

Issuing Date 28-May-2026

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Revision Number 2

**Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****Product identifier****Product Name** CGHF10**Other means of identification****Product Description** 10000 µg/mL: Hafnium  
**Recommended use of the chemical and restrictions on use****Recommended Use** Laboratory chemicals**Restriction on Use** No information available**Details of the supplier of the safety data sheet**

|         |                                                                                                                                          |                |                            |
|---------|------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------------------|
| Company | Inorganic Ventures<br>300 Technology Drive<br>Christiansburg, VA 24073<br>Phone: 1(800) 669-6799<br>Email:<br>info@inorganicventures.com | E-mail Address | info@inorganicventures.com |
|---------|------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------------------|

**Emergency telephone number****Emergency Telephone** +34.678750066  
Chemtrec 1-800-424-9300 (US)**Section 2: HAZARDS IDENTIFICATION****Classification**

|                                           |                           |
|-------------------------------------------|---------------------------|
| Acute toxicity - Oral                     | Category 4                |
| Acute toxicity - Dermal                   | Category 3                |
| Acute toxicity - Inhalation (Vapors)      | Category 4                |
| Acute toxicity - Inhalation (Dusts/Mists) | Category 4                |
| Skin corrosion/irritation                 | Category 1 Sub-category B |
| Serious eye damage/eye irritation         | Category 1                |
| Carcinogenicity                           | Category 1A               |

**Label Elements****Danger****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  
Wear protective gloves/protective clothing/eye protection/face protection  
Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Use only outdoors or in a well-ventilated area  
Do not breathe dust/fume/gas/mist/vapors/spray

**Precautionary Statements - Response**

Immediately call a POISON CENTER or doctor

**Eyes**

Immediately call a POISON CENTER or doctor

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

**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 [or 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 if you feel unwell

Immediately call a POISON CENTER or doctor

**Ingestion**

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

Rinse mouth

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

Do NOT induce vomiting

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other Information**

Toxic to aquatic life

**Unknown acute toxicity**

8.1345 % of the mixture consists of ingredient(s) of unknown toxicity

8.1345 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

8.1345 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

8.1345 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

1.1345 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

1.1345 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

### Section 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) |
|-------------------|-----------|----------|------------------------------------------------------------------------------|-------------------------------------------------------------|
| Nitric acid       | 7697-37-2 | 7        | -                                                                            |                                                             |
| Hydrogen fluoride | 7664-39-3 | 1.65     | -                                                                            |                                                             |

### Section 4: FIRST AID MEASURES

#### Description of first aid measures

|                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>General advice</b>                     | Show this safety data sheet to the doctor in attendance. Immediate medical attention is required. IF exposed or concerned: Get medical advice/attention.                                                                                                                                                                                                                                                                               |
| <b>Inhalation</b>                         | Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. 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. Delayed pulmonary edema may occur. |
| <b>Eye contact</b>                        | Get immediate medical advice/attention. 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.                                                                                                                                                                       |
| <b>Skin contact</b>                       | Get immediate medical advice/attention. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.                                                                                                                                                                                                                                                                                          |
| <b>Ingestion</b>                          | Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention.                                                                                                                                                                                                                                                    |
| <b>Self-protection of the first aider</b> | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Wear personal protective clothing (see section 8). Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Avoid contact with skin, eyes or clothing.                                                                                                       |

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

|                 |                    |
|-----------------|--------------------|
| <b>Symptoms</b> | Burning sensation. |
|-----------------|--------------------|

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

|                           |                                                                                                                                                                                                                                                           |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Note to physicians</b> | 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.

## Section 5: FIRE FIGHTING MEASURES

|                                                       |                                                                                                                                        |
|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| <b>Suitable Extinguishing Media</b>                   | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.                                |
| <b>Unsuitable extinguishing media</b>                 | CAUTION: Use of water spray when fighting fire may be inefficient.                                                                     |
| <b>Specific hazards arising from the chemical</b>     | The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors. |
| <b>Explosion data</b>                                 |                                                                                                                                        |
| <b>Sensitivity to mechanical impact</b>               | None.                                                                                                                                  |
| <b>Sensitivity to static discharge</b>                | None.                                                                                                                                  |
| <b>Special protective equipment for fire-fighters</b> | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.     |

## Section 6: ACCIDENTAL RELEASE MEASURES

|                                                                                   |                                                                                                                                                                                                                                         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b><u>Personal precautions, protective equipment and emergency procedures</u></b> |                                                                                                                                                                                                                                         |
| <b>Personal precautions</b>                                                       | Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Attention! Corrosive material. Keep people away from and upwind of spill/leak. |
| <b>Other information</b>                                                          | Refer to protective measures listed in Sections 7 and 8.                                                                                                                                                                                |
| <b><u>Methods and material for containment and cleaning up</u></b>                |                                                                                                                                                                                                                                         |
| <b>Methods for containment</b>                                                    | Prevent further leakage or spillage if safe to do so.                                                                                                                                                                                   |
| <b>Methods for cleaning up</b>                                                    | Pick up and transfer to properly labeled containers.                                                                                                                                                                                    |

## Section 7: HANDLING AND STORAGE

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b><u>Precautions for safe handling</u></b>                                |                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Advice on safe handling</b>                                             | Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Take off contaminated clothing and wash before reuse. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. |
| <b><u>Conditions for safe storage, including any incompatibilities</u></b> |                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Storage Conditions</b>                                                  | Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store locked up. Protect from moisture. Store away from other materials.                                                                                                                                                                                                   |

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control Parameters****Exposure Limits**

| Chemical name                  | Alberta                                                                                                                      | British Columbia                             | Ontario TWAEV                                                    | Quebec                                                                                |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Nitric acid<br>7697-37-2       | TWA: 2 ppm<br>TWA: 5.2 mg/m <sup>3</sup><br>STEL: 4 ppm<br>STEL: 10 mg/m <sup>3</sup>                                        | TWA: 2 ppm<br>STEL: 4 ppm                    | TWA: 2 ppm<br>STEL: 4 ppm                                        | TWA: 2 ppm<br>TWA: 5.2 mg/m <sup>3</sup><br>STEL: 4 ppm<br>STEL: 10 mg/m <sup>3</sup> |
| Hydrogen fluoride<br>7664-39-3 | Ceiling: 2 ppm<br>Ceiling: 1.6 mg/m <sup>3</sup><br>TWA: 0.5 ppm<br>TWA: 0.4 mg/m <sup>3</sup><br>TWA: 2.5 mg/m <sup>3</sup> | TWA: 2.5 mg/m <sup>3</sup><br>Ceiling: 2 ppm | TWA: 0.5 ppm<br>TWA: 2.5 mg/m <sup>3</sup><br>CEV: 2 ppm<br>Skin | TWA: 0.5 ppm<br>TWA: 2.5 mg/m <sup>3</sup><br>STEL: 3 ppm                             |

**Appropriate engineering controls**

**Engineering controls**                      Showers  
                                                      Eyewash stations  
                                                      Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**                      Face protection shield.

**Hand protection**                              Wear suitable gloves. Impervious gloves.

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

**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.

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

**Section 9: PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

**Physical state**                                      Liquid  
**Appearance**                                      clear /colorless  
**Odor**                                                  No information available  
**Odor threshold**                                      No information available

| <u>Property</u>                               | <u>Values</u>     |
|-----------------------------------------------|-------------------|
| <b>Melting point / freezing point</b>         | No data available |
| <b>Flash point</b>                            | No data available |
| <b>Flammability</b>                           | No data available |
| <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 |

|                                                |                   |
|------------------------------------------------|-------------------|
| <b>pH</b>                                      | No data available |
| <b>Initial boiling point and boiling range</b> | 100 °C / 212 °F   |
| <b>Evaporation rate</b>                        | No data available |
| <b>Flammability Limit in Air</b>               |                   |
| <b>Relative vapor density</b>                  | No data available |

|                                               |                           |                                                                |                   |
|-----------------------------------------------|---------------------------|----------------------------------------------------------------|-------------------|
| <b>Relative Density</b><br>None known         | No information available  | <b>Water solubility</b><br><b>Solubility in other solvents</b> | No data available |
| <b>Partition coefficient: n-octanol/water</b> | No data available         | <b>Autoignition temperature</b>                                | No data available |
| <b>Hyphen</b>                                 | No data available         | <b>Kinematic viscosity</b>                                     | No data available |
| <b>Dynamic viscosity</b>                      | No data available         | None known                                                     |                   |
| <b>Other information</b>                      |                           |                                                                |                   |
| <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. |                                                                |                   |

## Section 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>           | None under normal processing.                       |
| <b>Conditions to Avoid</b>                | Exposure to air or moisture over prolonged periods. |
| <b>Incompatible materials</b>             | acids. bases. Oxidizing agent.                      |
| <b>Hazardous decomposition products</b>   | Nitrogen oxides (NOx). Hydrogen fluoride.           |

## Section 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. Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. |
| <b>Eye contact</b>  | Specific test data for the substance or mixture is not available. Causes burns. (based on components). Corrosive to the eyes and may cause severe damage including blindness. Causes serious eye damage. May cause irreversible damage to eyes.                                                                                                                                                                                                                                         |
| <b>Skin contact</b> | Specific test data for the substance or mixture is not available. May cause irritation. Toxic in contact with skin. (based on components).                                                                                                                                                                                                                                                                                                                                              |
| <b>Ingestion</b>    | Specific test data for the substance or mixture is not available. Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung                                  |

damage if swallowed. May be fatal if swallowed and enters airways.

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

**Symptoms** redness. Burning. May cause blindness. Coughing and/ or wheezing.

#### Acute toxicity

#### Numerical measures of toxicity

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

|                               |                |
|-------------------------------|----------------|
| ATEmix (oral)                 | 303.60 mg/kg   |
| ATEmix (dermal)               | 303.00 mg/kg   |
| ATEmix (inhalation-gas)       | 29,265.90 mg/l |
| ATEmix (inhalation-dust/mist) | 2.13 mg/l      |
| ATEmix (inhalation-vapor)     | 18.30 mg/l     |

**Unknown acute toxicity** 8.1345 % of the mixture consists of ingredient(s) of unknown toxicity

- 8.1345 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 8.1345 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 8.1345 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
- 1.1345 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
- 1.1345 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

#### Component Information

| Chemical name                  | Oral LD50 | Dermal LD50 | Inhalation LC50         |
|--------------------------------|-----------|-------------|-------------------------|
| Nitric acid<br>7697-37-2       | -         | -           | = 2500 ppm ( Rat ) 1 h  |
| Hydrogen fluoride<br>7664-39-3 | -         | -           | = 0.79 mg/L ( Rat ) 1 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 burns. Risk of serious damage to eyes.

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

**Germ cell mutagenicity** No information available.

**Carcinogenicity** Classification based on data available for ingredients.

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

| Chemical name                  | ACGIH                                       | IARC                                                                           | NTP | OSHA    |
|--------------------------------|---------------------------------------------|--------------------------------------------------------------------------------|-----|---------|
| Nitric acid<br>7697-37-2       | -                                           | Group 1 - Carcinogenic to humans<br>Group 2A - Probably carcinogenic to humans | -   | Present |
| Hydrogen fluoride<br>7664-39-3 | A4 - Not Classifiable as a Human Carcinogen | -                                                                              | -   | -       |

#### Legend

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

A4 - Not Classifiable as a Human Carcinogen

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

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

|                                 |                                 |
|---------------------------------|---------------------------------|
| <b>Reproductive toxicity</b>    | No information available.       |
| <b>STOT - single exposure</b>   | No information available.       |
| <b>STOT - repeated exposure</b> | No information available.       |
| <b>Target organ effects</b>     | Skin, Eyes, Respiratory system. |
| <b>Aspiration hazard</b>        | No information available.       |

## Section 12: ECOLOGICAL INFORMATION

### Ecotoxicity

| Chemical name                  | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea                             |
|--------------------------------|----------------------|------|----------------------------|---------------------------------------|
| Hydrogen fluoride<br>7664-39-3 | .?                   | -    | -                          | EC50: =270mg/L (48h, Daphnia species) |

**Persistence and Degradability** No information available.

**Bioaccumulation** No information available.

### Component Information

| Chemical name                  | Partition coefficient |
|--------------------------------|-----------------------|
| Nitric acid<br>7697-37-2       | -2.3                  |
| Hydrogen fluoride<br>7664-39-3 | -1.4                  |

## Section 13: DISPOSAL CONSIDERATIONS

### Waste treatment methods

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

## Section 14: TRANSPORT INFORMATION

### IMDG

|                                         |                                |
|-----------------------------------------|--------------------------------|
| <b>14.1. UN-No</b>                      | UN2922                         |
| <b>14.2. Proper shipping name</b>       | Corrosive liquid, toxic, n.o.s |
| <b>14.3. Transport hazard class(es)</b> | 8                              |
| <b>Subsidiary hazard class</b>          | 6.1                            |
| <b>14.4. Packing Group</b>              | III                            |
| <b>Description</b>                      | Not applicable                 |
| <b>14.5. Marine Pollutant</b>           | None                           |
| <b>14.6. Special Provisions</b>         | None                           |

No information available Transport No information available  
in bulk according  
to Annex II of MARPOL 73/78 and  
the IBC Code

**RID**

|                                  |                                |
|----------------------------------|--------------------------------|
| 14.1. UN-No                      | UN2922                         |
| 14.2. Proper shipping name       | Corrosive liquid, toxic, n.o.s |
| 14.3. Transport hazard class(es) | 8 (6.1)                        |
| 14.4. Packing Group              | III                            |
| Description                      | Not applicable                 |
| 14.5. Environmental hazard       | None                           |
| 14.6. Special Provisions         | None                           |

**ADR**

|                                  |                                |
|----------------------------------|--------------------------------|
| 14.1. UN-No                      | UN2922                         |
| 14.2. Proper shipping name       | Corrosive liquid, toxic, n.o.s |
| 14.3. Transport hazard class(es) | 8 (6.1)                        |
| 14.4. Packing Group              | III                            |
| Description                      | Not applicable                 |
| 14.5. Environmental hazard       | None                           |
| 14.6. Special Provisions         | None                           |

**ICAO**

|                            |                                |
|----------------------------|--------------------------------|
| 14.1. UN-No                | UN2922                         |
| 14.2. Proper Shipping Name | Corrosive liquid, toxic, n.o.s |
| 14.3. Hazard Class         | 8                              |
| Subsidiary hazard class    | 6.1                            |
| 14.4. Packing Group        | III                            |
| Description                | Not applicable                 |
| 14.5. Environmental hazard | None                           |
| 14.6. Special Provisions   | None                           |

**IATA-DGR**

|                                  |                                |
|----------------------------------|--------------------------------|
| 14.1. UN-No                      | UN2922                         |
| 14.2. Proper shipping name       | Corrosive liquid, toxic, n.o.s |
| 14.3. Transport hazard class(es) | 8                              |
| Subsidiary hazard class          | 6.1                            |
| 14.4. Packing Group              | III                            |
| Description                      | Not applicable                 |
| 14.5. Environmental hazard       | None                           |
| 14.6. Special Provisions         | None                           |

## Section 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          | Complies |
| DSL/NDSL      | Complies |
| EINECS/ELINCS | Complies |

|       |          |
|-------|----------|
| ENCS  | Complies |
| IECSC | Complies |
| KECL  | Complies |
| PICCS | Complies |
| AIIC  | Complies |

**Legend:**

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

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU 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

AICS - Australian Inventory of Chemical Substances

**Section 16: OTHER INFORMATION**

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

**Key or legend to abbreviations and acronyms used in the safety data sheet****LEG8 Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

|        |                             |        |                                  |
|--------|-----------------------------|--------|----------------------------------|
| LEGTWA | TWA (time-weighted average) | LEGST  | STEL (Short Term Exposure Limit) |
| LEGC   | Maximum limit value         | LEGSKN | Skin designation                 |

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 Environmental Protection Agency  
 Acute Exposure Guideline Level(s) (AEGL(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)  
 Japan GHS Classification  
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
 NIOSH (National Institute for Occupational Safety and Health)  
 National Library of Medicine's ChemID Plus (NLM CIP)  
 National Library of Medicine's PubMed database (NLM PUBMED)  
 U.S. National Toxicology Program (NTP)  
 New Zealand's Chemical Classification and Information Database (CCID)  
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
 Organization for Economic Co-operation and Development Screening Information Data Set  
 RTECS (Registry of Toxic Effects of Chemical Substances)  
 World Health Organization

Revision date 28-May-2026

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 SDS**