



Trailer Brightener

00356, 00357, 00358

SDS Preparation Date (mm/dd/yyyy): 04/01/2020

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SAFETY DATA SHEET

SECTION 1. IDENTIFICATION

Product identifier used on the label

: **Trailer Brightener**

Other means of identification : 00356, 00357, 00358

Recommended use of the chemical and restrictions on use

: Acid cleaner, Stainless steel cleaner
Restrictions on use : Not intended for use by children.

Chemical family

: Mixture.

Name, address, and telephone number of the manufacturer:

FPPF Chemical Company, Inc.

117 West Tupper Street
Buffalo, NY, USA
14201

Manufacturer's Telephone # : (800) 735-3773

24 Hr. Emergency Tel # : PERS: North America 1-800-633-8253; International: +1-801-629-0667
Contract number: 8027

Name, address, and telephone number of the supplier:

Refer to manufacturer

SECTION 2. HAZARDS IDENTIFICATION

Classification of the chemical

Blue liquid. Acrid odor.

Most important hazards: Fatal if inhaled. Toxic if swallowed. Corrosive to metals Causes skin and eye burns. Occupational exposure to the substance or mixture may cause adverse effects. Avoid release to the environment.

This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

Classification

Corrosive to metals Category 1

Acute toxicity, oral - Category 3

Acute toxicity, inhalation - Category 2

Eye Damage/Irritation - Category 1

Skin Corrosion/Irritation - Category 1

Specific target organ toxicity, single exposure - Category 3 (respiratory)

Specific target organ toxicity, repeated exposure - Category 2

Label elements

Hazard pictogram(s)



Signal Word

DANGER!



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Hazard statement(s)

May be corrosive to metals.
Toxic if swallowed.
Fatal if inhaled.
Causes severe skin burns and eye damage.
May cause respiratory irritation.
May cause damage to organs through prolonged or repeated exposure.

Precautionary statement(s)

Keep only in original container.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Do not breathe mist or vapor.
Use only outdoors or in a well-ventilated area.
In case of inadequate ventilation wear respiratory protection.
Wear protective gloves/clothing and eye/face protection.

IF exposed or concerned: Get medical attention/advice.
Immediately call a POISON CENTER or doctor/physician.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.
Absorb spillage to prevent material damage.

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

Dispose of contents/container in accordance with local regulation.

Other hazards

Other hazards which do not result in classification: Contact with most metals will generate flammable hydrogen gas.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

<u>Chemical name</u>	<u>Common name and synonyms</u>	<u>CAS #</u>	<u>Concentration (% by weight)</u>
Hydrofluoric acid	Fluoric acid	7664-39-3	10.0 - 30.0
Sulfuric acid	Vitriol oil	7664-93-9	3.0 - 7.0
2-butoxyethanol	Ethylene glycol monobutyl ether butyl cellosolve Glycol Ether EB EGBE	111-76-2	1.0 - 5.0
Quaternary ammonium compounds, (hydrogenated tallow alkyl) bis(hydroxyethyl) methyl, ethoxylated, chlorides	PEG-15 Hydrogenated Tallowmonium Chloride	68187-69-9	1.0 - 5.0

The exact concentrations of the above listed chemicals are being withheld as a trade secret.

SECTION 4. FIRST-AID MEASURES

Description of first aid measures



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- Ingestion* : Seek immediate medical attention/advice. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.
- Inhalation* : Immediately remove person to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen by qualified medical personnel only. Seek immediate medical attention/advice.
- Skin contact* : Remove/Take off immediately all contaminated clothing. Immediately flush skin with gently flowing, running water for at least 20 minutes. Do not rub area of contact. Seek immediate medical attention/advice.
- Eye contact* : Immediately flush eyes with running water for at least 20 minutes. Protect unharmed eye. Seek immediate medical attention/advice.

Most important symptoms and effects, both acute and delayed

- : Causes severe skin burns and eye damage. Corrosive to the eyes and may cause severe damage including blindness. Direct skin contact may cause corrosive skin burns, deep ulcerations and possibly permanent scarring. Fatal if swallowed, in contact with skin or if inhaled.

Indication of any immediate medical attention and special treatment needed

- : Immediate medical attention is required. Causes chemical burns.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

- : Dry chemical, carbon dioxide and foam.

Unsuitable extinguishing media

- : Do not use water. May react with water.

Special hazards arising from the substance or mixture / Conditions of flammability

- : Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure. Contact with most metals will generate flammable hydrogen gas.

Flammability classification (OSHA 29 CFR 1910.106)

- : Non-flammable.

Hazardous combustion products

- : Carbon oxides; Sulphur oxides; Hydrogen fluoride gas; formaldehyde; irritating fumes and smoke.

Special protective equipment and precautions for firefighters

Protective equipment for fire-fighters

- : Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Do not enter without wearing specialized protective equipment suitable for the situation. Firefighter's normal protective clothing (Bunker Gear) will not provide adequate protection. A full-body encapsulating chemical protective suit with positive pressure self-contained breathing apparatus (NIOSH approved or equivalent) may be necessary.

Special fire-fighting procedures

- : Move containers from fire area if safe to do so. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses. Dike for water control.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

- : All persons dealing with clean-up should wear the appropriate protective equipment including self-contained breathing apparatus. Keep all other personnel upwind and away from the spill/release. Restrict access to area until completion of clean-up. Refer to Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION, for additional information on acceptable personal protective equipment.



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Environmental precautions : Ensure spilled product does not enter drains, sewers, waterways, or confined spaces. For large spills, dike the area to prevent spreading.

Methods and material for containment and cleaning up

- : Ventilate area of release. Remove all sources of ignition. In case of acid solution, neutralize with excess soda ash or sodium bicarbonate, mix and scoop up slurry. Wash residual with water. Do not use combustible absorbents, such as sawdust. Pick up and transfer to properly labeled containers. Contaminated absorbent material may pose the same hazards as the spilled product. Contact the proper local authorities.

Special spill response procedures

- : In case of a transportation accident, in the United States contact CHEMTREC at 1-800-424-9300 or International at 1-703-527-3887. If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8802).
 US CERCLA Reportable quantity (RQ): See section 15.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

- : Use in a well-ventilated area. Wear protective gloves/clothing and eye/face protection. In case of inadequate ventilation wear respiratory protection. Do not ingest. Do not breathe mist or vapor. Avoid contact with skin, eyes and clothing. Keep away from heat, sparks and open flames. Keep away from combustible material. Avoid contact with incompatible materials. Wash thoroughly after handling.

Conditions for safe storage : Store in a cool, dry, well-ventilated area. Store away from incompatibles and out of direct sunlight. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks. No smoking in the area.

Incompatible materials : Bases. Reducing agents. Oxidizing agents. Metals. Water.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<u>Exposure Limits:</u>				
<u>Chemical Name</u>	<u>ACGIH TLV</u>		<u>OSHA PEL</u>	
	<u>TWA</u>	<u>STEL</u>	<u>PEL</u>	<u>STEL</u>
Hydrofluoric acid	0.5 ppm (F)	N/Av	3 ppm (F)	N/Av
Sulfuric acid	0.2 mg/m ³ (thoracic fraction)	N/Av	1 mg/m ³	N/Av
2-butoxyethanol	20 ppm	N/Av	50 ppm (240 mg/m ³) (skin)	N/Av
Quaternary ammonium compounds, (hydrogenated tallow alkyl) bis(hydroxyethyl) methyl, ethoxylated, chlorides	N/Av	N/Av	N/Av	N/Av

Exposure controls

Ventilation and engineering measures

- : Use only outdoors or in a well-ventilated area. Apply technical measures to comply with the occupational exposure limits. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. Use explosion-proof electrical and ventilating equipment. In case of insufficient ventilation wear suitable respiratory equipment.



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- Respiratory protection** : If engineering controls and work practices are not effective in controlling exposure to this material, then wear suitable approved respiratory protection. If the TLV is exceeded, a NIOSH/MSHA-approved respirator is advised. Respirators should be selected based on the form and concentration of contaminants in air, and in accordance with OSHA (29 CFR 1910.134) or CSA Z94.4-02.
- Skin protection** : Wear protective gloves/clothing. The suitability for a specific workplace should be discussed with the producers of the protective gloves.
- Eye / face protection** : Chemical splash goggles must be worn when handling this material. A full face shield may also be necessary.
- Other protective equipment** : Wear resistant clothing and boots. Other equipment may be required depending on workplace standards. An eyewash station and safety shower should be made available in the immediate working area.
- General hygiene considerations** : Do not breathe mist or vapor. Avoid contact with skin, eyes and clothing. Do not eat, drink, smoke or use cosmetics while working with this product. Upon completion of work, wash hands before eating, drinking, smoking or use of toilet facilities. Remove and wash contaminated clothing before re-use. Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance** : Blue liquid.
- Odour** : Acrid odor.
- Odour threshold** : N/Av
- pH** : 1.0
- Melting Point/Freezing point** : N/Av
- Initial boiling point and boiling range** : N/Av
- Flash point** : N/Av
- Flashpoint (Method)** : N/Av
- Evaporation rate (BuAe = 1)** : N/Av
- Flammability (solid, gas)** : N/Av
- Lower flammable limit (% by vol.)** : N/Av
- Upper flammable limit (% by vol.)** : N/Av
- Oxidizing properties** : None.
- Explosive properties** : Not explosive
- Vapour pressure** : N/Av
- Vapour density** : N/Av
- Relative density / Specific gravity** : 1.02 - 1.253
- Solubility in water** : Soluble
- Other solubility(ies)** : N/Av
- Partition coefficient: n-octanol/water or Coefficient of water/oil distribution** : N/Av
- Auto-ignition temperature** : N/Av
- Decomposition temperature** : N/Av
- Viscosity** : N/Av
- Volatiles (% by weight)** : 100 (as water and acid)
- Volatile organic Compounds (VOC's)** : N/Av



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Absolute pressure of container

: N/Ap

Flame projection length

: N/Ap

Other physical/chemical comments

: No additional information.

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No dangerous reaction known under conditions of normal use. Contact with metals may release small amounts of flammable hydrogen gas.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions

: Hazardous polymerization does not occur.

Conditions to avoid : Avoid heat and open flame. Ensure adequate ventilation, especially in confined areas. Avoid contact with water.

Incompatible materials : Reducing agents. Bases. Metals Oxidizing agents Water

Hazardous decomposition products

: None known, refer to hazardous combustion products in Section 5.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Routes of entry inhalation : YES

Routes of entry skin & eye : YES

Routes of entry Ingestion : YES

Routes of exposure skin absorption

: YES

Potential Health Effects:

Signs and symptoms of short-term (acute) exposure

Sign and symptoms Inhalation

: Fatal if inhaled. Inhalation of high concentrations of fumes or mists may cause severe irritation and corrosive damage to the nose, throat and upper respiratory tract. Inhalation may cause headache, nausea and central nervous effects such as dizziness, coordination difficulties and unconsciousness. Could result in pulmonary edema (fluid accumulation). Symptoms of pulmonary edema (chest pain, shortness of breath) may be delayed.

Sign and symptoms ingestion

: Toxic if swallowed. Causes severe irritation, swelling, corrosive burns and damage in mouth and throat. May be absorbed and cause symptoms similar to those for inhalation.

Sign and symptoms skin

: Corrosive to skin. Causes severe burns, symptoms may be delayed. May be absorbed and cause symptoms similar to those for inhalation.

Sign and symptoms eyes

: Corrosive to eyes. Chemical burns, corneal damage, and possibly blindness can result from direct contact. May be absorbed and cause symptoms similar to those for inhalation.

Potential Chronic Health Effects

: Prolonged or repeated contact may cause drying, cracking and defatting of the skin. Repeated or prolonged exposure may result in kidney effects. In extreme cases, tooth erosion could result. Prolonged exposure may cause skeletal fluorosis (weakened bone structure).

Mutagenicity

: Not expected to be mutagenic in humans.



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Carcinogenicity : No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP. IARC has classified "strong inorganic acid mists containing sulphuric acid" as a known carcinogen (IARC category 1). This classification does not apply to this product; it only applies to mists containing sulphuric acid, and not to sulphuric acid or sulphuric acid mixtures.

Reproductive effects & Teratogenicity

: Not expected to cause reproductive effects.

Sensitization to material : Not expected to be a skin or respiratory sensitizer.

Specific target organ effects : This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015). Classification:
 Specific target organ toxicity, single exposure - Category 3 (respiratory)
 May cause respiratory irritation.
 Specific Target Organ Toxicity, Repeated Exposure - Category 2
 May cause damage to organs through prolonged or repeated exposure. Prolonged exposure may cause skeletal fluorosis (weakened bone structure). Symptoms of Fluorosis include fragile bones, stiffness of the joints, osteosclerosis, loss of appetite, nausea, vomiting, dyspnea, salivation, abdominal pain, fever, paresthesias, nystagmus, optic neuritis, polyuria, stomatitis, albuminuria, nettle rash, skin, tooth and kidney damage and cardiac arrhythmias. Fluoride ion can reduce serum calcium levels possibly causing fatal hypocalcemia. Prolonged exposure to fluoride dust, vapors or mists results in perforation of the nasal septum. Chronic effects include excessive calcification of the bones, ligaments and tendons.

Medical conditions aggravated by overexposure

: Pre-existing skin, eye, respiratory and central nervous system disorders.

Synergistic materials : Not available.

Toxicological data : There is no available data for the product itself, only for the ingredients. See below for individual ingredient acute toxicity data. The calculated ATE values for this mixture are:
 ATE oral = 131.11 mg/kg
 ATE dermal = 8000 mg/kg
 ATE inhalation (vapours) = 1.82 mg/L

<u>Chemical name</u>	<u>LC₅₀(4hr)</u> <u>inh, rat</u>	<u>LD₅₀</u>	
		<u>(Oral, rat)</u>	<u>(Rabbit, dermal)</u>
Hydrofluoric acid	655 ppm	N/Av	N/Av
Sulfuric acid	255 mg/m ³	2140 mg/kg	N/Av
2-butoxyethanol	450 ppm (2.175 mg/L) (vapour)	530 mg/kg	400 - 500 mg/kg
Quaternary ammonium compounds, (hydrogenated tallow alkyl) bis(hydroxyethyl) methyl, ethoxylated, chlorides	N/Av	N/Av	N/Av

Other important toxicological hazards

: None known or reported by the manufacturer.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity : Do not release, unmonitored, into the environment. See the following tables for individual ingredient chronic ecotoxicity data.



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Ecotoxicity data:

<u>Ingredients</u>	CAS No	Toxicity to Fish		
		LC50 / 96h	NOEC / 21 day	M Factor
Hydrofluoric acid	7664-39-3	48 Hr LC50 Leuciscus idus: 660 mg/L	N/Av	N/Av
Sulfuric acid	7664-93-9	96 Hr LC50 Brachydanio rerio: >500 mg/L [static]	N/Av	N/Av
2-butoxyethanol	111-76-2	1490 mg/L (Bluegill sunfish)	> 100 mg/L (Zebra fish)	None.
Quaternary ammonium compounds, (hydrogenated tallow alkyl) bis(hydroxyethyl) methyl, ethoxylated, chlorides	68187-69-9	N/Av	N/Av	N/Av

<u>Ingredients</u>	CAS No	Toxicity to Daphnia		
		EC50 / 48h	NOEC / 21 day	M Factor
Hydrofluoric acid	7664-39-3	48 Hr EC50 Daphnia species: 270 mg/L	N/Av	N/Av
Sulfuric acid	7664-93-9	24 Hr EC50 Daphnia magna: 29 mg/L	N/Av	N/Av
2-butoxyethanol	111-76-2	835 mg/L (Daphnia magna)	100 mg/L	None.
Quaternary ammonium compounds, (hydrogenated tallow alkyl) bis(hydroxyethyl) methyl, ethoxylated, chlorides	68187-69-9	N/Av	N/Av	N/Av

<u>Ingredients</u>	CAS No	Toxicity to Algae		
		EC50 / 96h or 72h	NOEC / 96h or 72h	M Factor
Hydrofluoric acid	7664-39-3	N/Av	N/Av	N/Av
Sulfuric acid	7664-93-9	N/Av	N/Av	N/Av
2-butoxyethanol	111-76-2	911 mg/L/72hr (Green algae)	286 mg/L/72hr	None.
Quaternary ammonium compounds, (hydrogenated tallow alkyl) bis(hydroxyethyl) methyl, ethoxylated, chlorides	68187-69-9	N/Av	N/Av	N/Av

Persistence and degradability

: No data is available on the product itself.

Bioaccumulation potential

: No data is available on the product itself.



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<u>Components</u>	<u>Partition coefficient n-octanol/water (log Kow)</u>	<u>Bioconcentration factor (BCF)</u>
Hydrofluoric acid (CAS 7664-39-3)	-1.4	no bioaccumulation
Sulfuric acid (CAS 7664-93-9)	-2.20(estimated)	no bioaccumulation
2-butoxyethanol (CAS 111-76-2)	0.8	0.97

Mobility in soil : No data is available on the product itself.

Other Adverse Environmental effects

: The ecological characteristics of this product have not been fully investigated. The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters.

SECTION 13. DISPOSAL CONSIDERATIONS

Handling for Disposal : Handle waste according to recommendations in Section 7. Empty containers retain residue (liquid and/or vapour) and can be dangerous. Do not cut, weld, drill or grind on or near this container.

Methods of Disposal : Dispose of in accordance with federal, provincial and local hazardous waste laws.

RCRA : If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.



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SECTION 14. TRANSPORT INFORMATION

Regulatory Information	UN Number	UN proper shipping name	Transport hazard class(es)	Packing Group	Label
IMDG	UN3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Hydrofluoric and sulfuric acid)	8	II	
IMDG Additional information	Consult the IMDG regulations for exceptions.				
ICAO/IATA	UN3264	Corrosive liquid, acidic, inorganic, n.o.s. (Hydrofluoric and sulfuric acid)	8	II	
ICAO/IATA Additional information	Refer to ICAO/IATA Packing Instruction				
TDG	UN3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Hydrofluoric and sulfuric acid)	8	II	
TDG Additional information	May be shipped as LIMITED QUANTITY when transported in containers no larger than 1.0 Litre, in packages not exceeding 30 kg gross mass.				
49CFR/DOT	UN3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Hydrofluoric and sulfuric acid)	8	II	
49CFR/DOT Additional information	May be shipped as LIMITED QUANTITY when transported in quantities no larger than 1 Litre, in packages not exceeding 30 kg gross mass.				

Special precautions for user : Appropriate advice on safety must accompany the package.

Environmental hazards : This product does not meet the criteria for an environmentally hazardous mixture, according to the IMDG Code. See ECOLOGICAL INFORMATION, Section 12.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
: Not available.

SECTION 15 - REGULATORY INFORMATION

US Federal Information:

Components listed below are present on the following U.S. Federal chemical lists:



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<u>Ingredients</u>	CAS #	TSCA Inventory	CERCLA Reportable Quantity(RQ) (40 CFR 117.302):	SARA TITLE III: Sec. 302, Extremely Hazardous Substance, 40 CFR 355:	SARA TITLE III: Sec. 313, 40 CFR 372, Specific Toxic Chemical	
					Toxic Chemical	de minimus Concentration
Hydrofluoric acid	7664-39-3	Yes	100 lb/ 45.4 kg	100 lb TPQ	Yes	0.1%
Sulfuric acid	7664-93-9	Yes	1000 lb/ 454 kg	1000 lb TPQ	Yes	0.1%
2-butoxyethanol	111-76-2	Yes	None.	None.	No	N/Ap
Quaternary ammonium compounds, (hydrogenated tallow alkyl) bis(hydroxyethyl) methyl, ethoxylated, chlorides	68187-69-9	Yes	N/Ap	N/Av	No	N/Ap

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes: Corrosive to metals ; Acute toxicity Eye Damage; Skin corrosion; Specific target organ toxicity, single exposure; Specific target organ toxicity, repeated exposure .Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds or the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

US State Right to Know Laws:

The following chemicals are specifically listed by individual States:

<u>Ingredients</u>	CAS #	California Proposition 65		State "Right to Know" Lists					
		Listed	Type of Toxicity	CA	MA	MN	NJ	PA	RI
Hydrofluoric acid	7664-39-3	No	N/Ap	Yes	Yes	Yes	Yes	Yes	Yes
Sulfuric acid	7664-93-9	No	N/Ap	Yes	Yes	Yes	Yes	Yes	Yes
2-butoxyethanol	111-76-2	No	N/Ap	Yes	Yes	Yes	Yes	Yes	Yes
Quaternary ammonium compounds, (hydrogenated tallow alkyl) bis(hydroxyethyl) methyl, ethoxylated, chlorides	68187-69-9	No	N/Ap	No	No	No	No	No	No

Canadian Information:

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL). WHMIS Classification: See Section 2.

International Information:

Components listed below are present on the following International Inventory list:



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Ingredients	CAS #	European EINECs	Australia AICS	Philippines PICCS	Japan ENCS	Korea KECI/KECL	China IECSC	NewZealand IOC
Hydrofluoric acid	7664-39-3	231-634-8	Present	Present	(1)-306	KE-20198	Present	HSR001537, HSR001568, HSR001569, HSR001570, HSR001589 (dilution)
Sulfuric acid	7664-93-9	231-639-5	Present	Present	(1)-724; (1)-430	KE-32570	Present	HSR001572, HSR001573, HSR001588 (dilution)
2-butoxyethanol	111-76-2	203-905-0	Present	Present	(7)-97; (2)-407	KE-04134	Present	HSR001154
Quaternary ammonium compounds, (hydrogenated tallow alkyl) bis(hydroxyethyl) methyl, ethoxylated, chlorides	68187-69-9	N/Av	Present	Present	N/Av	KE-30031	Present	May be used as a component in a product covered by a group standard, but is not approved for use as a chemical in its own right.

SECTION 16. OTHER INFORMATION

Legend

- : ACGIH: American Conference of Governmental Industrial Hygienists
- CAS: Chemical Abstract Services
- CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
- CFR: Code of Federal Regulations
- DOT: Department of Transportation
- EPA: Environmental Protection Agency
- HSDB: Hazardous Substances Data Bank
- IARC: International Agency for Research on Cancer
- Inh: Inhalation
- MSHA: Mine Safety and Health Administration
- N/Av: Not Available
- N/Av: Not Available
- NIOSH: National Institute of Occupational Safety and Health
- NTP: National Toxicology Program
- OSHA: Occupational Safety and Health Administration
- PEL: Permissible exposure limit
- RCRA: Resource Conservation and Recovery Act
- RTECS: Registry of Toxic Effects of Chemical Substances
- SARA: Superfund Amendments and Reauthorization Act
- STEL: Short Term Exposure Limit
- TDG: Canadian Transportation of Dangerous Goods Act & Regulations
- TLV: Threshold Limit Values
- TPQ: Threshold Planning Quantity
- TSCA: Toxic Substance Control Act
- TWA: Time Weighted Average
- WHMIS: Workplace Hazardous Materials Identification System



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References : Safety Data Sheets from manufacturer.
OECD - The Global Portal to Information on Chemical Substances
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Other special considerations for handling

: Provide adequate information, instruction and training for operators.

Prepared for:

FPPF Chemical Company, Inc.
117 West Tupper Street
Buffalo, NY, USA 14201
Telephone: 1-800-735-3773
Please direct all enquiries to FPPF Chemical Company

DISCLAIMER

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