1. Identification

Material name: BUFFERED ETCH 10:1 W/OHS, SEMI GRADE
Issue date: 13-May-2019
Revision date: -
Supercedes date: -
Other means of identification:
Spec ID: 100000002018
Synonyms: Ammonium hydrogen fluoride solution
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: Not classified.
Health hazards:
- Acute toxicity, oral: Category 3
- Acute toxicity, dermal: Category 2
- Acute toxicity, inhalation: Category 3
- Skin corrosion/irritation: Category 1B
- Serious eye damage/eye irritation: Category 1

OSHA defined hazards: Not classified.

Label elements:

Signal word: Danger
Hazard statement: Toxic if swallowed. Fatal in contact with skin. Toxic if inhaled. Causes severe skin burns and eye damage.
Precautionary statement:
Prevention: Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. 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.
Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC): None known.
3. Composition/information on ingredients

Mixture

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium fluoride</td>
<td></td>
<td>12125-01-8</td>
<td>15 - 40</td>
</tr>
<tr>
<td>Hydrofluoric acid</td>
<td></td>
<td>7664-39-3</td>
<td>3 - &lt;7</td>
</tr>
</tbody>
</table>

Composition comments

Ammonium fluoride generates ammonium bifluoride (ammonium hydrogen difluoride, CAS no. 1341-49-7) by decomposition.

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. Be aware that symptoms of chemical pneumonia (shortness of breath) may occur several hours after exposure.

Skin contact

Remove contaminated clothes and rinse skin thoroughly with water for at least 15 minutes. Chemical burns must be treated by a physician. Get medical attention immediately. If 2.5% calcium gluconate is available, the water rinse time should be limited to 5 minutes and then the 2.5% calcium gluconate massaged into the burn site. It should be applied frequently and massaged continuously until pain and/or redness disappears or until more definitive medical care is given. Wear gloves when massaging calcium gluconate into the burn site.

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. A 1.0% calcium gluconate gel solution can be used to irrigate the eye using a syringe or a continuous irrigation device.

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. Get medical attention immediately.

5. Fire-fighting measures

Suitable extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media

None.

Specific hazards arising from the chemical

Hydrogen fluoride, a corrosive and toxic gas, and other potentially hazardous fluorine-containing compounds may be released upon combustion.

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. Avoid contact with spilled material. If leakage cannot be stopped, evacuate area. 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. Collect in containers and seal securely. For waste disposal, see Section 13 of the SDS.

Environmental precautions

Do not allow to enter drains, sewers or watercourses unless authorized by permit.
7. Handling and storage

Precautions for safe handling

Should be handled in closed systems, if possible. Avoid any exposure. Wear approved safety goggles. Wear protective gloves and appropriate clothing to prevent skin contact. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in closed original container in a dry place. Store above freezing. 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>Ammonium fluoride (CAS 12125-01-8)</td>
<td>PEL</td>
<td>2.5 mg/m³</td>
</tr>
<tr>
<td>Hydrofluoric acid (CAS 7664-39-3)</td>
<td>PEL</td>
<td>2.5 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>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium fluoride (CAS 12125-01-8)</td>
<td>TWA</td>
<td>2.5 mg/m³</td>
</tr>
<tr>
<td>Hydrofluoric acid (CAS 7664-39-3)</td>
<td>TWA</td>
<td>3 ppm</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>Ammonium fluoride (CAS 12125-01-8)</td>
<td>TWA</td>
<td>2.5 mg/m³</td>
</tr>
<tr>
<td>Hydrofluoric acid (CAS 7664-39-3)</td>
<td>Ceiling</td>
<td>2 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>0.5 ppm</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>Ammonium fluoride (CAS 12125-01-8)</td>
<td>TWA</td>
<td>2.5 mg/m³</td>
</tr>
<tr>
<td>Hydrofluoric acid (CAS 7664-39-3)</td>
<td>Ceiling</td>
<td>5 mg/m³</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>6 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>2.5 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 ppm</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>Ammonium fluoride (CAS 12125-01-8)</td>
<td>3 mg/l</td>
<td>Fluoride</td>
<td>Urine</td>
<td>*</td>
</tr>
<tr>
<td>Hydrofluoric acid (CAS 7664-39-3)</td>
<td>2 mg/l</td>
<td>Fluoride</td>
<td>Urine</td>
<td>*</td>
</tr>
<tr>
<td></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.

Exposure guidelines

US - California OELs: Skin designation

Hydrofluoric acid (CAS 7664-39-3) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

Hydrofluoric acid (CAS 7664-39-3) Can be absorbed through the skin.

Appropriate engineering controls

Should be handled in closed systems, if possible. If enclosed handling cannot be guaranteed, ventilation and protective clothing must be used. 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. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 1910.134. 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.
Thermal hazards
General hygiene considerations
Wear appropriate thermal protective clothing, when necessary.
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 Mild ammoniacal odor.
Odor threshold No data available.
pH 4.5 - 6.5 (25°C)
Melting point/freezing point 50 °F (10 °C)
Initial boiling point and boiling range 219.2 °F (104 °C)
Flash point Not applicable.
Evaporation rate < 1 (Water = 1)
Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits
Flammability limit - lower (%)
Flammability limit - upper (%)

Vapor pressure No data available.
Vapor density No data available.
Relative density 1.11-1.114
Solubility(ies)
Solubility (water) Completely miscible in water.
Partition coefficient (n-octanol/water) No data available.
Auto-ignition temperature None.
Decomposition temperature No data available.
Viscosity No data available.
Other information
Density 1.11-1.114 g/cc
Molecular weight Not applicable/mixture.
Percent volatile 60 - 72 %

10. Stability and reactivity
Reactivity Stable at normal conditions.
Chemical stability Stable under normal temperature conditions.
Possibility of hazardous reactions Will not occur.
Conditions to avoid Heat. Freezing.
Hazardous decomposition products

11. Toxicological information

Information on likely routes of exposure

**Inhalation**
Toxic if inhaled. Causes respiratory tract burns. Absorption of fluoride ion can cause hypocalcaemia, hypomagnesaemia, and hyperkalaemia, which can result in cardiac arrest.

**Skin contact**
Fatal in contact with skin. Causes severe skin burns. Hypocalcaemia should be considered a risk in all instances of inhalation or ingestion and whenever skin burns exceed 25 square inches (an area about the size of the palm).

**Eye contact**
Causes serious eye damage.

**Ingestion**
Toxic if swallowed. Causes digestive tract burns. Erosion of exposed teeth. Absorption of fluoride ion can cause hypocalcaemia, hypomagnesaemia, and hyperkalaemia, which can result in cardiac arrest.

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**
Fatal in contact with skin. Toxic if swallowed. Toxic if inhaled.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium fluoride (CAS 12125-01-8)</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>2000 mg/kg</td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>1000 - 2000 mg/kg</td>
</tr>
<tr>
<td>Hydrofluoric acid (CAS 7664-39-3)</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>Vapor</td>
<td>Mouse, Rat</td>
<td>1395 ppm, 60 Minutes</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Causes severe skin burns.</td>
<td></td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Causes serious eye damage.</td>
<td></td>
</tr>
<tr>
<td>Respiratory or skin sensitization</td>
<td>Due to lack of data the classification is not possible.</td>
<td></td>
</tr>
<tr>
<td>Respiratory sensitization</td>
<td>Due to lack of data the classification is not possible.</td>
<td></td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>Based on available data, the classification criteria are not met.</td>
<td></td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Based on available data, the classification criteria are not met.</td>
<td></td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Based on available data, the classification criteria are not met.</td>
<td></td>
</tr>
</tbody>
</table>

IARC Monographs. Overall Evaluation of Carcinogenicity

Ammonium fluoride (CAS 12125-01-8) 3 Not classifiable as to carcinogenicity to humans.

NTP Report on Carcinogens

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

IARC: 1 = Carcinogenic to Humans; There is sufficient evidence of carcinogenicity in humans. 2A = Possibly Carcinogenic to Humans; There is limited evidence of carcinogenicity in humans and less than sufficient evidence of carcinogenicity in experimental animals. 2B = Possibly Carcinogenic to Humans; There is limited evidence of carcinogenicity in humans and less than sufficient evidence of carcinogenicity in experimental animals. 3 = Not classifiable as to carcinogenicity to humans; The evidence of carcinogenicity is inadequate in humans and inadequate or limited in experimental animals. 4 = Probably not carcinogenic to humans; There is inadequate evidence of carcinogenicity in humans but evidence suggesting lack of carcinogenicity in experimental animals. Not listed = Not evaluated by IARC.

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

Inhalation of vapor or mist may cause lung edema. Symptoms may be delayed. May cause damage to the liver and kidneys. Fluorides: Can cause bone damage. 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. Absorbed fluoride can cause metabolic imbalances with irregular heartbeat, nausea, dizziness, vomiting and seizures. Risk of hypocalcemia with nervous problems (tetany) and cardiac arrhythmia.

12. Ecological information

Ecotoxicity

Harmful to aquatic life.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium fluoride (CAS 12125-01-8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Algae</td>
<td>EC50</td>
<td>Algae</td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Daphnia</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Fish</td>
</tr>
<tr>
<td>Hydrofluoric acid (CAS 7664-39-3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Oncorhynchus mykiss</td>
</tr>
</tbody>
</table>

Persistence and degradability

The product contains inorganic compounds which are not biodegradable.

Bioaccumulative potential

Not relevant for inorganic substances.

Mobility in soil

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

Other adverse effects

This product contains one or more substances identified as hazardous air pollutants (HAPs) per the US Federal Clean Air Act (see section 15).

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

Not regulated.

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 | UN2817 |
| UN proper shipping name | Ammonium hydrogendifluoride, solution |
| Transport hazard class(es) | 8 |
| Class | 6.1 |
| Subsidiary risk | 8, 6.1 |
| Label(s) | II |
| Packing group | No |
| Environmental hazards | Corrosive & Toxic |
| Marine pollutant | No |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |
| Special provisions | IB2, N34, T8, TP2, TP12, TP13 |
| Packaging exceptions | 154 |
| Packaging non bulk | 202 |
| Packaging bulk | 243 |

IATA

| UN number | UN2817 |
| UN proper shipping name | Ammonium hydrogendifluoride solution |
| Transport hazard class(es) | 8 |
| Class | 6.1 |
| Subsidiary risk | Corrosive & Toxic |
| Label(s) | II |
| Packing group | No |
| Environmental hazards | 8P |
| ERG Code | Read safety instructions, SDS and emergency procedures before handling. |

IMDG

| UN number | UN2817 |
Ammonium hydrogendifluoride solution

**UN proper shipping name**

8

**Transport hazard class(es)**

Class

6.1

Subsidiary risk

II

**Packing group**

No

**Environmental hazards**

Marine pollutant

F-A, S-B

Special precautions for user

Read safety instructions, SDS and emergency procedures before handling.

**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.

SARA 311/312 Hazard categories: see Section 2 of the SDS.

**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**

US EPCRA (SARA Title III) Section 302 - Extremely Hazardous Spill: Reportable quantity

Hydrofluoric acid (CAS 7664-39-3) 100 LBS

US EPCRA (SARA Title III) Section 302 - Extremely Hazardous Substance: Threshold Planning Quantity

Hydrofluoric acid (CAS 7664-39-3) 100 LBS

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

Ammonium fluoride (CAS 12125-01-8) 1.0 %

Hydrofluoric acid (CAS 7664-39-3) 1.0 %

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

Ammonium fluoride (CAS 12125-01-8) Listed.

Hydrofluoric acid (CAS 7664-39-3) Listed.

**CERCLA (Superfund) reportable quantity (lbs) (40 CFR 302.4)**

Ammonium fluoride: 100

Hydrofluoric acid: 100

**Drug Enforcement Administration (DEA) (21 CFR 1308.11-15)**

Not controlled

**Inventory status**

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

All ingredients are TSCA compliant.

*A “Yes” indicates this product complies with the inventory requirements administered by the governing country(s)
US. Pennsylvania Worker and Community Right-to-Know Law
Ammonium fluoride (CAS 12125-01-8)
Hydrofluoric acid (CAS 7664-39-3)

US. Rhode Island RTK
Ammonium fluoride (CAS 12125-01-8) Listed.
Hydrofluoric acid (CAS 7664-39-3) Listed.

California Proposition 65
US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))
Hydrofluoric acid (CAS 7664-39-3)

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: -

List of abbreviations
LD50: Lethal Dose, 50%

Disclaimer
THIS SAFETY DATA SHEET (SDS) HAS BEEN PREPARED IN COMPLIANCE WITH THE FEDERAL OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200. THE INFORMATION IN THIS SDS SHOULD BE PROVIDED TO ALL WHO WILL USE, HANDLE, STORE, TRANSPORT, OR OTHERWISE BE EXPOSED TO THIS PRODUCT. THIS INFORMATION HAS BEEN PREPARED FOR THE GUIDANCE OF PLANT ENGINEERING, OPERATIONS AND MANAGEMENT AND FOR PERSONS WORKING WITH OR HANDLING THIS PRODUCT. FUJIFILM ELECTRONIC MATERIALS BELIEVES THIS INFORMATION TO BE RELIABLE AND UP TO DATE AS OF THE DATE OF PUBLICATION BUT, MAKES NO WARRANTY THAT IT IS. ADDITIONALLY, IF THIS SDS IS MORE THAN THREE YEARS OLD, YOU SHOULD CONTACT FUJIFILM ELECTRONIC MATERIALS AT THE PHONE NUMBER 1-800-553-6546 (CUSTOMER SERVICE) TO MAKE CERTAIN THAT THIS DOCUMENT IS CURRENT.

This SDS contains revisions in the following section(s):
1, 10, 11, 12, 14, 15, 16.

SDS file
10050_US_EN_V2.0

Replaces file
10050_US_EN_V1.0