1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product Name
Zing® Formula IV Aluminum Pontoon/Boat Cleaner

Other means of identification

Product Code
N-879

Synonyms
None

Details of the supplier of the safety data sheet

Company Name
Nyco Products Company
5332 Dansher Road
Countryside, IL 60525
(708) 579-8100
nycoproducts.com

Emergency telephone number

Emergency Telephone
Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - Oral</td>
<td>Category 4</td>
</tr>
<tr>
<td>Acute toxicity - Dermal</td>
<td>Category 3</td>
</tr>
<tr>
<td>Acute toxicity - Inhalation (Gases)</td>
<td>Category 4</td>
</tr>
<tr>
<td>Acute toxicity - Inhalation (Dusts/Mists)</td>
<td>Category 4</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 1</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 1</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Category 1A</td>
</tr>
</tbody>
</table>

Label elements

Danger

Emergency Overview

Hazard statements
Harmful if swallowed
Toxic in contact with skin
Harmful if inhaled
Causes severe skin burns and eye damage
May cause cancer
Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use only in a well-ventilated area
Wear protective gloves/protective clothing/eye protection/face protection
Do not breathe dust/fume/gas/mist/vapors/spray
Do not eat, drink or smoke when using this product
Wash face, hands and any exposed skin thoroughly after handling

Precautionary Statements - Response

Specific Treatment (See Section 4 on the SDS)
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
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Immediately call a POISON CENTER or doctor/physician
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
IF SWALLOWED: Rinse mouth. DO NOT induce vomiting
Drink plenty of water
Immediately call a POISON CENTER or doctor/physician

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Disposal should be in accordance with applicable regional, national and local laws and regulations

Hazards not otherwise classified (HNOC)

Other Information

Unknown Acute Toxicity
0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Weight-%</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric Acid</td>
<td>7647-01-0</td>
<td>5-10</td>
<td>*</td>
</tr>
<tr>
<td>Ammonium Fluoride</td>
<td>12125-01-8</td>
<td>1-5</td>
<td>*</td>
</tr>
<tr>
<td>Nonylphenol Ethoxylate</td>
<td>9016-45-9</td>
<td>1-5</td>
<td>*</td>
</tr>
<tr>
<td>Hydrofluoric Acid</td>
<td>7664-39-3</td>
<td>.1-1</td>
<td>*</td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

Immediate medical attention is required. NOTE: The effect of Hydrofluoric Acid (HF), i.e. the onset of pain, particularly in dilute solutions, may not be felt for up to 24 hours. It is important that workers have immediate access to the antidote (calcium gluconate) both on and off the worksite in order to apply it as soon as possible.
Skin Contact
Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. For minor skin contact, avoid spreading material on unaffected skin. For severe burns, immediate medical attention is required. Immediately apply calcium gluconate gel 2.5% and massage into the affected area using rubber gloves; continue to massage while repeatedly applying gel until 15 minutes after pain is relieved. Alternately, immerse the burned area in a solution of 0.2% iced aqueous Hyamine 1622 or 0.13% iced aqueous Zephiran Chloride. If finger/fingernails are touched, even if there is no pain, dip them in a bath of 5% calcium gluconate for 15 to 20 minutes. Consult a physician immediately in all cases of skin contact no matter how minor.

Eye contact
Keep eye wide open while rinsing. Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Do not rub affected area. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Rinse the eyes with a calcium gluconate 1% solution for 10 minutes. In the case of difficulty opening the lids, administer an analgesic eyewash. Do not use oily drops, ointment, or HF skin burn treatments. Consult an ophthalmologist or eye specialist and physician immediately in all cases. Take to a hospital immediately.

Inhalation
Remove to fresh air. Call a physician or poison control center immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Remove the subject from the contaminated area as soon as possible. Transport subject lying down, with the head higher than the body, to a quiet, uncontaminated and well ventilated location. Administer oxygen (2.5% calcium gluconate if available, can be oxygen nebulized with trained personnel) or cardiopulmonary resuscitation if necessary and as soon as possible. If patient is unconscious, give artificial respiration. Note: Mouth to mouth resuscitation is not recommended. Keep warm (blanket). Consult physician in all cases. Take to a hospital.

Ingestion
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water. Immediate medical attention is required. Remove from exposure, lie down. Clean mouth with water and drink afterwards plenty of water. Call a physician or poison control center immediately. When directed by physician, give orally either 1% aqueous calcium gluconate solution, milk or calcium/magnesium containing anti-acid. Such solutions can be beneficial but also may be problematic if they induce vomiting.

Self-protection of the first aider
Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Note: Mouth to mouth resuscitation is not recommended.

Most important symptoms and effects, both acute and delayed

Symptoms
Any additional important symptoms and effects are described in Section 11: Toxicology Information.

Indication of any immediate medical attention and special treatment needed

Note to physicians
Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media
Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical
The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire and/or explosion do not breathe fumes.

**Explosion data**
- Sensitivity to Mechanical Impact: None.
- Sensitivity to Static Discharge: None.

**Protective equipment and precautions for firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions**
Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak.

**Environmental precautions**
Do not allow into any storm sewer drains, lakes, streams, ponds, estuaries, oceans or other surface water bodies. Should not be released into the environment. Dispose of according to all local city, state and federal rules and regulations.

**Methods and material for containment and cleaning up**

**Methods for containment**
Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.

**Methods for cleaning up**
Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Prevent product from entering drains. Dam up. After cleaning, flush away traces with water.

### 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling**
Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Ensure adequate ventilation, especially in confined areas. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems. Avoid breathing vapors or mists. Always add acid to water.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions**
Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers. Keep/store only in original container. Do not reuse container.

**Incompatible materials**

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

**Exposure Guidelines**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric Acid</td>
<td>Ceiling: 2 ppm</td>
<td>(vacated) Ceiling: 5 ppm (vacated) Ceiling: 7 mg/m³</td>
<td>Ceiling: 5 ppm Ceiling: 7 mg/m³</td>
</tr>
<tr>
<td>7647-01-0</td>
<td></td>
<td></td>
<td>IDLH: 50 ppm Ceiling: 5 ppm Ceiling: 7 mg/m³</td>
</tr>
<tr>
<td>Ammonium Fluoride</td>
<td>TWA: 2.5 mg/m³ F</td>
<td>TWA: 2.5 mg/m³ F</td>
<td>IDLH: 250 mg/m³ F</td>
</tr>
</tbody>
</table>
N-879 Zing® Formula IV Aluminum Pontoon/Boat Cleaner

Revision Date 29-Dec-2017

| 12125-01-8 | Hydrofluoric Acid 7664-39-3 | TWA: 0.5 ppm F TWA: 2.5 mg/m³ F S* Ceiling: 2 ppm F | TWA: 3 ppm F TWA: 2.5 mg/m³ F (vacated) TWA: 3 ppm F (vacated) TWA: 2.5 mg/m³ (vacated) | IDLH: 30 ppm IDLH: 250 mg/m³ F Ceiling: 6 ppm 15 min Ceiling: 5 mg/m³ 15 min TWA: 3 ppm TWA: 2.5 mg/m³ |
| Sulfuric Acid 7664-93-9 | TWA: 0.2 mg/m³ thoracic particulate matter | TWA: 1 mg/m³ (vacated) TWA: 1 mg/m³ (vacated) TWA: 2 mg/m³ (vacated) | IDLH: 15 mg/m³ TWA: 1 mg/m³ TWA: 2 mg/m³ |
| Propargyl Alcohol 107-19-7 | TWA: 1 ppm S* | TWA: 1 ppm (vacated) TWA: 1 ppm (vacated) TWA: 2 mg/m³ (vacated) | |

NIOSH IDLH Immediately Dangerous to Life or Health

Other Information
Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Controls
Showers, Eyewash stations & Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection
Tight sealing safety goggles. Face protection shield.

Skin and body protection
Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Wear protective gloves and protective clothing.

Respiratory protection
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene
When using do not eat, drink or smoke. Keep away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Take off all contaminated clothing and wash it before reuse. Wear suitable gloves and eye/face protection. Keep working clothes separately.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Colorless</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Colorless</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Acidic</td>
<td></td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No Information available</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>&lt;1</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.06</td>
<td></td>
</tr>
<tr>
<td>Viscosity</td>
<td>&lt; 25 cP @ 25°C</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No Information available</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>99 °C / 210 °F Degrees</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No Information available</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Flammability Limits in Air:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit:</td>
<td>No Information available</td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit:</td>
<td>No Information available</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No Information available</td>
<td></td>
</tr>
<tr>
<td>Vapor density</td>
<td>No Information available</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>Complete</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No Information available</td>
<td></td>
</tr>
</tbody>
</table>
N-879 Zing® Formula IV Aluminum Pontoon/Boat Cleaner

Revision Date 29-Dec-2017

Other Information

Density Lbs/Gal 8.83
VOC Content (%) Not Applicable

10. STABILITY AND REACTIVITY

Reactivity
No data available

Chemical stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Conditions to avoid
Exposure to air or moisture over prolonged periods. Extremes of temperature and direct sunlight.

Incompatible materials

Hazardous Decomposition Products

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information
The primary effects and toxicity of this material are due to it corrosive nature.

Inhalation
Harmful if inhaled. Breathing of vapor can cause respiratory irritation and inflammation. Breathing of mist or liquid can cause burns to the respiratory tract.

Eye contact
Avoid contact with eyes. Corrosive to the eyes and may cause severe damage including blindness.

Skin Contact
Toxic in contact with skin. Corrosive. Contact with skin may cause severe irritation and burns. Contact is irritating and may cause an unusual, skin rash that appears similar to ballooning of the skin. If skin is moist, formation of hydrofluoric acid can cause serious burns. These burns do not appear serious at first, but may cause severe damage if not treated immediately.

Ingestion
Harmful if swallowed. Ingestion causes acute irritation and burns to the mucous membranes of the mouth, trachea, esophagus and stomach.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric Acid 7647-01-0</td>
<td>= 700 mg/kg (Rat)</td>
<td>&gt; 5010 mg/kg (Rabbit)</td>
<td>= 1.68 mg/L (Rat) 1 h</td>
</tr>
<tr>
<td>Nonylphenol Ethoxylate 9016-45-9</td>
<td>= 2590 mg/kg (Rat) = 1310 mg/kg (Rabbit)</td>
<td>= 1780 µL/kg (Rabbit) = 2 mL/kg (Rabbit)</td>
<td>-</td>
</tr>
<tr>
<td>Hydrofluoric Acid 7684-39-3</td>
<td>-</td>
<td>-</td>
<td>= 0.79 mg/L (Rat) 1 h</td>
</tr>
</tbody>
</table>

Information on toxicological effects

Symptoms
No Information available.
Delayed and immediate effects as well as chronic effects from short and long-term exposure

Corrosivity
Causes burns. Extremely corrosive and destructive to tissue. Risk of serious damage to eyes.

Sensitization
No Information available.

Germ cell mutagenicity
No Information available.

Carcinogenicity
The table below indicates whether each agency has listed any ingredient as a carcinogen.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric Acid</td>
<td>-</td>
<td>Group 3</td>
<td>-</td>
<td>X</td>
</tr>
<tr>
<td>Ammonium Fluoride</td>
<td>-</td>
<td>Group 3</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

ACGIH (American Conference of Governmental Industrial Hygienists)
A2 - Suspected Human Carcinogen
IARC (International Agency for Research on Cancer)
Group 1 - Carcinogenic to Humans
Group 3 - Not classifiable as a human carcinogen
NTP (National Toxicology Program)
Known - Known Carcinogen
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

Reproductive toxicity
No Information available.

STOT - single exposure
No Information available.

STOT - repeated exposure
No Information available.

Chronic toxicity
Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Avoid repeated exposure. Possible risk of irreversible effects.

Target organ effects
EYES, Respiratory system, Skin.

Aspiration hazard
No Information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity
0% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document.

| ATEmix (oral)     | 431.00 |
| ATEmix (dermal)   | 526.00 |
| ATEmix (inhalation-gas) | 8,040.74 |
| ATEmix (inhalation-dust/mist) | 2.76 |

12. ECOLOGICAL INFORMATION

Ecotoxicity
0.09% of the mixture consists of components(s) of unknown hazards to the aquatic environment

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric Acid</td>
<td>-</td>
<td>282: 96 h Gambusia affinis mg/L LC50 static</td>
<td>-</td>
</tr>
<tr>
<td>Ammonium Fluoride</td>
<td>-</td>
<td>364.0: 96 h Pimephales promelas mg/L LC50 static</td>
<td>-</td>
</tr>
<tr>
<td>Nonylphenol Ethoxylate</td>
<td>-</td>
<td>5: 96 h Fish mg/L LC50</td>
<td>-</td>
</tr>
<tr>
<td>Hydrofluoric Acid</td>
<td>-</td>
<td>660: 48 h Leuciscus idus mg/L LC50</td>
<td>270: 48 h Daphnia species mg/L EC50</td>
</tr>
<tr>
<td>Sulfuric Acid</td>
<td>-</td>
<td>500: 96 h Brachydianio rerio mg/L LC50 static</td>
<td>29: 24 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>Propargyl Alcohol</td>
<td>1.49 - 1.56: 96 h Pimephales promelas mg/L LC50 flow-through</td>
<td>32: 24 h Daphnia magna mg/L EC50</td>
<td></td>
</tr>
</tbody>
</table>

Persistence and degradability
No Information available.

Bioaccumulation
Bioaccumulative potential.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrofluoric Acid 7664-39-3</td>
<td>-1.4</td>
</tr>
</tbody>
</table>

Other adverse effects

No Information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging

Do not reuse container.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>RCRA - Basis for Listing</th>
<th>RCRA - D Series Wastes</th>
<th>RCRA - U Series Wastes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrofluoric Acid 7664-39-3</td>
<td>U134</td>
<td>-</td>
<td>U134</td>
</tr>
<tr>
<td>Propargyl Alcohol 107-19-7</td>
<td>P102</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

This product contains one or more substances that are listed with the State of California as a hazardous waste.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium Fluoride 12125-01-8</td>
<td>Toxic</td>
</tr>
<tr>
<td></td>
<td>Corrosive</td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

The basic description below is specific to the container size. This information is provided for at a glance DOT information. Please refer to the container and/or shipping papers for the appropriate shipping description before tendering this material for shipment. For additional information, please contact the distributor listed in section 1 of this SDS.

DOT

UN/ID No. UN2922
Proper shipping name Corrosive liquids, toxic, n.o.s.
Hazard Class 8
Subsidiary class 6.1
Packing Group II
Special Provisions B2, IB2, T2, TP2
Description UN2922, Corrosive liquids, toxic, n.o.s. (contains Hydrochloric Acid and Ammonium Bisulfide), 8, 6.1, II
Emergency Response Guide Number 154

TDG

UN/ID No. UN2922
Proper shipping name Corrosive liquids, toxic, n.o.s.
Hazard Class 8
Subsidiary class 6.1
Packing Group II
Description UN2922, Corrosive liquids, toxic, n.o.s. (contains Hydrochloric Acid and Ammonium Bisulfide), 8, 6.1, II

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL/NDSL Complies
Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>SARA 313 - Threshold Values %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric Acid - 7647-01-0</td>
<td>1.0</td>
</tr>
<tr>
<td>Ammonium Fluoride - 12125-01-8</td>
<td>1.0</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazard Categories

- Acute health hazard: Yes
- Chronic Health Hazard: Yes
- Fire hazard: No
- Sudden release of pressure hazard: No
- Reactive Hazard: No

CWA (Clean Water Act)
This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric Acid - 7647-01-0</td>
<td>5000 lb</td>
<td>-</td>
<td>-</td>
<td>X</td>
</tr>
<tr>
<td>Ammonium Fluoride - 12125-01-8</td>
<td>100 lb</td>
<td>-</td>
<td>-</td>
<td>X</td>
</tr>
<tr>
<td>Hydrofluoric Acid - 7664-39-3</td>
<td>100 lb</td>
<td>-</td>
<td>-</td>
<td>X</td>
</tr>
</tbody>
</table>

CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazardous Substances RQs</th>
<th>CERCLA/SARA RQ</th>
<th>Reportable Quantity (RQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric Acid - 7647-01-0</td>
<td>5000 lb</td>
<td>5000 lb</td>
<td>RQ 5000 lb final RQ</td>
</tr>
<tr>
<td>Ammonium Fluoride - 12125-01-8</td>
<td>100 lb</td>
<td>-</td>
<td>RQ 100 lb final RQ</td>
</tr>
<tr>
<td>Hydrofluoric Acid - 7664-39-3</td>
<td>100 lb</td>
<td>100 lb</td>
<td>RQ 100 lb final RQ</td>
</tr>
</tbody>
</table>

US State Regulations

California Proposition 65
WARNING: This product can expose you to chemicals including Sulfuric Acid, which is known to the state of California to cause cancer, and Methanol, which is known to cause birth defects or other reproductive harm. For More Information go to www.P65Warnings.ca.gov.

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric Acid - 7647-01-0</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Ammonium Fluoride - 12125-01-8</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Hydrofluoric Acid - 7664-39-3</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Sulfuric Acid - 7664-93-9</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Propargyl Alcohol - 107-19-7</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
**U.S. EPA Label Information**

EPA Pesticide Registration Number Not Applicable

---

### 16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and Chemical Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Physical hazards</th>
<th>Personal protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>D</td>
</tr>
</tbody>
</table>

**Issue Date** 16-May-2018  
**Revision Date** 29-Dec-2017  
**Revision Note** No Information available  

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

*End of Safety Data Sheet*