This is a kit that contains the following components:
INCRETE W/B URETHANE PART A
INCRETE W/B URETHANE CLEAR PART B
SAFETY DATA SHEET

1. Identification

Product identifier: INCRETE W/B URETHANE PART A
Product Code: CUWK G001 000

Recommended use and restriction on use

Recommended use: Curative
Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information
Euclid Admixture Canada Inc.
2835 Grand-Allee
Saint Hubert QC J4T 2R4
CA

Contact person: EH&S Department
Telephone: (450)465-2233
Emergency telephone number: 1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

Hazard Classification

Health Hazards

- Acute toxicity (Inhalation - dust and mist) Category 4
- Acute toxicity (Inhalation - dust and mist) Category 4
- Skin sensitizer Category 1
- Specific Target Organ Toxicity - Single Exposure Category 3

Target Organs

1. Respiratory tract irritation.

Unknown toxicity - Health

- Acute toxicity, oral 20 %
- Acute toxicity, dermal 20 %
- Acute toxicity, inhalation, vapor 100 %
- Acute toxicity, inhalation, dust or mist 20.55 %

Label Elements

Hazard Symbol:
Signal Word: DangerWarning

Hazard Statement:
May cause cancer.
Harmful if inhaled. Harmful if inhaled.
May cause an allergic skin reaction.
May cause respiratory irritation.

Precautionary Statements

Prevention: Do not breathe dust or mists. Use only outdoors or in a well-ventilated area. [In case of inadequate ventilation] wear respiratory protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.

Response: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. Specific treatment is urgent (see on this label). IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF ON SKIN: Wash with plenty of water/… If skin irritation or rash occurs: Get medical advice/attention. Call a POISON CENTER/doctor if you feel unwell. Specific treatment (see on this label). Wash contaminated clothing before reuse.


Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC): None.

3. Composition/information on ingredients

Mixtures
### 4. First-aid measures

**Description of necessary first-aid measures**

**Inhalation:** Move to fresh air.

**Skin Contact:** Destroy or thoroughly clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, get medical attention.

**Eye contact:** Rinse immediately with plenty of water.

**Ingestion:** Rinse mouth thoroughly.

**Personal Protection for First-aid Responders:** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

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

- **Symptoms:** Respiratory tract irritation.
- **Hazards:** No data available.

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

- **Treatment:** Get medical attention if symptoms occur.

### 5. Fire-fighting measures

**General Fire Hazards:** No unusual fire or explosion hazards noted.

**Suitable (and unsuitable) extinguishing media**

- **Suitable extinguishing media:** Use fire-extinguishing media appropriate for surrounding materials.
- **Unsuitable extinguishing media:** Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical:** During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters**

- **Special fire fighting procedures:** No data available.
Special protective equipment for fire-fighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

Accidental release measures: In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Methods and material for containment and cleaning up: Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

Environmental Precautions: Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer. Environmental manager must be informed of all major spillages.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation): Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

Safe handling advice: Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Avoid contact with eyes, skin, and clothing. Wash hands thoroughly after handling.

Contact avoidance measures: No data available.

Hygiene measures: Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin. Observe good industrial hygiene practices.

Storage

Safe storage conditions: Store away from incompatible materials. Store in original tightly closed container.

Safe packaging materials: No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Type</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanol</td>
<td>TWA</td>
<td>200 ppm</td>
<td>US. ACGIH Threshold Limit Values, as amended (2011)</td>
</tr>
<tr>
<td></td>
<td>STEL</td>
<td>400 ppm</td>
<td>US. ACGIH Threshold Limit Values, as amended (2011)</td>
</tr>
<tr>
<td>Chemical name</td>
<td>Type</td>
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<tr>
<td>2-Propanol</td>
<td>STEL</td>
<td>400 ppm</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)</td>
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<td>200 ppm</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)</td>
</tr>
<tr>
<td></td>
<td>STEL</td>
<td>400 ppm</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)</td>
</tr>
<tr>
<td>2-Propanol</td>
<td>STEL</td>
<td>500 ppm 1,230 mg/m3</td>
<td>Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)</td>
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<tr>
<td></td>
<td>TWA</td>
<td>400 ppm 983 mg/m3</td>
<td>Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)</td>
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<tr>
<td>Hexamethylene diisocyanate (HDI)</td>
<td>CEILING</td>
<td>0.01 ppm</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)</td>
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<tr>
<td></td>
<td>TWA</td>
<td>0.005 ppm</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)</td>
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<tr>
<td>Hexamethylene diisocyanate (HDI)</td>
<td>TWA</td>
<td>0.005 ppm</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (06 2015)</td>
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<tr>
<td></td>
<td>CEV</td>
<td>0.02 ppm</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (06 2015)</td>
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</table>
Hexamethylene diisocyanate (HDI)

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanol (acetone: Sampling time: End of shift at end of work week.)</td>
<td>40 mg/l (Urine)</td>
<td>ACGIH BEI (03 2013)</td>
</tr>
</tbody>
</table>

### Biological Limit Values

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanol (acetone: Sampling time: End of shift at end of work week.)</td>
<td>40 mg/l (Urine)</td>
<td>ACGIH BEI (03 2013)</td>
</tr>
</tbody>
</table>

### Appropriate Engineering Controls

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

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

**Eye/face protection:**
- Wear goggles/face shield.

**Skin Protection**

**Hand Protection:**
- Additional Information: Use suitable protective gloves if risk of skin contact.

**Skin and Body Protection:**
- Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

**Respiratory Protection:**
- In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

**Hygiene measures:**
- Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin. Observe good industrial hygiene practices.

### 9. Physical and chemical properties

**Appearance**

- **Physical state:** liquid
- **Form:** liquid
- **Color:** Colorless
- **Odor:** Mild
- **Odor threshold:** No data available.
- **pH:** No data available.
- **Melting point/freezing point:** No data available.
- **Initial boiling point and boiling range:** No data available.
- **Flash Point:** 185 °C 365 °F
- **Evaporation rate:** Slower than Ether
- **Flammability (solid, gas):** No

**Upper/lower limit on flammability or explosive limits**

- **Flammability limit - upper (%):** No data available.
- **Flammability limit - lower (%):** No data available.
- **Explosive limit - upper:** No data available.
Explosive limit - lower: No data available.
Vapor pressure: No data available.
Vapor density: Vapors are heavier than air and may travel along the floor and in the bottom of containers.
Relative density: 1.15
Solubility(ies)
  Solubility in water: Practically Insoluble
  Solubility (other): No data available.
Partition coefficient (n-octanol/water): No data available.
Auto-ignition temperature: No data available.
Decomposition temperature: No data available.
Viscosity: No data available.

10. Stability and reactivity

Reactivity: No data available.
Chemical Stability: Material is stable under normal conditions.
Possibility of hazardous reactions: No data available.
Conditions to avoid: Avoid heat or contamination.
Hazardous Decomposition Products: Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

11. Toxicological information

Information on likely routes of exposure
  Inhalation: In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.
  Skin Contact: May cause an allergic skin reaction.
  Eye contact: Eye contact is possible and should be avoided.
  Ingestion: May be ingested by accident. Ingestion may cause irritation and malaise.

Symptoms related to the physical, chemical and toxicological characteristics
  Inhalation: No data available.
  Skin Contact: No data available.
  Eye contact: No data available.
  Ingestion: No data available.
Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: Not classified for acute toxicity based on available data.

Specified substance(s):
- Homopolymer of HDI
  LD 50 (Rat): > 5,000 mg/kg
- 2-Propanol
  LD 50 (Rat): 5.84 g/kg

Dermal

Product: Not classified for acute toxicity based on available data.

Specified substance(s):
- Homopolymer of HDI
  LD 50 (Rabbit): > 15,800 mg/kg
- 2-Propanol
  LD 50 (Rabbit): 12,800 mg/kg

Inhalation

Product: ATEmix: 1.5 mg/l

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):
- Homopolymer of HDI in vivo (Rabbit): Not irritant
- 2-Propanol in vivo (Rabbit): Not Classified

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):
- 2-Propanol Rabbit, 24 hrs: Category 2: Causes serious eye irritation

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.
IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:
No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:
No carcinogenic components identified

Germ Cell Mutagenicity

In vitro
Product: No data available.

In vivo
Product: No data available.

Reproductive toxicity
Product: No data available.

Specific Target Organ Toxicity - Single Exposure
Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure
Product: No data available.

Target Organs
Specific Target Organ Toxicity - Single Exposure: Respiratory tract irritation.

Aspiration Hazard
Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish
Product: No data available.

Specified substance(s):
2-Propanol
LC 50 (Fathead minnow (Pimephales promelas), 96 h): 11,130 mg/l Mortality

Aquatic Invertebrates
Specified substance(s): 2-Propanol

LC 50 (Water flea (Daphnia magna), 24 h): > 10,000 mg/l Mortality

Chronic hazards to the aquatic environment:

Fish
Product: No data available.

Aquatic Invertebrates
Product: No data available.

Toxicity to Aquatic Plants
Product: No data available.

Persistence and Degradability

Biodegradation
Product: No data available.

BOD/COD Ratio
Product: No data available.

Bioaccumulative potential
Bioconcentration Factor (BCF)
Product: No data available.

Partition Coefficient n-octanol / water (log Kow)
Product: No data available.

Specified substance(s): 2-Propanol
Log Kow: 0.05

Mobility in soil: No data available.

Other adverse effects: No data available.

13. Disposal considerations

Disposal methods: Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Contaminated Packaging: No data available.
14. Transport information

TDG:
Not Regulated

CFR / DOT:
Not Regulated

IMDG:
Not Regulated

15. Regulatory information

US Federal Regulations
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
None present or none present in regulated quantities.

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs)
(40 CFR 721, Subpt E)
None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended
None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Reportable quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanol</td>
<td>100 lbs.</td>
</tr>
<tr>
<td>Hexamethylene diisocyanate (HDI)</td>
<td>100 lbs.</td>
</tr>
</tbody>
</table>

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate (Acute) Health Hazards
Acute toxicity (any route or exposure)
Respiratory or Skin Sensitization
Specific target organ toxicity (single or repeated exposure)

US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

Chemical Identity

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)
None present or none present in regulated quantities.
US State Regulations

**US, California Proposition 65**
No ingredient requiring a warning under CA Prop 65.

**US, New Jersey Worker and Community Right-to-Know Act**
No ingredient regulated by NJ Right-to-Know Law present.

**US, Massachusetts RTK - Substance List**
No ingredient regulated by MA Right-to-Know Law present.

**US, Pennsylvania RTK - Hazardous Substances**
No ingredient regulated by PA Right-to-Know Law present.

**US, Rhode Island RTK**
No ingredient regulated by RI Right-to-Know Law present.

International regulations

**Montreal protocol**
Not applicable

**Stockholm convention**
Not applicable

**Rotterdam convention**
Not applicable

**Kyoto protocol**
Not applicable

**VOC:** When appropriately mixed with the other part, product has a VOC less water and exempt solvent of:
34 g/l

Regulatory VOC (less water and exempt solvent) : 3 g/l

VOC Method 310 : 0.55 %
**Inventory Status:**

<table>
<thead>
<tr>
<th>Region</th>
<th>Status Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia AICS</td>
<td>All components in this product are listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Canada DSL Inventory List</td>
<td>All components in this product are listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>EINECS, ELINCS or NLP</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Japan (ENCS) List</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>China Inv. Existing Chemical Substances</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Korea Existing Chemicals Inv. (KECI)</td>
<td>All components in this product are listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Canada NDSL Inventory</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Philippines PICCS</td>
<td>All components in this product are listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>US TSCA Inventory</td>
<td>All components in this product are listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>New Zealand Inventory of Chemicals</td>
<td>All components in this product are listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Japan ISHL Listing</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Japan Pharmacopoeia Listing</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td><strong>16. Other information, including date of preparation or last revision</strong></td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Revision Date:</strong></td>
<td>09/04/2020</td>
</tr>
<tr>
<td><strong>Version #:</strong></td>
<td>2.0</td>
</tr>
<tr>
<td><strong>Further Information:</strong></td>
<td>No data available.</td>
</tr>
<tr>
<td><strong>Disclaimer:</strong></td>
<td>For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.</td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET

1. Identification

Product identifier: INCRETE W/B URETHANE CLEAR PART B
Product Code: CUWK G001 000

Recommended use and restriction on use
  Recommended use: Coatings
  Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information
Euclid Admixture Canada Inc.
2835 Grand-Allee
Saint Hubert QC J4T 2R4
CA

Contact person: EH&S Department
Telephone: (450)465-2233
Emergency telephone number: 1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

Hazard Classification
  Not classified

Label Elements

  Hazard Symbol: No symbol
  Signal Word: No signal word.
  Hazard Statement: Not applicable
  Precautionary Statements: Not applicable
  Hazard(s) not otherwise classified (HNOC): None.

3. Composition/information on ingredients

Mixtures
**Chemical Identity**

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>Content in percent (%)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triethanolamine</td>
<td></td>
<td>102-71-6</td>
<td>1 - &lt;5%</td>
</tr>
<tr>
<td>Propylene Glycol n-Butyl Ether</td>
<td></td>
<td>5131-66-8</td>
<td>1 - &lt;5%</td>
</tr>
</tbody>
</table>

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

### 4. First-aid measures

**Description of necessary first-aid measures**

**Inhalation:**
Move to fresh air.

**Skin Contact:**
Wash skin thoroughly with soap and water. If skin irritation occurs: Get medical advice/attention.

**Eye contact:**
Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. If eye irritation persists: Get medical advice/attention.

**Ingestion:**
Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

**Personal Protection for First-aid Responders:**
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

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

- **Symptoms:**
  May cause skin and eye irritation.

- **Hazards:**
  No data available.

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

**Treatment:**
Get medical attention if symptoms occur.

### 5. Fire-fighting measures

**General Fire Hazards:**
No unusual fire or explosion hazards noted.

**Suitable (and unsuitable) extinguishing media**

- **Suitable extinguishing media:**
  Use fire-extinguishing media appropriate for surrounding materials.

- **Unsuitable extinguishing media:**
  Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical:**
During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters**

- **Special fire fighting procedures:**
  No data available.
Special protective equipment for fire-fighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: No data available.

Accidental release measures: In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Methods and material for containment and cleaning up: Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

Environmental Precautions: Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer. Environmental manager must be informed of all major spillages.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation): Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

Safe handling advice: Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Contact avoidance measures: No data available.

Hygiene measures: Observe good industrial hygiene practices.

Storage

Safe storage conditions: Store away from incompatible materials. Store in original tightly closed container.

Safe packaging materials: No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

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</tr>
</thead>
<tbody>
<tr>
<td>Triethanolamine</td>
<td>ST ESL</td>
<td>50 µg/m3</td>
<td>US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (07 2011)</td>
</tr>
<tr>
<td></td>
<td>AN ESL</td>
<td>5 µg/m3</td>
<td>US. Texas. Effects Screening Levels (Texas</td>
</tr>
<tr>
<td>Chemical name</td>
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</tr>
<tr>
<td>-----------------</td>
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<td>-----------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Triethanolamine</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (08 2010)</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>US. ACGIH Threshold Limit Values, as amended (2011)</td>
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<td>TWA</td>
<td>5 mg/m³</td>
<td>Canada. Alberta OELs (Occupational Health &amp; Safety Code, Schedule 1, Table 2), as amended (07 2009)</td>
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<tr>
<td></td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)</td>
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<tr>
<td></td>
<td>TWA</td>
<td>0.5 ppm 3.1 mg/m³</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)</td>
</tr>
</tbody>
</table>

**Appropriate Engineering Controls**

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

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

**Eye/face protection:** Wear goggles/face shield.

**Skin Protection**

**Hand Protection:** Additional Information: Use suitable protective gloves if risk of skin contact.

**Skin and Body Protection:** No data available.

**Respiratory Protection:** In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

**Hygiene measures:** Observe good industrial hygiene practices.
9. Physical and chemical properties

Appearance

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>liquid</td>
</tr>
<tr>
<td>Form</td>
<td>liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Off-white</td>
</tr>
<tr>
<td>Odor</td>
<td>Mild</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>7 - 8</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>-0.00 °C 32 °F</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>100 °C 212 °F</td>
</tr>
<tr>
<td>Flash Point</td>
<td>No data available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Slower than Ether</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No</td>
</tr>
</tbody>
</table>

Upper/lower limit on flammability or explosive limits

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability limit - upper (%)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability limit - lower (%)</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive limit - upper</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive limit - lower</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Vapors are heavier than air and may travel along the floor and in the bottom of containers.</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.04</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td></td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Soluble</td>
</tr>
<tr>
<td>Solubility (other)</td>
<td>No data available</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>No data available.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No data available</td>
</tr>
</tbody>
</table>

10. Stability and reactivity

Reactivity: No data available.

Chemical Stability: Material is stable under normal conditions.

Possibility of hazardous reactions: No data available.

Conditions to avoid: Avoid heat or contamination.


Hazardous Decomposition Products: Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.
11. Toxicological information

Information on likely routes of exposure

Inhalation: In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.

Skin Contact: Causes mild skin irritation.

Eye contact: Eye contact is possible and should be avoided.

Ingestion: May be ingested by accident. Ingestion may cause irritation and malaise.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Ingestion: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: ATEmix: 203,905.09 mg/kg

Dermal

Product: ATEmix: 61,789.42 mg/kg

Inhalation

Product: Not classified for acute toxicity based on available data.

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):

Triethanolamine in vivo (Rabbit): Not irritant

Propylene Glycol n-Butyl Ether in vivo (Rabbit): Irritating

Serious Eye Damage/Eye Irritation

Product: No data available.
Specified substance(s):
Propylene Glycol n-Butyl Ether
Rabbit, 24 - 72 hrs: Not irritating

Respiratory or Skin Sensitization
Product: No data available.

Carcinogenicity
Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:
No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:
No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:
No carcinogenic components identified

Germ Cell Mutagenicity
In vitro
Product: No data available.

In vivo
Product: No data available.

Reproductive toxicity
Product: No data available.

Specific Target Organ Toxicity - Single Exposure
Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure
Product: No data available.

Aspiration Hazard
Product: No data available.

Other effects: No data available.
12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

**Fish**
- **Product:** No data available.

**Specified substance(s):**
- Triethanolamine
  - LC 50 (Fathead minnow (Pimephales promelas), 96 h): 10,610 - 13,010 mg/l
  - Mortality
  - LC 50 (Pimephales promelas, 96 h): 11,800 mg/l Experimental result, Key study

**Aquatic Invertebrates**
- **Product:** No data available.

**Specified substance(s):**
- Triethanolamine
  - EC 50 (Ceriodaphnia dubia, 48 h): 609.88 mg/l Experimental result, Key study

Chronic hazards to the aquatic environment:

**Fish**
- **Product:** No data available.

**Aquatic Invertebrates**
- **Product:** No data available.

**Specified substance(s):**
- Triethanolamine
  - NOEC (Daphnia magna, 21 d): 125 mg/l Experimental result, Key study

**Toxicity to Aquatic Plants**
- **Product:** No data available.

Persistence and Degradability

**Biodegradation**
- **Product:** No data available.

**BOD/COD Ratio**
- **Product:** No data available.

Bioaccumulative potential

**Bioconcentration Factor (BCF)**
- **Product:** No data available.

**Specified substance(s):**
Triethanolamine Various, Bioconcentration Factor (BCF): 0.89 Aquatic sediment QSAR, Supporting study
Cyprinus carpio, Bioconcentration Factor (BCF): < 3.9 Aquatic sediment Experimental result, Key study
Bioconcentration Factor (BCF): 3.02 Aquatic sediment QSAR, Weight of Evidence study
Bioconcentration Factor (BCF): 0.68 Aquatic sediment QSAR, Supporting study
Bioconcentration Factor (BCF): 0.96 Aquatic sediment QSAR, Supporting study

Partition Coefficient n-octanol / water (log Kow)
Product: No data available.
Specified substance(s):
Triethanolamine Log Kow: -1.75 - -1.32 No Estimated by calculation, Weight of Evidence study
Log Kow: -1.00

Mobility in soil: No data available.
Other adverse effects: No data available.

13. Disposal Considerations

Disposal methods: Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
Contaminated Packaging: No data available.

14. Transport Information

TDG: Not Regulated
CFR / DOT: Not Regulated
IMDG: Not Regulated

15. Regulatory Information

US Federal Regulations
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
None present or none present in regulated quantities.

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)
None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended
None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Reportable quantity</th>
</tr>
</thead>
</table>

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
- Not classified

US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)
None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65
No ingredient requiring a warning under CA Prop 65.

US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity
Triethanolamine

US. Massachusetts RTK - Substance List

Chemical Identity
Triethanolamine

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity
Triethanolamine

US. Rhode Island RTK

Chemical Identity
Triethanolamine

International regulations
Montreal protocol
  Not applicable

Stockholm convention
  Not applicable

Rotterdam convention
  Not applicable

Kyoto protocol
  Not applicable

VOC: When appropriately mixed with the other part, product has a VOC less water and exempt solvent of:
34 g/l

  Regulatory VOC (less water and exempt solvent) : 40 g/l
  VOC Method 310 : 1.61 %
**Inventory Status:**

<table>
<thead>
<tr>
<th>Inventory Type</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia AICS:</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Canada DSL Inventory List:</td>
<td>All components in this product are listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>EINECS, ELINCS or NLP:</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Japan (ENCS) List:</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>China Inv. Existing Chemical Substances:</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Korea Existing Chemicals Inv. (KECI):</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Canada NDSL Inventory:</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Philippines PICCS:</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>US TSCA Inventory:</td>
<td>All components in this product are listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>New Zealand Inventory of Chemicals:</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Japan ISHL Listing:</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Japan Pharmacopoeia Listing:</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
</tbody>
</table>
16. Other information, including date of preparation or last revision

<table>
<thead>
<tr>
<th>Revision Date:</th>
<th>09/04/2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version #:</td>
<td>2.0</td>
</tr>
<tr>
<td>Further Information:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Disclaimer:</td>
<td>For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.</td>
</tr>
</tbody>
</table>