

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision Date: 03/18/2014

Version: 1.0

SECTION 1: IDENTIFICATION

<u>Product Identifier</u> <u>Product Form:</u> Mixture

Product Name: Anew X (AFCO 5286)

Product Code: AFCO 5286 Intended Use of the Product

Use of the Substance/Mixture: Acid aluminum brightener and cleaner for tractor trailers and aluminum equipment. For professional

use only

Name, Address, and Telephone of the Responsible Party

Company

Alex C. Fergusson, LLC. 800 Development Avenue Chambersburg, PA 17201

T 800-345-1329 www.afcocare.com

Emergency Telephone Number

Emergency number : 1-800-424-9300 (CHEMTREC)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US)

Met. Corr. 1 H290
Acute Tox. 3 (Oral) H301
Acute Tox. 3 (Inhalation:vapour) H331
Skin Corr. 1B H314
Eye Dam. 1 H318
Carc. 1A H350
Aquatic Chronic 3 H412

Label Elements GHS-US Labeling

Hazard Pictograms (GHS-US)



GHSDE





Signal Word (GHS-US) : Danger

Hazard Statements (GHS-US) : H290 - May be corrosive to metals

H301+H331 - Toxic if swallowed or if inhaled H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

H350 - May cause cancer

H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements (GHS-US): P201 - Obtain special instructions 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 vapors, mist, spray. P262 - Do not get in eyes, on skin, or on clothing.

P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product. P271 - Use only outdoors or in a well-ventilated area.

P272 - Contaminated work clothing should not be allowed out of the workplace.

P273 - Avoid release to the environment.

03/18/2014 EN (English US) 1/13

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P280 - Wear protective gloves, protective clothing, eye protection, face protection, respiratory protection.

P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position 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.

P308+P313 - If exposed or concerned: Get medical advice/attention.

P310 - Immediately call a POISON CENTER or doctor/physician.

P311 - Call a POISON CENTER or doctor/physician.

P321 - Specific treatment (see section 4).

P330 - If swallowed, rinse mouth.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P361 - Remove/Take off immediately all contaminated clothing.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P363 - Wash contaminated clothing before reuse.

P390 - Absorb spillage to prevent material damage.

P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P405 - Store locked up.

P406 - Store in corrosive resistant container with a resistant inner liner.

P501 - Dispose of contents/container to local, regional, national, territorial, provincial, and international regulations.

Other Hazards

Other Hazards Not Contributing to the Classification: Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. When heated to decomposition, emits toxic fumes. Corrosive vapors.

Unknown Acute Toxicity (GHS-US) Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Mixture

Name	Product identifier	% (w/w)	Classification (GHS-US)
Water	(CAS No) 7732-18-5	70 - 90	Not classified
Sulfuric acid	(CAS No) 7664-93-9	10 - 20	Met. Corr. 1, H290
			Skin Corr. 1A, H314
			Eye Dam. 1, H318
			Carc. 1A, H350
Hydrofluoric acid	(CAS No) 7664-39-3	5 - 10	Acute Tox. 2 (Oral), H300
			Acute Tox. 1 (Dermal), H310
			Acute Tox. 2 (Inhalation:vapour), H330
			Skin Corr. 1A, H314
2-Butoxyethanol	(CAS No) 111-76-2	1 - 5	Flam. Liq. 4, H227
			Acute Tox. 4 (Oral), H302
			Acute Tox. 4 (Dermal), H312
			Acute Tox. 4 (Inhalation:vapour), H332
			Skin Irrit. 2, H315
			Eye Irrit. 2A, H319
Nonylphenol ethoxylates	(CAS No) 9016-45-9	1 - 5	Skin Irrit. 2, H315
			Eye Irrit. 2A, H319
			Aquatic Chronic 2, H411

03/18/2014 EN (English US) 2/13

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Phosphoric acid	(CAS No) 7664-38-2	0.1 - 1	Met. Corr. 1, H290
			Acute Tox. 4 (Oral), H302
			Skin Corr. 1B, H314
			Eye Dam. 1, H318

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General: FIRST AID MUST BE STARTED IMMEDIATELY. Speed in removing hydrofluoric acid from skin or eyes is of primary importance. All persons who may be exposed to hydrofluoric acid, and their supervisors, should be familiar with the First Aid procedures.

Inhalation: Immediately remove the victim to an uncontaminated atmosphere. CALL A PHYSICIAN. Administer oxygen as soon as possible. Oxygen inhalation may be repeated at half-hour intervals for a total of three or four hours until no shortness of breath is present and the victim's normal skin color has returned. Keep the victim warm.

Skin Contact: Immediately shower with copious amounts of water within seconds after contact or suspected contact, and completely remove all clothing while in the shower. Stay in the shower until assured that all traces of hydrofluoric acid are removed which may take up to 30 minutes or longer. EXAMINATION OF AND TREATMENT BY A PHYSICIAN IS RECOMMENDED AS QUICKLY AS POSSIBLE. IT MAY BE NECESSARY TO TRANSPORT THE VICTIM TO THE NEAREST HOSPITAL EMERGENCY ROOM. Remember also that concentrated hydrofluoric acid causes immediate pain, but dilute hydrofluoric acid solutions may not cause redness, burning or pain until several minutes or even hours have elapsed.

Eye Contact: Flush eyes immediately with large quantities of clean water while holding the eyelids apart. Continue flushing at 15-minute intervals, alternating with the following treatment Apply ice compress while awaiting examination by an eye physician. It may be necessary to take victim to the nearest hospital emergency room. For eye pain, a drop of 0.5% pontacaine hydrochloride may be may be instilled in the eye. Do not use oils or ointments.

Ingestion: CALL A PHYSICIAN IMMEDIATELY.Drink large amounts of water to dilute. Do not induce vomiting. Several glasses of milk or several ounces of milk of magnesia may be given for their soothing effect.

Most Important Symptoms and Effects Both Acute and Delayed

Acute Symptoms:

Inhalation: Mild exposure can irritate nose, throat and respiratory system. Onset of symptoms may be delayed for several hours. Sever exposure can cause nose and throat burns, lung inflammation and pulmonary edema. Also depletes calcium levels in the body if not promptly treated, resulting in death due to hypocalcemia.

Skin Contact: Both liquid and vapor can cause severe burns which may not be immediately painful or visible. Hydrofluoric acid will penetrate skin and attack underlying tissues and bone. Large burns of 25 square inches or more may also cause hypocalcemia which can be fatal. Solutions as dilute as 2% or lower may cause burns.

Eye Contact: Both liquid and vapor can cause irritation or corneal burns and conjuctivitis. Solutions as dilute as 2% may cause burns.

Ingestion: Can cause severe mouth, throat, and stomach burns and be fatal if swallowed. Even with small amounts or dilute solutions, profound and likely fatal hypocalcemia is likely to occur unless medical treatment is promptly initiated.

Chronic Symptoms: Repeated overexposure may lead to possible liver and kidney damage.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Water spray, fog, carbon dioxide, foam, dry chemical.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable.

Explosion Hazard: Product is not explosive.

Reactivity: When heated to decomposition, emits toxic fumes. In contact with metals, emits flammable/explosive hydrogen gas.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

03/18/2014 EN (English US) 3/13

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Hazardous Combustion Products: Carbon oxides (CO, CO₂). Corrosive vapors. Hydrogen Fluoride . Sulfur oxides. Toxic fumes are released.

Other information: Do not allow run-off from fire fighting to enter drains or water courses.

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not get in eyes, on skin, or on clothing. Do not breathe vapour or mist.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Absorb and/or contain spill with inert material, then place in suitable container. Cautiously neutralize spilled liquid with soda ash or lime.

Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely. Do not take up in combustible material such as: saw dust or cellulosic material. Contact competent authorities after a spill. Cautiously neutralize spilled liquid with soda ash or lime.

Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Additional Hazards When Processed: When heated to decomposition, emits toxic fumes. Corrosive vapors are released. Contact with metals may evolve flammable hydrogen gas. Thermal decomposition may generate hydrogen fluoride gas which is corrosive and toxic by all routes of exposure.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do no eat, drink or smoke when using this product. Wash hands and forearms thoroughly after handling. Always wash your hands immediately after handling this product, and once again before leaving the workplace.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a well-ventilated place. Keep container tightly closed. Keep/Store away from direct sunlight, extremely high temperatures, incompatible materials. Do not store in glass. Product will attack glass.

Incompatible Materials: Strong bases, strong oxidizers, and (some) metals. Chlorine compounds, chlorinated inorganics (potassium, calcium and sodium hypochlorite) and hydrogen peroxides. Sulfides.

Specific End Use(s)

Acid aluminum brightener and cleaner for tractor trailers and aluminum equipment. For professional use only.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

2-Butoxyethanol (11	1-76-2)		
Mexico	OEL TWA (mg/m³)	120 mg/m³	
Mexico	OEL TWA (ppm)	26 ppm	
Mexico	OEL STEL (mg/m³)	360 mg/m³	
Mexico	OEL STEL (ppm)	75 ppm	
USA ACGIH	ACGIH TWA (ppm)	20 ppm	
USA OSHA	OSHA PEL (TWA) (mg/m³)	240 mg/m³	
USA OSHA	OSHA PEL (TWA) (ppm)	50 ppm	
USA NIOSH	NIOSH REL (TWA) (mg/m³)	24 mg/m³	

03/18/2014 EN (English US) 4/13

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

LICA NIOCII	NIOCH DEL /T/A/A\ / sa sa\	[nnm
USA NIOSH	NIOSH REL (TWA) (ppm)	5 ppm
USA IDLH	US IDLH (ppm)	700 ppm
Ontario	OEL TWA (ppm)	20 ppm
Québec	VEMP (mg/m³)	97 mg/m³
Québec	VEMP (ppm)	20 ppm
Phosphoric acid (7664-38-		
Mexico	OEL TWA (mg/m³)	1 mg/m³
Mexico	OEL STEL (mg/m³)	3 mg/m³
USA ACGIH	ACGIH TWA (mg/m³)	1 mg/m³
USA ACGIH	ACGIH STEL (mg/m³)	3 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m³)	1 mg/m³
USA NIOSH	NIOSH REL (TWA) (mg/m³)	1 mg/m³
USA NIOSH	NIOSH REL (STEL) (mg/m³)	3 mg/m³
USA IDLH	US IDLH (mg/m³)	1000 mg/m³
Ontario	OEL STEL (mg/m³)	3 mg/m³
Ontario	OEL TWA (mg/m³)	1 mg/m³
Québec	VECD (mg/m³)	3 mg/m ³
Québec	VEMP (mg/m³)	1 mg/m ³
Hydrofluoric acid (7664-39	9-3)	
Mexico	OEL Ceiling (mg/m³)	2.5 mg/m ³
Mexico	OEL Ceiling (ppm)	3 ppm
USA ACGIH	ACGIH TWA (ppm)	0.5 ppm
USA ACGIH	ACGIH Ceiling (ppm)	2 ppm
USA OSHA	OSHA PEL (TWA) (ppm)	3 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m³)	2.5 mg/m³
USA NIOSH	NIOSH REL (TWA) (ppm)	3 ppm
USA NIOSH	NIOSH REL (ceiling) (mg/m³)	5 mg/m ³
USA NIOSH	NIOSH REL (ceiling) (ppm)	6 ppm
USA IDLH	US IDLH (ppm)	30 ppm
Ontario	OEL Ceiling (ppm)	2 ppm
Ontario	OEL TWA (ppm)	0.5 ppm
Québec	PLAFOND (mg/m³)	2.6 mg/m³
Québec	PLAFOND (ppm)	3 ppm
Sulfuric acid (7664-93-9)		
Mexico	OEL TWA (mg/m³)	1 mg/m³
USA ACGIH	ACGIH TWA (mg/m³)	0.2 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m³)	1 mg/m³
USA NIOSH	NIOSH REL (TWA) (mg/m³)	1 mg/m³
USA IDLH	US IDLH (mg/m³)	15 mg/m³
Ontario	OEL TWA (mg/m³)	0.2 mg/m³
Québec	VECD (mg/m³)	3 mg/m³
	VEMP (mg/m³)	1 mg/m³

Exposure Controls

Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

03/18/2014 EN (English US) 5/13

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Personal Protective Equipment: Protective clothing. Protective goggles. Gloves. Insufficient ventilation: wear respiratory protection. Face shield.











Materials for Protective Clothing: Chemically resistant materials and fabrics. Corrosion proof clothing.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles or face shield.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Use NIOSH-approved air-purifying or supplied-air respirator where airborne concentrations of vapor or mist

are expected to exceed exposure limits.

Thermal Hazard Protection: Wear suitable protective clothing. **Other Information:** When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State : Liquid
Appearance : Clear pink

Odor : Acidic, pungent, slight lemon odor

Odor Threshold : Not available

pH : <1

Relative Evaporation Rate (butylacetate=1) Not available Not available **Melting Point Freezing Point** Not available **Boiling Point** 96.1 °C (204.98°F) **Flash Point** Not flammable **Auto-ignition Temperature** Not available **Decomposition Temperature** Not available Flammability (solid, gas) Not available **Lower Flammable Limit** Not available **Upper Flammable Limit** Not available Not available **Vapor Pressure** Relative Vapor Density at 20 °C Not available

Specific Gravity: 1.12Solubility: Complete.Partition coefficient: n-octanol/water: Not availableViscosity: Not available

Explosion Data – Sensitivity to Mechanical Impact : Not expected to present an explosion hazard due to mechanical impact. Explosion Data – Sensitivity to Static Discharge : Not expected to present an explosion hazard due to static discharge.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: When heated to decomposition, emits toxic fumes. In contact with metals, emits flammable/explosive hydrogen gas.

Chemical Stability: Stable at standard temperature and pressure.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Direct sunlight. Extremely high temperatures. Incompatible materials.

Incompatible Materials: Strong bases. Strong oxidizers, and (some) metals. Chlorine compounds, chlorinated inorganics (potassium, calcium and sodium hypochlorite) and hydrogen peroxides. Sulfides.

Hazardous Decomposition Products: Carbon oxides (CO, CO2). Corrosive vapors. Hydrogen fluoride. Sulfur oxides. Thermal decomposition generates toxic vapours.

03/18/2014 EN (English US) 6/13

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 11: TOXICOLOGICAL INFORMATION

<u>Information on Toxicological Effects - Product</u>

Acute Toxicity: Toxic if swallowed. Toxic if inhaled.

LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Causes severe skin burns and eye damage. pH: < 1

Serious Eye Damage/Irritation: Causes serious eye damage. pH: < 1 Respiratory or Skin Sensitization: May cause an allergic skin reaction.

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not available **Carcinogenicity:** May cause cancer.

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Potential Adverse Human Health Effects and Symptoms: Toxic if inhaled. Toxic if swallowed.

Symptoms/Injuries After Inhalation: Inhalation may cause immediate severe irritation progressing quickly to chemical burns. Toxic if

inhaled.

Symptoms/Injuries After Skin Contact: Contact may cause immediate severe irritation progressing quickly to chemical burns. May

cause an allergic skin reaction.

Symptoms/Injuries After Eye Contact: Causes serious eye damage.

Symptoms/Injuries After Ingestion: Toxic if swallowed. Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: May cause cancer. May cause erosion of the teeth, or chronic bronchitis.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Water (7732-18-5)		
LD50 Oral Rat	> 90000 mg/kg	
2-Butoxyethanol (111-76-2)		
LD50 Oral Rat	470 mg/kg	
LD50 Dermal Rat	1680 mg/kg	
LC50 Inhalation Rat (ppm)	450 ppm/4h	
ATE (dermal)	0.680 mg/kg body weight	
ATE (gases)	450.000 ppmV/4h	
ATE (vapors)	11.000 mg/l/4h	
Nonylphenol ethoxylates (9016-45-9)		
LD50 Oral Rat	2590 mg/kg	
LD50 Dermal Rabbit	1780 μl/kg	
ATE (dermal)	2000.000 mg/kg body weight	
Phosphoric acid (7664-38-2)		
LD50 Oral Rat	1530 mg/kg	
LD50 Dermal Rabbit	2730 mg/kg	
LC50 Inhalation Rat (mg/l)	> 850 mg/m³ (Exposure time: 1 h)	
Hydrofluoric acid (7664-39-3)		
LC50 Inhalation Rat (mg/l)	850 mg/l/4h (Exposure time: 4 h)	
LC50 Inhalation Rat (ppm)	1276 ppm/1h	
Sulfuric acid (7664-93-9)		
LD50 Oral Rat	2140 mg/kg	
LC50 Inhalation Rat (mg/l)	510 mg/m³ (Exposure time: 2 h)	

03/18/2014 EN (English US) 7/13

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2-Butoxyethanol (111-76-2)		
IARC Group	3	
National Toxicity Program (NTP) Status	Evidence of Carcinogenicity.	
Sulfuric acid (7664-93-9)		
IARC Group	1	

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecology - General: Harmful to aquatic life.

2-Butoxyethanol (111-76-2)	
LC50 Fish 1	1490 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	2950 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)
Hydrofluoric acid (7664-39-3	
EC50 Daphnia 1	270 mg/l (Exposure time: 48 h - Species: Daphnia species)
Sulfuric acid (7664-93-9)	
LC50 Fish 1	500 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])

Persistence and Degradability Not available

Bioaccumulative Potential

Dioaccamalative i occitiai		
Anew X (AFCO 5286)		
Bioaccumulative Potential	Not established.	
2-Butoxyethanol (111-76-2)		
Log Pow	0.81 (at 25 °C)	
Hydrofluoric acid (7664-39-3)		
BCF fish 1	(no bioaccumulation)	
Log Pow	-1.4	
Sulfuric acid (7664-93-9)		
BCF fish 1	(no bioaccumulation)	

Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

Ecology – Waste Materials: This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: TRANSPORT INFORMATION

14.1 In Accordance with DOT

Proper Shipping Name : HYDROFLUORIC ACID AND SULFURIC ACID MIXTURES

Hazard Class : 8

Identification Number: UN1786Label Codes: 8,6.1Packing Group: IERG Number: 157

14.2 In Accordance with IMDG

Proper Shipping Name : HYDROFLUORIC ACIDAND SULFURIC ACID MIXTURES

Hazard Class : 8

Identification Number : UN1786

03/18/2014 EN (English US) 8/13

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Packing Group : I
Label Codes : 8,6.1
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-B

8

14.3 In Accordance with IATA

Proper Shipping Name : HYDROFLUORIC ACID AND SULFURIC ACID MIXTURES

Packing Group : |

Identification Number : UN1786

Hazard Class : 8 Label Codes : 8,6.1 ERG Code (IATA) : 8P



14.4 In Accordance with TDG

Proper Shipping Name : HYDROFLUORIC ACID AND SULFURIC ACID MIXTURES

Packing Group : I
Hazard Class : 8
Identification Number : UN1786
Label Codes : 8,6.1



SECTION 15: REGULATORY INFORMATION

US Federal Regulations

Anew X (AFCO 5286)	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
	Delayed (chronic) health hazard

Water (7732-18-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

2-Butoxyethanol (111-76-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Nonylphenol ethoxylates (9016-45-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Phosphoric acid (7664-38-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Hydrofluoric acid (7664-39-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed on SARA Section 302 (Specific toxic chemical listings)

Listed on SARA Section 313 (Specific toxic chemical listings)

SARA Section 302 Threshold Planning Quantity (TPQ)	100
SARA Section 313 - Emission Reporting	1.0 %

Sulfuric acid (7664-93-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed on SARA Section 302 (Specific toxic chemical listings)

Listed on SARA Section 313 (Specific toxic chemical listings)

SARA Section 302 Threshold Planning Quantity (TPQ)	1000
SARA Section 313 - Emission Reporting	1.0 % (acid aerosols including mists, vapors, gas, fog, and other
	airborne forms of any particle size)

US State Regulations

Sulfuric acid (7664-93-9)	
U.S California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of
	California to cause cancer.

03/18/2014 EN (English US) 9/13

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2-Butoxyethanol (111-76-2)

- U.S. California SCAQMD Toxic Air Contaminants Non-Cancer Acute
- U.S. California Toxic Air Contaminant List (AB 1807, AB 2728)
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. New Jersey Special Health Hazards Substances List
- U.S. New York Occupational Exposure Limits Skin Designations
- U.S. New York Occupational Exposure Limits TWAs
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. Texas Effects Screening Levels Long Term
- U.S. Texas Effects Screening Levels Short Term

Nonylphenol ethoxylates (9016-45-9)

- U.S. Texas Effects Screening Levels Long Term
- U.S. Texas Effects Screening Levels Short Term

Phosphoric acid (7664-38-2)

- U.S. California SCAQMD Toxic Air Contaminants Non-Cancer Chronic
- U.S. California Toxic Air Contaminant List (AB 1807, AB 2728)
- U.S. New Jersey Discharge Prevention List of Hazardous Substances
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. New Jersey Special Health Hazards Substances List
- U.S. New York Occupational Exposure Limits TWAs
- U.S. New York Reporting of Releases Part 597 List of Hazardous Substances
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. Texas Effects Screening Levels Long Term
- U.S. Texas Effects Screening Levels Short Term

Hydrofluoric acid (7664-39-3)

- U.S. California SCAQMD Toxic Air Contaminants Non-Cancer Acute
- U.S. California SCAQMD Toxic Air Contaminants Non-Cancer Chronic
- U.S. California Toxic Air Contaminant List (AB 1807, AB 2728)
- U.S. New Jersey Discharge Prevention List of Hazardous Substances
- U.S. New Jersey Environmental Hazardous Substances List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. New Jersey Special Health Hazards Substances List
- U.S. New Jersey TCPA Extraordinarily Hazardous Substances (EHS)
- U.S. New York Occupational Exposure Limits TWAs
- U.S. New York Reporting of Releases Part 597 List of Hazardous Substances
- U.S. North Carolina Control of Toxic Air Pollutants
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. Texas Effects Screening Levels Long Term
- U.S. Texas Effects Screening Levels Short Term

Sulfuric acid (7664-93-9)

Strong inorganic acid mists containing sulfuric acid are present on the State of California list of Chemicals Known to the State to Cause Cancer or Reproductive Toxicity (Cal Prop 65).

- U.S. California SCAQMD Toxic Air Contaminants Non-Cancer Acute
- U.S. California SCAQMD Toxic Air Contaminants Non-Cancer Chronic
- U.S. California Toxic Air Contaminant List (AB 1807, AB 2728)
- U.S. New Jersey Discharge Prevention List of Hazardous Substances
- U.S. New Jersey Environmental Hazardous Substances List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. New Jersey Special Health Hazards Substances List
- U.S. New York Occupational Exposure Limits TWAs

03/18/2014 EN (English US) 10/13

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

- U.S. New York Reporting of Releases Part 597 List of Hazardous Substances
- U.S. North Carolina Control of Toxic Air Pollutants
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. Texas Effects Screening Levels Long Term
- U.S. Texas Effects Screening Levels Short Term

Canadian Regulations	
Anew X (AFCO 5286)	
WHMIS Classification	Class E - Corrosive Material Class D Division 1 Subdivision A - Very toxic material causing immediate and serious toxic effects Class D Division 1 Subdivision B - Toxic material causing immediate and serious toxic effects Class D Division 2 Subdivision A - Very toxic material causing other toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects
Water (7732-18-5)	
	L (Domestic Substances List) inventory.
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria
2-Butoxyethanol (111-76-	
	L (Domestic Substances List) inventory.
Listed on the Canadian Ing	
WHMIS Classification	Class B Division 3 - Combustible Liquid
	Class D Division 1 Subdivision A - Very toxic material causing immediate and serious toxic effects
	Class D Division 2 Subdivision B - Toxic material causing other toxic effects
Nonylphenol ethoxylates	(9016-45-9)
	L (Domestic Substances List) inventory.
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects
Phosphoric acid (7664-38-	-2)
	L (Domestic Substances List) inventory.
Listed on the Canadian Ing	gredient Disclosure List
WHMIS Classification	Class E - Corrosive Material
Hydrofluoric acid (7664-3	9-3)
Listed on the Canadian DS	L (Domestic Substances List) inventory.
Listed on the Canadian Ing	gredient Disclosure List
WHMIS Classification	Class D Division 1 Subdivision A - Very toxic material causing immediate and serious toxic effects
	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects
	Class E - Corrosive Material
Sulfuric acid (7664-93-9)	
Listed on the Canadian DS	L (Domestic Substances List) inventory.
Listed on the Canadian Ing	gredient Disclosure List
WHMIS Classification	Class D Division 1 Subdivision B - Toxic material causing immediate and serious toxic effects

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

Class D Division 2 Subdivision A - Very toxic material causing other toxic effects

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Class E - Corrosive Material

Revision date : 03/18/2014

03/18/2014 EN (English US) 11/13

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Other Information

: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Acute Tox. 1 (Dermal)	Acute toxicity (dermal) Category 1
Acute Tox. 2 (Dermal)	Acute toxicity (dermal) Category 2
Acute Tox. 2	Acute toxicity (inhalation:vapour) Category 2
(Inhalation:vapour)	
Acute Tox. 2 (Oral)	Acute toxicity (oral) Category 2
Acute Tox. 3	Acute toxicity (inhalation:vapour) Category 3
(Inhalation:vapour)	
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4	Acute toxicity (inhalation:vapour) Category 4
(Inhalation:vapour)	
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Asp. Tox. 1	Aspiration hazard Category 1
Carc. 1A	Carcinogenicity Category 1A
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 2	Flammable liquids Category 2
Flam. Liq. 3	Flammable liquids Category 3
Flam. Liq. 4	Flammable liquids Category 4
Met. Corr. 1	Corrosive to metals Category 1
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1
Skin Sens. 1B	Skin sensitization Category 1B
H227	Combustible liquid
H290	May be corrosive to metals
H300	Fatal if swallowed
H301	Toxic if swallowed
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H310	Fatal in contact with skin
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H330	Fatal if inhaled
H331	Toxic if inhaled
H332	Harmful if inhaled
L	

03/18/2014 EN (English US) 12/13

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

H350	May cause cancer
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

NFPA Health Hazard : 3 - Short exposure could cause serious temporary or

residual injury even though prompt medical attention was

given.

NFPA Fire Hazard : 0 - Materials that will not burn.

NFPA Reactivity : 1 - Normally stable, but can become unstable at elevated

temperatures and pressures or may react with water with

some release of energy, but not violently.



Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is

given

Flammability : 0 Minimal Hazard
Physical : 1 Slight Hazard
Party Responsible for the Preparation of This Document

Alex C. Fergusson, LLC. 800 Development Avenue Chambersburg, PA 17201

800-345-1329

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

North America GHS US 2012 & WHMIS 2

03/18/2014 EN (English US) 13/13