

Eyes:	Causes serious eye damage with tearing, redness, and impaired vision.	
Skin:	Causes severe burns which may not be immediately painful or visible. Symptoms may include pain, redness of skin and possible	
	tissue destruction. Hydrofluoric acid will penetrate skin and attack underlying tissue. May cause hypocalcemia which may be	
	fatal.	
Ingestion:	Harmful if swallowed. Corrosive to mucous membranes, esophagus and stomach.	
Inhalation:	Respiratory irritant.	
Chronic Effects:	Avoid repeated exposure. May aggravate pre-existing medical conditions including eye, skin and respiratory disorders.	
Carcinogenicity:	Not classifiable as a human carcinogen by OSHA, NTP or IARC.	

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Hazardous Chemical	Toxicity to Fish	Toxicity to Invertebrates
Hydrofluoric Acid 60 mg/L freshwater fish		270 mg/L (48 h: Daphnia)
2-butoxyethanol	1,474 mg/l (96 h: Oncorhynchus mykiss)	I,550 mg/l (48 h: water flea)
Proprietary Blend	Not Determined	Not Determined

Environmental Toxicity

Biodegradation:	No information available.	
Persistence:	No information available.	
Bioaccumulation:	No information available.	
Mobility:	No information available.	

SECTION 13: DISPOSAL CONSIDERATIONS

 Waste Disposal:
 Recover or recycle if possible. Disposal should be in compliance with applicable federal, state, and local regulations. Do not dispose of in the environment, in sewage, and/or in drains.

Container: Drain contaminated container thoroughly. Do not reuse container.

SECTION 14: TRANSPORT INFORMATION

Transport in accordance with all federal, state, and local regulations.

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Proper Name:Corrosive Liquid, Toxic, n.o.s. (Hydrofluoric Acid)Hazard Class:8 (6.1)UN Number:UN2922

Packing Group:

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

TSCA Status: All components of this product are listed or exempt from listing on TSCA inventory.

CERCLA Reportable Quantity: Hydrofluoric acid: 100 lbs.

Section 311/312 Hazard Category

Acute Health Hazard:	7664-39-3	Hydrofluoric acid	5 - 10%
	111-76-2	2-butoxyethanol	0 - 5%

Chronic Health Hazard:	7664-39-3	Hydrofluoric acid	5 - 10%
Fire Hazard:	111-76-2	2-butoxyethanol	0 - 5%
Sudden Release of Pressure:	No		
Reactive Hazard:	7664-39-3	Hydrofluoric acid	5 - 10%
<u>Section 313 Toxic Chemicals</u>	7664-39-3	Hydrofluoric acid	5 - 10%
	-76-2	2-butoxyethanol	0 - 5%

SECTION 16: OTHER INFORMATION

Prepared by:	Health and Safety Department
Contact Number:	I-877-866-9742
Issue Date:	5/27/2015
Revision Date:	5/27/2015
Revision Note:	MSDS converted to GHS SDS format
Version:	1
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	offered for your information, consideration, and investigation. Ver-tech Labs cannot anticipate all conditions under which this
	information and its product may be used. Final determination of suitability of any material is the sole responsibility of the user.
	All materials may present unknown hazards and should be used with caution. It is the user's responsibility to assume liability for
	loss, injury, damage or expense due to improper use.

End of Safety Data Sheet