

SECTION 1: Identification**Product identifier:** Liquid SourBright**Other means of identification:** Sour**SDS number:** 730**Recommended use:** Sour**Recommended restrictions:** Not for personal care**Manufacturer/Importer/Supplier/Distributor information****Company name:** U.N.X. Industries, Inc.**Address:** 707 Arlington Blvd
Greenville, NC 27858**Telephone:** Office hour (Mon-Fri)
8:00a.m. – 4:00p.m. (Eastern Time)
OFFICE NUMBER: 252-756-8616**E-mail:** unx@unxinc.com**Emergency phone number:** CHEMTEL (800) 255-3924 (24 HOURS)**SECTION 2: Hazard(s) identification****Classification of the Substance or Mixture:****Physical hazards**

Corrosive to metals Category 1

Health hazards

Acute toxicity, Oral Category 4

Acute toxicity, Dermal Category 5

Skin corrosion/irritation: Category 1B

Serious eye damage/eye irritation: Category 1

Label elements:**Signal word:** Danger**Hazard statements**

H290	May be corrosive to metals
H302	Harmful if swallowed.
H313	May be harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.

SECTION 2: Hazard(s) identification (continued)

Precautionary statements

Prevention:

- P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read label before use.
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P262 Do not get in eyes, skin, or on clothing.
P264 Wash hands, arms, face and exposed skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this products.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:

- P301+312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P362+P364 Take off contaminated clothing and wash it before reuse.
P308+P313 IF exposed or concerned: Get medical advice/attention.

Storage:

- P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Disposal:

- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise Classified (HNOC): Not classified

SECTION 3: Composition/information on ingredients

Substance/Mixtures

Chemical name	CAS Number	Concentration (%)
Water	7732-18-5	70-90
Fluorosilicic Acid	16961-83-4	10-30

Section 4: First-aid measures

Non-emergency personnel

General advice: safely remove victims from the danger zone. Provide emergency services with this safety data sheet.

Eye contact: rinse with plenty of water for at least 15 minutes. Get medical attention immediately.

Skin contact: rinse with plenty of water while removing any contaminated clothing. For small amounts of exposure, get medical attention if any discomfort or symptoms persists. For large amounts of exposure, get medical attention immediately.

Ingestion: rinse mouth with plenty of water if the person is conscious. Do not induce vomiting unless directed by medical personnel. Get medical attention immediately.

Inhalation: bring victim out to fresh air. If the victim is not breathing, give artificial respiration. In case of unconsciousness, place the person on their side for transport, get medical attention immediately

Emergency personnel

Personal Protection: refer to Section 8 for specific personal protective equipment

Notes to physician: the concentration and length of exposure impacts the severity of the symptoms.

Most important symptoms/effects, acute and delayed:

Refer to Section 2 for hazards and Section 11 for information on health effects and symptoms. Treat symptomatically.

Indication of immediate medical attention and special treatment needed, if necessary: provide general supportive measures. Eye contact, inhalation, and ingestion cases should be treated immediately. Have procedures and facilities in place to treat these cases of exposure.

SECTION 5: Fire-fighting measures

Suitable extinguishing media: In case of a small fire, use dry chemicals, carbon dioxide, foam, or inert gas. In case of a large fire, use foam, water fog or water spray. Water fog and spray both effective in cooling containers and adjacent structures, but there is a potential for it to cause frothing and/or not extinguish the fire. Water can be used to cool external walls of vessels to prevent excessive pressure, autoignition and/or explosion.

Unsuitable extinguishing media: do not use a water jet as this can spread the fire. Do not use carbon dioxide in enclosed spaces with insufficient ventilation.

Specific hazards arising from the chemical: flammable liquid and vapors that can be ignited by static spark. Do not breathe in any fumes caused by the fire/explosion. Containers can melt from the heat of fire and the combustible packaging material may provide fuel for the fire. Withdraw immediately in cases of rising sound from venting safety device or discoloration of tanks. For massive fire in cargo, use unmanned hose holder or monitor nozzles. If not, withdraw and let fire burn out.

SECTION 5: Fire-fighting measures (Continued)

Special Protective equipment for fire fighters: wear full protective airtight garment and NIOSH approved self-contained breathing apparatus with independent air-supply. Fight the fire in early stages if safe to do so. Provide sufficient ventilation and be aware of hydrogen generation upon reactions with some metals. Do not allow contaminated extinguishing water to enter the soil, ground-water or surface waters.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures: ventilate and restrict access to the area of leak or spill. Have emergency procedures in place for treating incidents, evacuation and informing the emergency services. Refer to Section 8 for personal protective equipment.

Environment precautions: clean up spills/leaks immediately and prevent it from spreading. Large or uncontrolled spills to water systems must be reported to appropriate regulatory body.

Methods and materials for containment and cleaning up: absorb spills with non-combustible absorbent. Dam and absorb with sand, earth or other inert material for large spills/leaks. Collect spillage in containers with labeled contents and dispose according to local regulations. Flush the contaminated area with lots of water.

SECTION 7: Handling and storage

Precautions for safe handling: Refer to Section 8 for personal protective equipment. Do not eat, drink or smoke when handling the product. Avoid skin and eye contact. Follow general hygiene routines after working with the product. When handling large amounts of the product, be sure to have a safety shower nearby.

Conditions for safe storage: store in a suitable, closed and labeled container upright at temperature between 40°F and 100°F in a well-ventilated area. Opened containers must be properly resealed to avoid spillage. Store away from heat, direct sunlight and moisture. It is preferred to keep the container on sump pallets. Store in high-density polyethylene containers. See Section 10 for incompatible materials.

SECTION 8: Exposure control/personal protection

Control Parameters

Occupational exposure limits

US.OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Chemical Name	CAS-No.	Type	ppm	mg/m ³
Fluorosilicic Acid	16961-83-4	TWA		2.5 mg/m ³ F(As F)

U.S. ACGIH Threshold Limit Values

Chemical Name	CAS-No.	Type	ppm	mg/L
Fluorosilicic Acid	16961-83-4	TWA		2.5 mg/m ³ F(As F)

SECTION 8: Exposure control/personal protection (continued)

Appropriate engineering controls/ventilation system:

A general exhaust system is recommended to keep employee exposures below the limits. An additional local exhaust system is preferred in order to control emissions at its source.

Personal Protective Equipment (PPE)

Respiratory Protection: A NIOSH approved full-face respirator with high efficiency dust/mist filter is recommended. For emergencies or when dealing with unknown exposure measures, use a full-face piece positive-pressure, air-supplied respirator fitted with a suitable cartridge for the chemical. Consult respirator supplier regarding the compatibility of the equipment. **CAUTION:** Air purifying respirators do not protect the user in oxygen deficient atmospheres, use an air supply system.

Hand Protection: impervious gloves, with suitable protection for workplace, are recommended any time the product is being handled. Consult glove supplier for details on suitability, breakthrough time and permeability. Frequent change of the glove is advisable. Be aware that latex gloves can trigger an allergic reaction to sensitive individuals.

Eye Protection: use chemical safety goggles and/or full-face shield when handling the product.

Skin/Body Protection: wear impervious protective clothing, boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Take additional precaution if handling amounts past the exposure limits.

Thermal Hazard: wear thermal protective clothing when necessary

General Hygiene: change out of clothes, thoroughly wash your hands and clothes, and shower/bathe as soon as possible. Do not eat, drink, smoke or use the bathroom while handling the product.

Other Protective Measures: have an eye wash and safety shower station close by. Routinely wash all equipment to remove contaminants.

SECTION 9: Physical and chemical properties

Appearance:	Liquid
Colour:	Light Amber
Odour:	Acid odour
Odour Threshold:	No data available
pH:	1 ± 0.5
Melting point/range:	No data available
Boiling point/range:	No data available
Flash point:	No data available
Evaporation rate:	No data available
Flammability (solid, gas):	No data available
Upper/lower flammability of explosive limits:	No data available
Vapour pressure (mm Hg):	No data available
Vapour density (Air=1):	No data available
Relative density:	No data available

SECTION 9: Physical and chemical properties (continued)

Solubility(ies): Excellent
Partition coefficient (n-octanol/water): No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Viscosity, dynamic: 1

Other Information: This product does not contain phosphates.

SECTION 10: Stability and reactivity

Reactivity: No hazardous reactions are known under normal storage conditions and if handled according to standard industrial practices.

Chemical Stability: Stable if under normal storage conditions and handled according to standard industrial practices.

Possibility of hazardous reactions: Hazardous polymerization will not occur.

Conditions to avoid: No hazardous conditions are known.

Incompatible materials: Avoid contact with acids, oxidizing agents, combustible materials, flammable materials and metals.

Hazardous decompositions products: Mild decomposition, resulting in giving off hydrogen.

SECTION 11: Toxicological information

Acute toxicity: Toxicological testing has not been conducted with this material. The toxicology information listed below is based on the components of this material.

Category 4- Oral: Harmful if swallowed.
Category 5- Dermal: Harmful in contact with skin.

Fluorosilicic Acid – Acute Toxicity Estimate (ATE)		
Oral LD ₅₀ 125 mg/kg (Rat)	LC ₅₀ 1.11 mg/L (Rat) 1 hour	Oral LD ₅₀ 200 mg/kg (Guinea pig)

Skin Corrosion/ irritation: Category 1: Causes severe skin burns and eye damage due to an acidic pH.

Serious eye damage/irritation: Category 1: Causes serious eye damage due to an acidic pH.

Respiratory or skin sensitization: Classification not possible.

Germ cell mutagenicity: Classification not possible.

Carcinogenicity: Classification not possible.

SECTION 11: Toxicological information (continued)

Reproductive toxicity: Classification not possible.

Specific Target Organ Toxicity - Single Exposure: Classification not possible.

Specific Target Organ Toxicity - Repeated Exposure: Classification not possible.

Aspiration hazard: Classification not possible.

SECTION 12: Ecological information

Toxicity: Do not allow to escape into waterways, wastewater or soil. Ecotoxicological studies of the product are not available. Please find below the data available to us from raw materials:

Aquatic ecotoxicity: With high probability acutely not harmful to aquatic organisms.

Fluorosilicic Acid			
LC ₅₀ (Fish) 96h Salmo Gairdneri 51.0 mg/L (as fluorides)	EC ₅₀ (Crustaceans) 48h Daphnia Magna 97.0 mg/L (as fluorides)	EC ₅₀ (Crustaceans) 96h Mysidopsis Bahia 10.5 mg/L (as fluorides)	EC ₅₀ (Algae) 96h Scenedesmus Specie 43 mg/L

Persistence and degradability: No information available.

Bioaccumulative potential: Fluorosilicic acid has potential for bioaccumulation as fluorides into vegetables.

Mobility in soil: No information available.

Other adverse effects: No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13: Disposal considerations

General Information: Do not allow the product to contaminate any body of water. Refer to Section 8 for personal protection equipment.

Disposal Methods: Avoid unauthorized disposal. Do not dump into any body of water. Comply with federal, state/provincial and local laws/regulations. Do not reuse empty containers.

