SAFETY DATA SHEET

1. Identification

Material name: FRECKLE ETCH; CPG GRADE
Issue date: 14-April-2014
Revision date: 25-September-2017
Supersedes date: 25-April-2017
Other means of identification
Spec ID: 10000000033
Synonyms: Metal etchants, aluminum etchants.
Recommended use: Etchant used in semiconductor manufacturing.
Recommended restrictions: None known.
Supplier information
FUJIFILM Electronic Materials U.S.A., Inc.
80 Circuit Drive
North Kingstown RI 02852
Transportation Emergency:
FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC: 1-800-424-9300
Medical Emergency (24HR):
FOR ANY HEALTH & MEDICAL EMERGENCY, 24 HOURS /7 DAYS CALL: 1-800-365-8951
Non-emergency Telephone:
FOR ALL SDS REQUESTS & QUESTIONS, CALL CUSTOMER SERVICE: 1-800-553-6546

2. Hazard(s) identification

Physical hazards
Corrosive to metals Category 1

Health hazards
Skin corrosion/irritation Category 1B
Serious eye damage/eye irritation Category 1

OSHA defined hazards
Not classified.

Label elements

Signal word: Danger
Hazard statement: May be corrosive to metals. Causes severe skin burns and eye damage.
Precautionary statement
Prevention: Keep only in original container. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe mist/vapors/spray. Use only outdoors or in a well-ventilated area. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.
Response: If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. 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. Immediately call a poison center/doctor. Absorb spillage to prevent material damage.
Storage: Store in corrosive resistant container with a resistant inner liner. Store locked up.
Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC): None known.
Supplemental information: None.
3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphoric acid</td>
<td></td>
<td>7664-38-2</td>
<td>65-85</td>
</tr>
<tr>
<td>Acetic acid</td>
<td></td>
<td>64-19-7</td>
<td>5-15</td>
</tr>
<tr>
<td>Nitric acid</td>
<td></td>
<td>7697-37-2</td>
<td>1-5</td>
</tr>
<tr>
<td>Fluoroboric acid</td>
<td></td>
<td>16872-11-0</td>
<td>1-3</td>
</tr>
</tbody>
</table>

Composition comments

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.
The product contains: Water.

4. First-aid measures

**Inhalation**
Immediately remove from further exposure. Get immediate medical assistance. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. Give supplemental oxygen, if available. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

**Skin contact**
Remove contaminated clothes and rinse skin thoroughly with water for at least 15 minutes. Get medical attention immediately. Chemical burns must be treated by a physician.

**Eye contact**
Flush thoroughly with water for at least 15 minutes. Get immediate medical assistance. If medical assistance is not immediately available, flush an additional 15 minutes. Make sure to remove any contact lenses from the eyes before rinsing.

**Ingestion**
Rinse mouth thoroughly with water and give large amounts of milk or water to people not unconscious. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Lay on the side. Obtain medical attention and take along this material safety data sheet.

Most important symptoms/effects, acute and delayed

**Inhalation**: May cause damage to mucous membranes in nose, throat, lungs and bronchial system. Be aware that symptoms of lung edema (shortness of breath) may develop up to 24 hours after exposure. **Eye contact**: Prolonged contact causes serious eye and tissue damage. **Skin contact**: May cause serious chemical burns to the skin. **Ingestion**: May cause burns in mucous membranes, throat, esophagus and stomach.

Indication of immediate medical attention and special treatment needed
Treat symptomatically.

5. Fire-fighting measures

**Suitable extinguishing media**
This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media**
None.

**Specific hazards arising from the chemical**
By heating and fire, toxic and corrosive vapors/gases may be formed.

**Special protective equipment and precautions for firefighters**
Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire fighting equipment/instructions**
Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**
Avoid any exposure. Wear suitable protective clothing. See Section 8 of the SDS for Personal Protective Equipment.

**Methods and materials for containment and cleaning up**
Absorb spillage with suitable absorbent material. For waste disposal, see Section 13 of the SDS.

**Environmental precautions**
Avoid discharge into drains, water courses or onto the ground unless authorized by permit.

7. Handling and storage

**Precautions for safe handling**
Mechanical ventilation or local exhaust ventilation is required. Avoid any exposure. Wear approved safety goggles. Wear protective gloves and appropriate clothing to prevent skin contact. Work practice should minimize contact. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities**
Store in closed original container in a dry place. Store in corrosive resistant container with a resistant inner liner. Store away from incompatible materials.
8. Exposure controls/personal protection

Occupational exposure limits

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

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetic acid (CAS 64-19-7)</td>
<td>PEL</td>
<td>25 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 ppm</td>
</tr>
<tr>
<td>Fluoroboric acid (CAS 16872-11-0)</td>
<td>PEL</td>
<td>2.5 mg/m³</td>
</tr>
<tr>
<td>Nitric acid (CAS 7697-37-2)</td>
<td>PEL</td>
<td>5 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 ppm</td>
</tr>
<tr>
<td>Phosphoric acid (CAS 7664-38-2)</td>
<td>PEL</td>
<td>1 mg/m³</td>
</tr>
</tbody>
</table>

US. OSHA Table Z-2 (29 CFR 1910.1000)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluoroboric acid (CAS 16872-11-0)</td>
<td>TWA</td>
<td>2.5 mg/m³</td>
<td>Dust.</td>
</tr>
</tbody>
</table>

US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetic acid (CAS 64-19-7)</td>
<td>STEL</td>
<td>15 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>10 ppm</td>
</tr>
<tr>
<td>Nitric acid (CAS 7697-37-2)</td>
<td>STEL</td>
<td>4 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>2 ppm</td>
</tr>
<tr>
<td>Phosphoric acid (CAS 7664-38-2)</td>
<td>STEL</td>
<td>3 mg/m³</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>1 mg/m³</td>
</tr>
</tbody>
</table>

US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetic acid (CAS 64-19-7)</td>
<td>STEL</td>
<td>37 mg/m³</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>15 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 ppm</td>
</tr>
<tr>
<td>Fluoroboric acid (CAS 16872-11-0)</td>
<td>TWA</td>
<td>2.5 mg/m³</td>
</tr>
<tr>
<td>Nitric acid (CAS 7697-37-2)</td>
<td>STEL</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>4 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 ppm</td>
</tr>
<tr>
<td>Phosphoric acid (CAS 7664-38-2)</td>
<td>STEL</td>
<td>3 mg/m³</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>1 mg/m³</td>
</tr>
</tbody>
</table>

Biological limit values

ACGIH Biological Exposure Indices

<table>
<thead>
<tr>
<th>Components</th>
<th>Value</th>
<th>Determinant</th>
<th>Specimen</th>
<th>Sampling Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluoroboric acid (CAS 16872-11-0)</td>
<td>3 mg/l</td>
<td>Fluoride</td>
<td>Urine</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>2 mg/l</td>
<td>Fluoride</td>
<td>Urine</td>
<td>*</td>
</tr>
</tbody>
</table>

* - For sampling details, please see the source document.

Appropriate engineering controls

Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear approved safety goggles.

Skin protection

Hand protection

Wear protective gloves impervious to the chemicals in use.

Other

Also wear appropriate clothing to prevent any possibility of skin contact. Suitable items can be recommended by the protective equipment supplier or by a qualified industrial hygienist.
Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 1910.134.

Thermal hazards

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

- Physical state: Liquid.
- Form: Liquid.
- Color: Colorless to Pale Yellow.
- Odor: Vinegar-like.
- Odor threshold: No data available.
- pH: < 2 (25 °C)
- Melting point/freezing point: No data available.
- Initial boiling point and boiling range: 235.4 - 244.4 °F (113 - 118 °C)
- Flash point: None.
- Evaporation rate: < 1 (Water = 1)
- Flammability (solid, gas): Not applicable.

Upper/lower flammability or explosive limits

- Flammability limit - lower (%): Not applicable.
- Flammability limit - upper (%): Not applicable.

Vapor pressure: No data available.
Vapor density: No data available.
Relative density: 1.5 - 1.6

Solubility(ies)

- Solubility (water): Completely miscible in water.
- Partition coefficient (n-octanol/water): No data available.

Auto-ignition temperature: Not applicable.
Decomposition temperature: Not applicable.
Viscosity: No data available.

Other information

- Density: 1.50 - 1.60 g/cc
- Molecular weight: Not applicable/mixture.
- Percent volatile: 60 - 80 %

10. Stability and reactivity

Chemical stability

Stable under normal temperature conditions.

Possibility of hazardous reactions

May be corrosive to metals. Reacts with most metals to form flammable hydrogen gas.

Conditions to avoid

Keep away from heat.

Incompatible materials


Hazardous decomposition products

11. Toxicological information

Information on likely routes of exposure

**Inhalation**
Causes respiratory tract burns. High concentrations: May cause lung damage.

**Skin contact**
Causes severe skin burns.

**Eye contact**
Causes serious eye damage.

**Ingestion**
Causes digestive tract burns.

Symptoms related to the physical, chemical and toxicological characteristics

**Inhalation**: May cause damage to mucous membranes in nose, throat, lungs and bronchial system. Be aware that symptoms of lung edema (shortness of breath) may develop up to 24 hours after exposure. **Eye contact**: Prolonged contact causes serious eye and tissue damage. **Skin contact**: May cause serious chemical burns to the skin. **Ingestion**: May cause burns in mucous membranes, throat, esophagus and stomach.

Information on toxicological effects

**Acute toxicity**

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetic acid (CAS 64-19-7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td>Rabbit</td>
<td>1060 mg/kg</td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mist</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rat</td>
<td>11.4 mg/l, 4 Hours</td>
</tr>
<tr>
<td><strong>Oral</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>3.31 g/kg</td>
</tr>
<tr>
<td>Nitric acid (CAS 7697-37-2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rat</td>
<td>130 mg/m3, 4 h</td>
</tr>
<tr>
<td>Phosphoric acid (CAS 7664-38-2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td>Rabbit</td>
<td>2740 mg/kg</td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rat</td>
<td>2600 mg/kg (Approximate)</td>
</tr>
</tbody>
</table>

**Skin corrosion/irritation**
Causes severe skin burns.

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

**Respiratory or skin sensitization**

**Respiratory sensitization**
Due to lack of data the classification is not possible.

**Skin sensitization**
Due to lack of data the classification is not possible.

**Germ cell mutagenicity**
Due to lack of data the classification is not possible.

**Carcinogenicity**
Due to lack of data the classification is not possible.

**IARC Monographs. Overall Evaluation of Carcinogenicity**
Not listed.

**NTP Report on Carcinogens**
Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)
Not regulated.

**Reproductive toxicity**
Due to lack of data the classification is not possible.

**Specific target organ toxicity - single exposure**
Due to lack of data the classification is not possible.

**Specific target organ toxicity - repeated exposure**
Due to lack of data the classification is not possible.

**Aspiration hazard**
Based on available data, the classification criteria are not met.

**Chronic effects**
May cause lung damage. Inhalation of vapor or mist may cause lung edema. Erosion of exposed teeth. Exposure to this product is associated with an increased risk of bronchitis.
Further information

Prolonged overexposure to fluorides may increase fluoride content of bones and teeth, and may result in fluorosis, with mottling of teeth (in children) and brittleness of bones.

12. Ecological information

Ecotoxicity

The product contains a substance which is harmful to aquatic organisms.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetic acid (CAS 64-19-7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>6000 mg/l, 24 h</td>
</tr>
<tr>
<td></td>
<td>LC50</td>
<td>100 - 330 mg/l, 48 h</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>446 mg/l, 8 hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td>88 mg/l, 96 hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td>251 mg/l, 96 hours</td>
</tr>
<tr>
<td>Nitric acid (CAS 7697-37-2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>LC50</td>
<td>180 mg/l, 48 hours</td>
</tr>
<tr>
<td>Phosphoric acid (CAS 7664-38-2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>&gt; 100 mg/l, 48 h</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>75.1 mg/l, 96 h</td>
</tr>
</tbody>
</table>

Persistence and degradability

The product contains inorganic compounds which are not biodegradable.

Bioaccumulative potential

Not relevant for inorganic substances.

Octanol/water partition coefficient log Kow

Acetic acid (CAS 64-19-7) -0.31

Mobility in soil

This product is miscible in water and may not disperse in soil.

Other adverse effects

The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.

13. Disposal considerations

Disposal instructions

Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

Hazardous waste code

D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel]

Waste from residues / unused products

Dispose of waste and residues in accordance with local authority requirements.

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number UN1760

UN proper shipping name Corrosive liquids, n.o.s. (Phosphoric acid, Acetic acid)

Transport hazard class(es)

Class 8
Subsidiary risk -
Label(s) 8
Packing group II

Environmental hazards

Marine pollutant No

Special precautions for user

Read safety instructions, SDS and emergency procedures before handling.

Special provisions B2, IB2, T11, TP2, TP27

Packaging exceptions 154

Packaging non bulk 202

Packaging bulk 242

IATA

UN number UN1760

UN proper shipping name Corrosive liquid, n.o.s. (Phosphoric acid, Acetic acid)

Transport hazard class(es)

Class 8
Subsidiary risk -
Label(s) Corrosive
Packing group II
Environmental hazards No
ERG Code 8L
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IMDG
UN number UN1760
UN proper shipping name CORROSIVE LIQUID, N.O.S. (Phosphoric acid, Acetic acid)
Transport hazard class(es)
Class 8
Subsidiary risk -
Packing group II
Environmental hazards Marine pollutant No
EmS F-A, S-B
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

This substance/mixture is not intended to be transported in bulk.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

US federal regulations
This product is hazardous according to OSHA 29 CFR 1910.1200.
TSCA Section 4(a) Final Test Rules & Testing Consent Orders: Not regulated.
TSCA Section 5(e) PMN-Substance Consent Orders: Not regulated.

Drug Enforcement Administration (DEA). List 1(i), Precursor Chemicals (21 CFR 1310.02(a) and 1310.04(f)(1))
Not listed.
TSCA Section 5(a)(2) Final Significant New Use Rules (SNURs)(40CFR 721, Subpt. E)
Not regulated.
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.
US EPCRA (SARA Title III) Section 302 - Extremely Hazardous Spill: Reportable quantity
Nitric acid (CAS 7697-37-2) 1000 LBS
US EPCRA (SARA Title III) Section 302 - Extremely Hazardous Substance: Threshold Planning Quantity
Nitric acid (CAS 7697-37-2) 1000 LBS
US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration
Nitric acid (CAS 7697-37-2) 1.0 %
US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance
Nitric acid (CAS 7697-37-2) Listed.

CERCLA (Superfund) reportable quantity (lbs) (40 CFR 302.4)
Phosphoric acid: 5000
Acetic acid: 5000
Nitric acid: 1000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance (40 CFR 355, Appendix A)
No
Section 311/312 (40 CFR 370)
Yes

Drug Enforcement Administration (DEA) (21 CFR 1308.11-15)
Not controlled

Inventory status

Country(s) or region Inventory name On inventory (yes/no)*
Australia Australian Inventory of Chemical Substances (AICS) Yes
Canada Domestic Substances List (DSL) Yes

1000000000033 FRECKLE ETCH; CPG GRADE
911738 SDS file: 10320_US_EN_V2.1
Country(s) or region | Inventory name | On inventory (yes/no)*
--- | --- | ---
Canada | Non-Domestic Substances List (NDSL) | No
Korea | Existing Chemicals List (ECL) | Yes
New Zealand | New Zealand Inventory | Yes
Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes
United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes

All ingredients are TSCA compliant.

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

State regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US. Massachusetts RTK - Substance List
- Acetic acid (CAS 64-19-7) Listed.
- Nitric acid (CAS 7697-37-2) Listed.
- Phosphoric acid (CAS 7664-38-2) Listed.

US. New Jersey Worker and Community Right-to-Know Act
- Acetic acid (CAS 64-19-7)
- Fluoroboric acid (CAS 16872-11-0)
- Nitric acid (CAS 7697-37-2)
- Phosphoric acid (CAS 7664-38-2)

US. Pennsylvania Worker and Community Right-to-Know Law
- Acetic acid (CAS 64-19-7)
- Fluoroboric acid (CAS 16872-11-0)
- Nitric acid (CAS 7697-37-2)
- Phosphoric acid (CAS 7664-38-2)

US. Rhode Island RTK
- Acetic acid (CAS 64-19-7) Listed.
- Fluoroboric acid (CAS 16872-11-0) Listed.
- Nitric acid (CAS 7697-37-2) Listed.
- Phosphoric acid (CAS 7664-38-2) Listed.

16. Other information, including date of preparation or last revision

Further information
- HMIS® is a registered trade and service mark of the ACA.
- G - Safety Glasses, Gloves, Vapor Respirator

HMIS® ratings
- Health: 3
- Flammability: 0
- Physical hazard: 0
- Personal protection: G

NFPA ratings
- Health: -
- Flammability: -
- Instability: -

Disclaimer
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This SDS contains revisions in the following section(s):
- 1, 11, 16.  1, 11, 12, 16.

SDS file
- 10320_US_EN_V2.1

Replaces file
- 10320_US_EN_V2.0