

SAFETY DATA SHEET

Product Name : 803F

Date Issued : February 24, 2023

SECTION 1 : PRODUCT AND COMPANY IDENTIFICATION

Product Name: 110LPM
Formula : Multi-component mixture

Chemical Synonym / C# : c803F
Chemical Family: Strong acidic detergent

Supplier : Americhem International, 412 East 6th Avenue, Altoona, Pa. 16602
Information Telephone : 800-262-4360 **Emergency Telephone :** 607-529-3218

SECTION 2 : HAZARD IDENTIFICATION

Form : liquid **Color :** red

Emergency Overview : DANGER! Extremely corrosive. Causes severe burns. Burns may not be immediately painful or visible. Specialized medical treatment is required for all exposures. Use product with **extreme** care, taking extra precautions to avoid any manner of body contact (skin, eye, inhalation, ingestion, etc.) Extremely harmful if swallowed. Read the entire SDS for a more thorough evaluation of the hazards

OSHA Hazard Communication Standard

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

GHS Classification :

- Acute toxicity Oral (Category 3)
- Skin Corrosion/Irritation (Category 1A)
- Serious Eye Damage/Eye Irritation (Category 1)
- Corrosive to metals (Category 1)

Signal Word : Danger



Corrosion,



Skull & Crossbones

GHS Hazard Pictograms :

Hazard Statements :

- H290 May be corrosive to metals.
- H301 Toxic if swallowed.
- H314 Causes severe skin burns and eye damage
- H318 Causes serious eye damage

Precautionary Statements :

- P102 Keep out of reach of children.
- P103 Read label before use
- P202 Do not handle until all safety precautions have been read and understood.
- P234 Keep only in original container.
- P260 Do not breathe dust or mist.
- P264 Wash skin thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
- P301 + P310 + P330 + P331 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.
- P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

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Precautionary Statements, *continued*:

P304 + P340 +P310 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.

P305 + P351 + P338+ P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.

P363 Wash contaminated clothing before reuse.

P390 Absorb spillage to prevent material damage.

P405 Store locked up.

P406 Store in corrosive resistant stainless steel container with a resistant inner liner.

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards which do not result in classification :

None known. See Section 11 for Potential Health Hazards

SECTION 3 : COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredient(s)	CAS #	% (w/w)
Ammonium Bifluoride	1341-49-7	5 - 10
Sulfuric Acid	7664-93-9	10 - 15

Unlisted components are considered non-hazardous as per 29CFR1910.1200g2C. See section 15 for specific state right-to-know information if applicable.

SECTION 4 : FIRST AID MEASURES

First Aid Measures for Ammonium Bifluoride :

In all cases call a physician immediately. First Aid procedures should be pre-planned for fluoride compound emergencies. If swallowed, administer milk, chewable calcium carbonate tablets or milk of magnesia. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing difficult, give artificial respiration. In case of skin contact wipe off any excess material then immediately flush skin with large amounts of soapy water. Remove contaminated clothing and shoes. Wash clothing before re-use. Apply bandages soaked in magnesium sulfate. In case of eye contact, immediately flush eyes with gentle but large stream of water for at least 15 minutes, lifting upper and lower eyelids occasionally.

Note to Physician:

For large exposures, systemic effects (hypocalcemia and hypomagnesia) may occur.

First Aid Measures for Sulfuric Acid :

Eye Contact: If material gets into eyes, immediately flush eyes gently with water for at least 15 minutes while holding eyelids apart. If symptoms develop as a result of vapor exposure, immediately move individual away from exposure and into fresh air before flushing as recommended above. Seek immediate medical attention.

Skin Contact: Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse.

Ingestion: Seek immediate medical attention. Do not induce vomiting. Vomiting will cause further damage to the mouth and throat. If individual is conscious and alert, immediately rinse mouth with water and give milk or water to drink. If possible, do not leave individual unattended.

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First Aid Measures for Sulfuric Acid, *continued* :

Inhalation: If symptoms develop, immediately remove individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.

SECTION 5 : FIRE FIGHTING MEASURES

Extinguishing Media: none required

Fire Fighting Procedures: Use caution when fighting any fire. Adequate respiratory protection is essential.

Unusual Fire and Explosion Hazards: May react with metals to liberate hydrogen, a flammable gas.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Steps to be taken in case material is released or spilled: Contain large spills with dikes and transfer the material to appropriate containers for reclamation or disposal. Absorb remaining material or small spills with an inert material and then place in a chemical waste container. Proper Protective Equipment must be worn at all times during clean-up, see Section 8 for guidelines.

Deactivating Chemicals: Neutralize washings with a base such as soda ash or lime. Flush residual spill area with large amounts of water.

SECTION 7 : HANDLING AND STORAGE

Handling: Do not get in eyes, on skin, or on clothing. Avoid breathing mist or vapor. Do not taste or swallow. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Emptied container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed.

Storage Requirements: Store in plastic, rubber-lined, or 316 stainless steel tanks designed for phosphoric acid. Store drums away from heat and out of direct sunlight.

SECTION 8 : EXPOSURE CONTROLS / PERSONAL PROTECTION

Hazardous Ingredient	ACGIH TLV (mg/m ³) TWA	ACGIH TLV (mg/m ³) STEL
Ammonium Bifluoride	2.5 (as Fluoride)	-
Sulfuric Acid	1 (strong inorganic acid mists)	3 (strong inorganic acid mists)

Engineering measures :

Ventilation / Local Exhaust / Mechanical Recommendations: Provide natural or mechanical ventilation to minimize exposure. The use of local mechanical exhaust ventilation is preferred at sources of air contamination such as open process equipment. Consult NFPA Standard 91 for design of exhaust systems.

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Personal protective equipment :

Respiratory Protection: Avoid breathing vapor or mist. Use NIOSH/MSHA approved respiratory protection equipment (full facepiece recommended) when airborne exposure limits are exceeded. If used, full facepiece replaces the need for face shield and/or chemical goggles. Consult the respirator manufacturer to determine the appropriate type of equipment for a given application. Observe respirator use limitations specified by NIOSH/MSHA or the manufacturer. Respiratory protection programs must comply with 29 CFR1910.134.

Skin Protection: Wear appropriate protective clothing and chemical resistant gloves to prevent skin contact. Consult the glove/clothing manufacturer to determine the appropriate type glove/clothing for a given application. Wear chemical goggles, a face shield, and chemical resistant clothing when splashing is likely. Wash immediately if skin is contaminated. Remove contaminated clothing promptly and launder before reuse. Clean protective equipment before reuse. Provide a safety shower at any location where skin contact can occur. Wash thoroughly after handling.

Eye Protection: Where there is potential for eye contact, wear goggles and have eye flushing equipment immediately available.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

Appearance / Odor: Clear red liquid, acidic odor

Water Solubility: Complete

Specific Gravity: 1.14

Evaporation Rate(water=1): N/A

Vapor Density(air=1) : N/A

Flash Point : None

Flammable Limits: LEL = N/A UEL = N/A

pH (1%): < 1

Boiling Point (°F) : 212+

% Volatile: N/A

Vapor Pressure(mmHg): N/A

Flash Point Method Used: N/A

SECTION 10 : STABILITY AND REACTIVITY

Hazardous Decomposition Products: May form acid vapors.

Chemical Stability: Product is stable under normal conditions of storage and handling.

Materials to Avoid: Avoid contact with metals which may liberate flammable hydrogen gas. Avoid contact with materials such as sulfides and sulfites which could release toxic gasses. Be cautious in mixing with strong bases because high heat of reaction can generate steam.

Hazardous Polymerization: Will not occur.

SECTION 11 : TOXICOLOGICAL INFORMATION

Potential Health Hazards (as Ammonium Bifluoride):

If inhaled or swallowed, this compound can cause fluoride poisoning. Early symptoms include nausea, vomiting, diarrhea, and weakness. Later effects include central nervous system effects, cardiovascular effects and death.

Inhalation: May cause irritation and burns to the respiratory tract, symptoms may include coughing, sore throat, and labored breathing. May be absorbed through inhalation of dust; symptoms may parallel those from ingestion exposure. Irritation and burning effects may not appear immediately.

Ingestion: May cause salivation, nausea, vomiting, diarrhea, and abdominal pain, followed by symptoms of weakness, tremors, shallow respiration, carpopedal spasm, convulsions, and coma. May cause brain and kidney damage. Affects heart and circulatory system. Death may be caused by respiratory paralysis. Lethal dose estimated at between 1 teaspoonful and 1 oz.

Skin Contact: Causes irritation and burns to the skin. Effects may not appear immediately.

Eye Contact: Causes irritation. May be extremely irritating with possible burns to eye tissue and permanent eye damage may result.

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Chronic Exposure (as Ammonium Bifluoride) :

Chronic exposure may cause mottling of teeth and bone damage (osteosclerosis) and fluorosis. Symptoms of fluorosis include brittle bones, weight loss, anemia, calcified ligaments, general ill health and joint stiffness.

Aggravation of Pre-existing Conditions:

Populations that appear to be at increased risk from the effects of fluoride are individuals that suffer from diabetes insipidus or some forms of renal impairment.

Potential Health Hazards (as Sulfuric Acid) :

Eye Contact: Can cause permanent eye injury. Symptoms include stinging, tearing, redness, and swelling of eyes. Can injure the cornea and cause blindness.

Skin Contact: Can cause permanent skin damage. Symptoms may include redness, burning, and swelling of skin, burns, and other skin damage.

Ingestion: Swallowing this material may be harmful or fatal. Symptoms may include severe stomach and intestinal irritation (nausea, vomiting, diarrhea), abdominal pain, and vomiting of blood. Swallowing this material may cause burns and destroy tissue in the mouth, throat, and digestive tract. Low blood pressure and shock may occur as a result of severe tissue injury.

Inhalation: Breathing of vapor or mist is possible. Breathing this material may be harmful or fatal. Symptoms may include severe irritation and burns to the nose, throat, and respiratory tract.

Toxicological Data (as Ammonium Bifluoride):

Acute Toxicity/Effects

Oral LD50 rat = Approximate 130 mg/kg

Dermal LD50 = No data available.

Inhalation LC50 = No data available.

Repeated dose toxicity = No data available.

Skin corrosion/irritation : Causes severe skin burns.

Serious eye damage/eye irritation : Causes serious eye damage.

Respiratory or skin sensitization : Not a skin sensitizer.

Germ cell mutagenicity :

In vitro : No mutagenic components identified

In vivo : No mutagenic components identified

Carcinogenicity: No carcinogenic components identified by IARC, NTP, or OSHA.

Reproductive toxicity : No components toxic to reproduction

Specific target organ toxicity - single exposure : No data available.

Specific target organ toxicity - repeated exposure : No data available.

Aspiration hazard : Not classified

Toxicological Data (as Sulfuric Acid) :

LD50 (oral, rat) = 2140 mg/kg

LC50 (inhalation, rat) = 510 mg/m³ for 2 hours

LC50 (inhalation, guinea pigs) = 30 mg/m³ (8 hours)

Skin effects : (rabbit) = severe irritation

Animal testing indicates Sulfuric Acid is a slight skin irritant when tested as a 10% solution.

Eye effects (rabbit) = severe irritation

Animal testing indicates Sulfuric Acid is a moderate eye irritant when tested as a 10% solution.

Carcinogenicity: This product contains **Sulfuric Acid**. The International Agency for Research on Cancer (IARC) and the National Toxicology Program (NTP) have listed strong-inorganic-mists containing Sulfuric Acid as causing cancer in humans.

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SECTION 12 : ECOLOGICAL INFORMATION

Ecotoxicological Information (as Ammonium Bifluoride):

Toxicity :

Fish, LC50 = No data available.
Crustacea, EC50 = No data available.
Algae, EC50 = No data available.
Chronic = No data available.

Persistence and degradability :

Biodegradation : There are no data on the degradability of this product.
BOD/COD ratio : No data available.

Bioaccumulative potential :

Bioconcentration Factor (BCF) : No data available on bioaccumulation.
Partition Coefficient n-octanol / water (log Kow) : No data available.

Mobility in Soil : No data available.

Other adverse effects : Large amounts of the product may affect the acidity (pH-factor) in water with possible risk of harmful effects to aquatic organisms.

Ecotoxic Effects (as Sulfuric Acid) : Harmful to aquatic life in very low concentrations. May be dangerous if enters water intake; Fish toxicity critical concentration = 10 mg/l; 7.34 mg/l/48 hours - Lymnaea Palustris - 0-100% mortality.
96 hour LC50 (bluegill sunfish) = 10,5 ppm
48 hour TLM (flounder) = 100 - 300 ppm

SECTION 13 : DISPOSAL CONSIDERATIONS

Waste Disposal Method: Recycle, recovery and reuse of materials, where permitted, is encouraged as an alternate to disposal as a waste. Hazardous waste classification under federal regulations (40 CFR Part 261 et seq) is dependent upon whether a material is a RCRA listed hazardous waste or has any of the four RCRA hazardous waste characteristics. Refer to 40 CFR Part 261.33 to determine if a given material to be disposed of is a RCRA listed hazardous waste. RCRA Hazardous Waste Characteristics: There are four characteristics defined in 40 CFR Section 261.21-61.24: *Ignitability, Corrosivity, Reactivity, and Toxicity*. To determine Ignitability, see Section 9 of this SDS (flash point). For Corrosivity, see Sections 9 and 14 (pH and DOT corrosivity). For Reactivity, see Section 10 (incompatible materials). For Toxicity, see Section 2 (composition). Federal regulations are subject to change. State and local requirements, which may differ from or be more stringent than the federal regulations, may also apply to the classification of the material if it is to be disposed.

Is the unused product a RCRA hazardous waste (40CFR261.33) if discarded? Yes (as Sulfuric Acid)
If yes, the RCRA ID number is : D002 (see 40CFR261.23 if applicable).

SECTION 14 : TRANSPORTATION INFORMATION

Transportation Emergency Telephone Number: 3E 24 hour number : (866)302-6855*

*Please refer to c# referenced in section 1 of this sds.

UN Number / DOT Proper Shipping Name / DOT Hazard Class /Packing Group / DOT Label & other information: UN2922, CORROSIVE LIQUIDS, TOXIC, N.O.S.
(contains Ammonium Bifluoride and Sulfuric Acid),
8(6.1), PGII, (Corrosive, Poison ERG#154)

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SECTION 15 : REGULATORY INFORMATION

US FEDERAL REGULATIONS :

TSCA (Toxic Substances Control Act) Status : TSCA (United States) The intentional ingredients of this product are listed.

CERCLA RQ - 40 CFR 302.4(a) :

<u>Component</u>	<u>RQ (lbs)</u>
Ammonium Bifluoride	100
Sulfuric acid	1000

Spills or releases resulting in the loss of any ingredient at or above its RQ requires immediate notification to the National Response Center (800) 424-8802 and to your Local Emergency Planning Committee.

SARA 302 Components - 40 CFR 355 Appendix A

<u>Section 302 Component(s)</u>	<u>TPQ (lbs)</u>	<u>RQ (lbs)</u>
Sulfuric Acid	1000	1000

SARA 311/312 Classification - 40 CFR 370.2 :

(as Ammonium Bifluoride) : Acute (immediate)

(as Sulfuric Acid) : Acute (Immediate) Health, Chronic (Delayed) Health, Reactivity

SARA 313 Components - 40 CFR 372.65:

<u>Section 313 Component(s)</u>	<u>CAS #</u>	<u>%</u>
Sulfuric Acid (acid aerosols)	7664-93-9	10 - 15

INTERNATIONAL REGULATIONS :

Ammonium Bifluoride (CAS#1341-49-7): is listed on the following inventories or in compliance with the following inventories : Australia AICS, Canada DSL Inventory List, EINECS, ELINCS or NLP, Japan (ENCS) List, China Inv. Existing Chemical Substances, Korea Existing Chemicals Inv. (KECI), Philippines PICCS, US TSCA Inventory, New Zealand Inventory of Chemicals, Japan ISHL Listing

Ammonium Bifluoride (CAS#1341-49-7) is not in compliance with the following inventories : Canada NDSL Inventory, Japan Pharmacopoeia Listing

Inventory Status as Sulfuric Acid (CAS# 7664-93-9):

Sulfuric Acid is on the following lists : Canadian Domestic Substance List (DSL), Canadian WHMIS (Class D1A - Very Toxic, Class E - Corrosive).

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STATE REGULATIONS :

California Safe Drinking Water Act (Prop. 65) Listing : None listed.

Other Regulations / Legislation which apply to this product:

State Right-To-Know :

Ammonium Bifluoride (CAS# 1341-49-7) is listed on the following inventories or in compliance with the following inventories : New Jersey Worker and Community Right-to-Know Act , Massachusetts RTK - Substance List, Pennsylvania RTK - Hazardous Substances, Rhode Island RTK

Sulfuric Acid, CAS# 7664-93-9, is on the following lists : New Jersey Right-to-Know Label Information, Pennsylvania Right-to-Know Label Information.

SECTION 16 : OTHER INFORMATION

NFPA Rating : HEALTH: 4 FLAMMABILITY: 0 REACTIVITY: 1
NFPA hazard degree designation 704: 4 = extreme, 3 = high, 2 = moderate, 1 = slight, 0 = none.

Revision Date : 12/26/2018

Information and data compiled to compose this SDS is correct to the best of our knowledge as of the printed date, and is offered solely for your consideration, investigation, and verification.