

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) and Canadian  
Workplace Hazardous Material Information System (WHMIS 2015)

Revision date 01-Jul-2024

Revision Number 1

## 1. Identification

### Product identifier

|  |  |
|--|--|
| <b>Product Catalog Number:</b><br>40-4110-XX | <b>Product Description:</b><br>Tetrahydrofuran/ Pyridine/ Acetic Anhydride |
|--|--|

|                                      |                                  |
|--------------------------------------|----------------------------------|
| <b>Product Code(s)</b><br>40-4110-XX | <b>Product Name</b><br>Cap Mix A |
|--------------------------------------|----------------------------------|

### Other means of identification

**UN number or ID number** UN2924

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended use** For research use only

**Restrictions on use** Not for human diagnostic use

### Details of the supplier of the safety data sheet

#### Manufacturer Address

Glen Research LLC  
22825 Davis Drive  
Sterling, VA 20164 USA

#### Emergency telephone number

**Company Phone Number** 1-703-437-6191

**Emergency Telephone** CHEMTREC Customer Number (CCN): 234802 Glen Research Corporation  
US: 1-800-424-9300 or Local: +1-703-527-3887  
EMEA: +44 20 3885 0382  
APAC: +65 3163 8374

**Website** www.glenresearch.com

**E-mail address** support@glenresearch.com

## 2. Hazard(s) identification

### Classification

|                                      |             |
|--------------------------------------|-------------|
| Acute toxicity - Oral                | Category 4  |
| Acute toxicity - Dermal              | Category 4  |
| Acute toxicity - Inhalation (Vapors) | Category 3  |
| Serious eye damage/eye irritation    | Category 2A |
| Carcinogenicity                      | Category 2  |
| Flammable liquids                    | Category 2  |

**Appearance** Clear Liquid

**Physical state** Liquid

**Odor** Pungent Sweet Ether-like odor

### Label elements

#### **Signal word**

Danger

#### **Hazard statements**

Harmful if swallowed

Harmful in contact with skin

Toxic if inhaled

Causes serious eye irritation

Suspected of causing cancer

Highly flammable liquid and vapor



#### **Precautionary Statements - Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Wear protective gloves, protective clothing, eye protection and face protection

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Avoid breathing dust, fume, gas, mist, vapors and spray

Use only outdoors or in a well-ventilated area

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

Keep container tightly closed

Ground and bond container and receiving equipment

Use explosion-proof electrical, ventilating, lighting and .? equipment

Use only non-sparking tools

Take action to prevent static discharges

Keep cool

#### **Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention

##### **Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice and attention

##### **Skin**

Call a POISON CENTER or doctor if you feel unwell

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water and then shower

Wash contaminated clothing before reuse

##### **Inhalation**

IF INHALED: Remove person to fresh air and keep comfortable for breathing

Call a POISON CENTER or doctor

##### **Ingestion**

IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell

Rinse mouth

##### **Fire**

In case of fire: Use CO<sub>2</sub>, dry chemical, or foam to extinguish

#### **Precautionary Statements - Storage**

Store locked up

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

**Precautionary Statements - Disposal**

Dispose of contents and container to an approved waste disposal plant

**Other information**

No information available.

**Unknown acute toxicity**

10 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

**3. Composition/information on ingredients****Substance**

Not applicable.

**Mixture**

| Chemical name    | CAS No.  | Weight-% | Hazardous Material Information Review Act registry number (HMIRA registry #) | Date HMIRA filed and date exemption granted (if applicable) |
|------------------|----------|----------|--|---|
| Tetrahydrofuran  | 109-99-9 | 74-86    | -  | -   |
| Pyridine         | 110-86-1 | 7-13     | -  | -   |
| Acetic Anhydride | 108-24-7 | 7-13     | -  | -   |

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

**4. First-aid measures****Description of first aid measures****General advice**

Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention. Immediate medical attention is required.

**Inhalation**

Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. Immediate medical attention is required. 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. If breathing is difficult, (trained personnel should) give oxygen.

**Eye contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

**Skin contact**

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.

**Ingestion**

Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Not an expected route of exposure. IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician. Call a physician or poison control center immediately.

**Self-protection of the first aider**

Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. 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. Do not breathe vapor or mist.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** Metabolism may release cyanide, which may result in headache, dizziness, weakness, collapse, unconsciousness, and possible death. May cause redness and tearing of the eyes. Burning sensation. Coughing and/ or wheezing. Difficulty in breathing.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

**5. Fire-fighting measures**

**Suitable Extinguishing Media** Dry chemical. Carbon dioxide (CO<sub>2</sub>). Water spray. Alcohol resistant foam.

**Large Fire** CAUTION: Use of water spray when fighting fire may be inefficient.

**Unsuitable extinguishing media** Do not scatter spilled material with high pressure water streams.

**Specific hazards arising from the chemical** Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

**Hazardous combustion products** Carbon oxides. Nitrogen oxides (NO<sub>x</sub>).

**Explosion data**

|   |       |
|---|-------|
| <b>Sensitivity to mechanical impact</b> | None. |
| <b>Sensitivity to static discharge</b>  | Yes.  |

**Special protective equipment and precautions for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

**6. Accidental release measures****Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Do not breathe vapor or mist.

**Other information** Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

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

**Methods for containment** Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

**Methods for cleaning up** Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

**7. Handling and storage**

**Precautions for safe handling****Advice on safe handling**

Use personal protection equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Do not breathe vapor or mist. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Take off contaminated clothing and wash before reuse.

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

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Keep out of the reach of children. Store locked up.

**Packaging materials**

Glass.

**8. Exposure controls/personal protection****Control parameters****Exposure Limits**

| Chemical name                | ACGIH TLV   | OSHA PEL   | NIOSH  |   |
|------------------------------|---|--|--|---|
| Tetrahydrofuran<br>109-99-9  | STEL: 100 ppm<br>TWA: 50 ppm<br>S*  | TWA: 200 ppm<br>TWA: 590 mg/m <sup>3</sup><br>(vacated) TWA: 200 ppm<br>(vacated) TWA: 590 mg/m <sup>3</sup><br>(vacated) STEL: 250 ppm<br>(vacated) STEL: 735 mg/m <sup>3</sup> | IDLH: 2000 ppm<br>TWA: 200 ppm<br>TWA: 590 mg/m <sup>3</sup><br>STEL: 250 ppm<br>STEL: 735 mg/m <sup>3</sup> |   |
| Pyridine<br>110-86-1         | TWA: 1 ppm  | TWA: 5 ppm<br>TWA: 15 mg/m <sup>3</sup><br>(vacated) TWA: 5 ppm<br>(vacated) TWA: 15 mg/m <sup>3</sup>   | IDLH: 1000 ppm<br>TWA: 5 ppm<br>TWA: 15 mg/m <sup>3</sup>  |   |
| Acetic Anhydride<br>108-24-7 | STEL: 3 ppm<br>TWA: 1 ppm   | TWA: 5 ppm<br>TWA: 20 mg/m <sup>3</sup><br>(vacated) Ceiling: 5 ppm<br>(vacated) Ceiling: 20 mg/m <sup>3</sup>   | IDLH: 200 ppm<br>Ceiling: 5 ppm<br>Ceiling: 20 mg/m <sup>3</sup>   |   |
| Chemical name                | Alberta   | British Columbia   | Ontario  | Quebec                                  |
| Tetrahydrofuran<br>109-99-9  | TWA: 50 ppm<br>TWA: 147 mg/m <sup>3</sup><br>STEL: 100 ppm<br>STEL: 295 mg/m <sup>3</sup><br>Skin | TWA: 50 ppm<br>STEL: 100 ppm<br>Skin   | TWA: 50 ppm<br>STEL: 100 ppm<br>Skin   | TWA: 50 ppm<br>STEL: 100 ppm<br>Skin    |
| Pyridine<br>110-86-1         | TWA: 1 ppm<br>TWA: 3.2 mg/m <sup>3</sup>  | TWA: 1 ppm   | TWA: 1 ppm   | TWA: 5 ppm<br>TWA: 16 mg/m <sup>3</sup> |
| Acetic Anhydride<br>108-24-7 | Ceiling: 5 ppm<br>Ceiling: 21 mg/m <sup>3</sup>   | TWA: 1 ppm<br>STEL: 3 ppm  | TWA: 1 ppm<br>STEL: 3 ppm  | TWA: 1 ppm<br>STEL: 3 ppm               |

**Biological occupational exposure limits**

| Chemical name   | ACGIH   |
|-----------------|---|
| Tetrahydrofuran | 2 mg/L - urine (Tetrahydrofuran) - end of shift |

109-99-9

**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.

**Hand protection**                              Contact glove manufacturer for recommendations. Wear suitable gloves. Impervious gloves.

**Skin and body protection**                      Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots.

**Respiratory protection**                      No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**Environmental exposure controls**              Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

**General hygiene considerations**              Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Handle in accordance with good industrial hygiene and safety practice. Take off contaminated clothing and wash before reuse. Do not breathe vapor or mist. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

**9. Physical and chemical properties****Information on basic physical and chemical properties**

**Physical state**                                      Liquid  
**Appearance**                                      Clear Liquid  
**Color**    Clear  
**Odor**    Pungent Sweet Ether-like odor  
**Odor threshold**                                    No information available

| <u>Property</u>                                | <u>Values</u>      | <u>Remarks • Method</u> |
|--|--------------------|-------------------------|
| <b>pH</b>                                      | No data available  | None known              |
| <b>Melting point / freezing point</b>          | No data available  | None known              |
| <b>Initial boiling point and boiling range</b> | No data available  | None known              |
| <b>Flash point</b>                             | No data available  | None known              |
| <b>Evaporation rate</b>                        | No data available  | None known              |
| <b>Flammability</b>                            | No data available  | None known              |
| <b>Flammability Limit in Air</b>               |                    | None known              |
| <b>Upper flammability or explosive limits</b>  | No data available  |                         |
| <b>Lower flammability or explosive limits</b>  | No data available  |                         |
| <b>Vapor pressure</b>                          | No data available  | None known              |
| <b>Relative vapor density</b>                  | No data available  | None known              |
| <b>Relative density</b>                        | 0.90g/mL           | None known              |
| <b>Water solubility</b>                        | Completely soluble | None known              |
| <b>Solubility in other solvents</b>            | No data available  | None known              |
| <b>Partition coefficient</b>                   | No data available  | None known              |

|                                  |                   |            |
|----------------------------------|-------------------|------------|
| <b>Autoignition temperature</b>  | No data available | None known |
| <b>Decomposition temperature</b> | No data available | None known |
| <b>Kinematic viscosity</b>       | No data available | None known |
| <b>Dynamic viscosity</b>         | No data available | None known |

**Other information**

|                             |                          |
|-----------------------------|--------------------------|
| <b>Explosive properties</b> | No information available |
| <b>Oxidizing properties</b> | No information available |
| <b>Softening point</b>      | No information available |
| <b>Molecular weight</b>     | No information available |
| <b>VOC content</b>          | No information available |
| <b>Liquid Density</b>       | No information available |
| <b>Bulk density</b>         | No information available |

**10. Stability and reactivity**

|   |   |
|---|---|
| <b>Reactivity</b>                         | No information available                                |
| <b>Chemical stability</b>                 | Stable under normal conditions.                         |
| <b>Possibility of hazardous reactions</b> | None under normal processing.                           |
| <b>Hazardous polymerization</b>           | Hazardous polymerization does not occur.                |
| <b>Conditions to avoid</b>                | Heat, flames and sparks. Excessive heat.                |
| <b>Incompatible materials</b>             | None known based on information supplied.               |
| <b>Hazardous decomposition products</b>   | Hydrogen cyanide. Nitrogen oxides (NOx). Carbon oxides. |

**11. Toxicological information****Information on likely routes of exposure****Product Information**

|                     |   |
|---------------------|---|
| <b>Inhalation</b>   | Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract. Toxic by inhalation. (based on components).  |
| <b>Eye contact</b>  | Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.   |
| <b>Skin contact</b> | Specific test data for the substance or mixture is not available. May cause irritation. Prolonged contact may cause redness and irritation. May be absorbed through the skin in harmful amounts. Harmful in contact with skin. (based on components). |
| <b>Ingestion</b>    | Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if swallowed. (based on components).  |

**Symptoms related to the physical, chemical and toxicological characteristics**

|                 |  |
|-----------------|--|
| <b>Symptoms</b> | Metabolism may release cyanide, which may result in headache, dizziness, weakness, collapse, unconsciousness, and possible death. May cause redness and tearing of the eyes. Coughing and/ or wheezing. Difficulty in breathing. |
|-----------------|--|

**Acute toxicity**

|                                       |                          |
|---------------------------------------|--------------------------|
| <b>Numerical measures of toxicity</b> | No information available |
|---------------------------------------|--------------------------|

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

|                               |                |
|-------------------------------|----------------|
| ATEmix (oral)                 | 658.20 mg/kg   |
| ATEmix (dermal)               | 1,151.80 mg/kg |
| ATEmix (inhalation-gas)       | 99,999.00 ppm  |
| ATEmix (inhalation-dust/mist) | 99,999.00 mg/l |
| ATEmix (inhalation-vapor)     | 6.69 mg/l      |

#### Unknown acute toxicity

10 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

#### Component Information

| Chemical name                | Oral LD50            | Dermal LD50                  | Inhalation LC50            |
|------------------------------|----------------------|------------------------------|----------------------------|
| Tetrahydrofuran<br>109-99-9  | = 1650 mg/kg ( Rat ) | > 2000 mg/kg ( Rat )         | > 14.7 mg/L ( Rat ) 4 h    |
| Pyridine<br>110-86-1         | = 866 mg/kg ( Rat )  | 1000 - 2000 mg/kg ( Rabbit ) | = 12.898 mg/L ( Rat ) 4 h  |
| Acetic Anhydride<br>108-24-7 | = 630 mg/kg ( Rat )  | = 4000 mg/kg ( Rabbit )      | 4.2 - 8.5 mg/L ( Rat ) 4 h |

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Skin corrosion/irritation** May cause skin irritation.

**Serious eye damage/eye irritation** Classification based on data available for ingredients. Causes serious eye irritation.

**Respiratory or skin sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** Contains a known or suspected carcinogen. Classification based on data available for ingredients. Suspected of causing cancer.

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

| Chemical name               | ACGIH | IARC     | NTP | OSHA |
|-----------------------------|-------|----------|-----|------|
| Tetrahydrofuran<br>109-99-9 | A3    | Group 2B | -   | X    |
| Pyridine<br>110-86-1        | A3    | Group 2B | -   | X    |

#### Legend

**ACGIH (American Conference of Governmental Industrial Hygienists)**

A3 - Animal Carcinogen

**IARC (International Agency for Research on Cancer)**

Group 2B - Possibly Carcinogenic to Humans

**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.

**Target organ effects** No information available.



**Aspiration hazard** No information available.

## 12. Ecological information

### Ecotoxicity

| Chemical name               | Algae/aquatic plants | Fish   | Toxicity to microorganisms | Crustacea |
|-----------------------------|----------------------|--|----------------------------|-----------|
| Tetrahydrofuran<br>109-99-9 | -                    | LC50: 1970 - 2360mg/L<br>(96h, Pimephales promelas)<br>LC50: 2700 - 3600mg/L<br>(96h, Pimephales promelas)                               | -                          | -         |
| Pyridine<br>110-86-1        | -                    | LC50: 63.4 - 73.6mg/L<br>(96h, Pimephales promelas)<br>LC50: =26mg/L (96h, Cyprinus carpio)<br>LC50: =4.6mg/L (96h, Oncorhynchus mykiss) | -                          | -         |

**Persistence and degradability** Not Likely.

**Bioaccumulation** Not likely to bioaccumulate.

**Bioconcentration factor (BCF)** log Pow <= 4

### Component Information

| Chemical name                | Partition coefficient |
|------------------------------|-----------------------|
| Tetrahydrofuran<br>109-99-9  | 0.45                  |
| Pyridine<br>110-86-1         | 0.65                  |
| Acetic Anhydride<br>108-24-7 | -0.27                 |

**Mobility in soil** Not expected to adsorb on soil.

**Mobility** Soluble in water.

**Other adverse effects** No information available.

## 13. Disposal considerations

### Disposal methods

**Waste from residues/unused products** Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

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

## 14. Transport information

|                            |                                    |
|----------------------------|------------------------------------|
| <b>DOT</b>                 | Regulated                          |
| UN number or ID number     | UN2924                             |
| Proper shipping name       | Flammable liquid, corrosive, n.o.s |
| Transport hazard class(es) | Class 3, (8)                       |
| Packing group              | Packing Group II                   |
| Reportable quantity - lbs  | 1000 lbs                           |

|                            |                                     |
|----------------------------|-------------------------------------|
| <b>IATA</b>                | Regulated                           |
| UN number or ID number     | UN2924                              |
| UN proper shipping name    | Flammable liquid, corrosive, n.o.s. |
| Transport hazard class(es) | Class 3, (8)                        |
| Packing group              | Packing Group II                    |

|                            |                                     |
|----------------------------|-------------------------------------|
| <b>IMDG</b>                | Regulated                           |
| UN number or ID number     | UN2924                              |
| UN proper shipping name    | Flammable liquid, corrosive, n.o.s. |
| Transport hazard class(es) | Class 3, (8)                        |
| Packing group              | Packing Group II                    |
| EmS-No.                    | F-E, S-C                            |

## 15. Regulatory information

### Safety, health and environmental regulations/legislation specific for the substance or mixture

#### International Regulations

**The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

#### International Inventories

**TSCA** All of the components of this product are listed in the TSCA Inventory or exempt.

**DSL/NDSL** Listed or exempt.

**EINECS/ELINCS** Listed or exempt.

**ENCS** Listed or exempt.

**IECSC** Listed or exempt.

**KECI** Listed or exempt.

**PICCS** Listed or exempt.

**AIIC** Listed or exempt.

#### **Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AIIC** - Australian Inventory of Industrial Chemicals

**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.

| Chemical name       | SARA 313 - Threshold Values % |
|---------------------|-------------------------------|
| Pyridine - 110-86-1 | 1.0                           |

**SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

**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).

| Chemical name                | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|------------------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Acetic Anhydride<br>108-24-7 | 5000 lb                     | -                      | -                         | X                          |

**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).

| Chemical name                | Hazardous Substances RQs | Extremely Hazardous Substances RQs | Reportable Quantity (RQ)                   |
|------------------------------|--------------------------|------------------------------------|--|
| Tetrahydrofuran<br>109-99-9  | 1000 lb                  | -                                  | RQ 1000 lb final RQ<br>RQ 454 kg final RQ  |
| Pyridine<br>110-86-1         | 1000 lb                  | -                                  | RQ 1000 lb final RQ<br>RQ 454 kg final RQ  |
| Acetic Anhydride<br>108-24-7 | 5000 lb                  | -                                  | RQ 5000 lb final RQ<br>RQ 2270 kg final RQ |

**US State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals:

| Chemical name              | California Proposition 65 |
|----------------------------|---------------------------|
| Tetrahydrofuran - 109-99-9 | Carcinogen                |
| Pyridine - 110-86-1        | Carcinogen                |

**U.S. State Right-to-Know Regulations**

| Chemical name                | New Jersey | Massachusetts | Pennsylvania |
|------------------------------|------------|---------------|--------------|
| Tetrahydrofuran<br>109-99-9  | X          | X             | X            |
| Pyridine<br>110-86-1         | X          | X             | X            |
| Acetic Anhydride<br>108-24-7 | X          | X             | X            |

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

**16. Other information**

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|             |                           |                       |                           |                              |
|-------------|---------------------------|-----------------------|---------------------------|------------------------------|
| <b>NFPA</b> | <b>Health hazards</b> 3   | <b>Flammability</b> 3 | <b>Instability</b> 0      | <b>Special hazards</b> -     |
| <b>HMIS</b> | <b>Health hazards</b> 3 * | <b>Flammability</b> 3 | <b>Physical hazards</b> 0 | <b>Personal protection</b> X |

**Key or legend to abbreviations and acronyms used in the safety data sheet**Legend Section 8: Exposure controls/personal protection

|         |                             |      |                                  |
|---------|-----------------------------|------|----------------------------------|
| TWA     | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value         | Sk*  | Skin designation                 |

**Revision date** 01-Jul-2024**Revision Note** No information available**Disclaimer**

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**End of Safety Data Sheet**