



# SAFETY DATA SHEET

## DOW CHEMICAL CANADA ULC

**Product name:** SUPRACARE™ 240 Additives

**Issue Date:** 11/03/2025

**Print Date:** 11/04/2025

DOW CHEMICAL CANADA ULC encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

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## 1. IDENTIFICATION

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**Product name:** SUPRACARE™ 240 Additives

**Other means of identification:** No data available

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

**Identified uses:** Conditioning polymer. We recommend that you use this product in a manner consistent with the listed use. If your intended use is not consistent with the stated use, please contact your sales or technical service representative.

### **COMPANY IDENTIFICATION**

DOW CHEMICAL CANADA ULC  
#2400, 215 - 2ND STREET S.W.  
CALGARY AB T2P 1M4  
CANADA

**Customer Information Number:**

800-258-2436  
SDSQuestion@dow.com

### **EMERGENCY TELEPHONE NUMBER**

**24-Hour Emergency Contact (transportation emergencies only):** 1-800-424-9300

**Local Emergency Contact (transportation emergencies only):** 1-800-424-9300

**24-Hour Emergency Contact:** 1-989-636-4400

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## 2. HAZARDS IDENTIFICATION

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### **Hazard classification**

This product is hazardous under the criteria of the Hazardous Products Regulation (HPR) as implemented under the Workplace Hazardous Materials Information System (WHMIS 2015).  
Combustible dust - Category 1

### **Label elements**

Signal word: **WARNING!**

### **Hazards**

May form combustible dust concentrations in air.

### **Other hazards**

No data available

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

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This product is a mixture.

| Chemical name                                       | Common name and synonym                                                                                                                             | CASRN      | Concentration (w/w) |
|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------------------|
| Cationic hydroxyethyl cellulose-High Charge Density | Cellulose, ether with .alpha.-[2-hydroxy-3-(trimethylammonio)propyl]-.omega.-hydroxypoly(oxy-1,2-ethanediyl) chloride (<= 1 % Quaternized nitrogen) | 68610-92-4 | >= 88.0 - <= 96.0 % |
| Water                                               | Water                                                                                                                                               | 7732-18-5  | >= 0.0 - <= 5.6 %   |
| Sodium chloride                                     | sodium chloride                                                                                                                                     | 7647-14-5  | >= 1.0 - <= 4.0 %   |
| Sodium acetate                                      | sodium acetate                                                                                                                                      | 127-09-3   | >= 1.0 - <= 3.0 %   |
| Isopropanol                                         | propan-2-ol                                                                                                                                         | 67-63-0    | >= 0.02 - <= 1.0 %  |

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### 4. FIRST AID MEASURES

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#### Description of first aid measures

##### General advice:

If potential for exposure exists refer to Section 8 for specific personal protective equipment.

**Inhalation:** Move person to fresh air and keep comfortable for breathing; consult a physician.

**Skin contact:** Wash off with plenty of water.

**Eye contact:** Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

**Ingestion:** Rinse mouth with water. No emergency medical treatment necessary.

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

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

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

**Notes to physician:** No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

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## 5. FIREFIGHTING MEASURES

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### Extinguishing media

**Suitable extinguishing media:** Water.. Dry chemical fire extinguishers.. Carbon dioxide fire extinguishers..

**Unsuitable extinguishing media:** No data available

### Special hazards arising from the substance or mixture

**Hazardous combustion products:** During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating.. Combustion products may include and are not limited to:. Carbon monoxide.. Carbon dioxide..

**Unusual Fire and Explosion Hazards:** Do not permit dust to accumulate. When suspended in air dust can pose an explosion hazard. Minimize ignition sources. If dust layers are exposed to elevated temperatures, spontaneous combustion may occur.. Pneumatic conveying and other mechanical handling operations can generate combustible dust. To reduce the potential for dust explosions, electrically bond and ground equipment and do not permit dust to accumulate. Dust can be ignited by static discharge..

### Advice for firefighters

**Fire Fighting Procedures:** Keep people away. Isolate fire and deny unnecessary entry.. Soak thoroughly with water to cool and prevent re-ignition.. Cool surroundings with water to localize fire zone.. Hand held dry chemical or carbon dioxide extinguishers may be used for small fires.. Dust explosion hazard may result from forceful application of fire extinguishing agents..

**Special protective equipment for firefighters:** Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves).. If protective equipment is not available or not used, fight fire from a protected location or safe distance..

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## 6. ACCIDENTAL RELEASE MEASURES

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### Personal precautions, protective equipment and emergency procedures:

Isolate area. Spilled material may cause a slipping hazard. Keep unnecessary and unprotected personnel from entering the area. Refer to section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

**Environmental precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

**Methods and materials for containment and cleaning up:** Contain spilled material if possible. Absorb with materials such as: Non-combustible material. Sand. Wash the spill site with water.

Large spills: Collect in suitable and properly labeled containers. See Section 13, Disposal Considerations, for additional information.

## 7. HANDLING AND STORAGE

**Precautions for safe handling:** Avoid contact with eyes. Wash thoroughly after handling. No smoking, open flames or sources of ignition in handling and storage area. Good housekeeping and controlling of dusts are necessary for safe handling of product. Electrically bond and ground all containers, personnel and equipment before transfer or use of material. Keep away from heat, sparks and flame. Protect from heat. Keep container closed. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

**Conditions for safe storage:** Store in a cool, dry place. Protect from atmospheric moisture. Avoid prolonged exposure to heat and air.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

If exposure limits exist, they are listed below. If no exposure limits are displayed, then no values are applicable.

Consult local authorities for recommended exposure limits.

| Component       | Regulation                                                      | Type of listing | Value             |
|-----------------|-----------------------------------------------------------------|-----------------|-------------------|
| Sodium chloride | Dow IHG                                                         | TWA             | 10 mg/m3          |
| Isopropanol     | ACGIH                                                           | TWA             | 200 ppm           |
|                 | Further information: A4: Not classifiable as a human carcinogen |                 |                   |
|                 | ACGIH                                                           | STEL            | 400 ppm           |
|                 | Further information: A4: Not classifiable as a human carcinogen |                 |                   |
|                 | CA AB OEL                                                       | TWA             | 492 mg/m3 200 ppm |
|                 | CA AB OEL                                                       | STEL            | 984 mg/m3 400 ppm |
|                 | CA BC OEL                                                       | TWA             | 200 ppm           |
|                 | CA BC OEL                                                       | STEL            | 400 ppm           |
|                 | CA QC OEL                                                       | TWAEV           | 200 ppm           |
|                 | CA QC OEL                                                       | STEV            | 400 ppm           |

### Biological occupational exposure limits

| Components  | CAS-No. | Control parameters | Biological specimen | Sampling time                   | Permissible concentration | Basis     |
|-------------|---------|--------------------|---------------------|---------------------------------|---------------------------|-----------|
| Isopropanol | 67-63-0 | Acetone            | Urine               | End of shift at end of workweek | 40 mg/l                   | ACGIH BEI |

### Exposure controls

**Engineering controls:** Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

### Individual protection measures

**Eye/face protection:** Use safety glasses (with side shields).

**Skin protection**

**Hand protection:** Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. Examples of preferred glove barrier materials include: Polyvinyl chloride ("PVC" or "vinyl"). Nitrile/butadiene rubber ("nitrile" or "NBR"). Neoprene. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

**Other protection:** Wear clean, body-covering clothing.

**Respiratory protection:** Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions, no respiratory protection should be needed; however, in dusty atmospheres, use an approved particulate respirator. The following should be effective types of air-purifying respirators: Particulate filter.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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**Appearance**

|                       |                    |
|-----------------------|--------------------|
| <b>Physical state</b> | Powder             |
| <b>Color</b>          | White to off-white |

**Odor** Amine.

**Odor Threshold** No test data available

**pH** 5 - 7 *Literature*

**Melting point/freezing point**

**Melting point/ range** 160 °C *Literature* Decomposes above

**Freezing point** Not applicable

**Boiling point, initial boiling point and boiling range**

**Boiling point (760 mmHg)** Not applicable

**Flash point** **closed cup** No test data available

**Evaporation Rate (Butyl Acetate = 1)** Not applicable

**Flammability**

**Flammability (solid, gas)** May form combustible dust concentrations in air.

**Flammability (liquids)** No data available

**Upper/lower flammability or explosive limits**

**Lower explosion limit** No test data available

**Upper explosion limit** No test data available

**Vapor Pressure** Not applicable

**Relative vapour density**

**Relative Vapor Density (air = 1)** No test data available

**Density and / or relative density**

**Relative Density (water = 1)** No test data available

**Solubility(ies)**

|                                                    |                                    |
|----------------------------------------------------|------------------------------------|
| Water solubility                                   | soluble                            |
| Partition coefficient: n-octanol/water (log value) | No data available                  |
| Auto-ignition temperature                          | 320 °C <i>ASTM D1929</i>           |
| Decomposition temperature                          | No test data available             |
| Dynamic Viscosity                                  | No test data available             |
| Kinematic Viscosity                                | No test data available             |
| Explosive properties                               | No data available                  |
| Oxidizing properties                               | No data available                  |
| Bulk density                                       | 395.7 kg/m3 <i>Literature</i>      |
| Molecular weight                                   | 200 - 800 kg/mol <i>Literature</i> |
| Particle characteristics                           |                                    |
| Particle size                                      | Not Applicable                     |

NOTE: The physical data presented above are typical values and should not be construed as a specification.

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## 10. STABILITY AND REACTIVITY

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**Reactivity:** No data available

**Chemical stability:** Thermally stable at typical use temperatures. Hygroscopic

**Possibility of hazardous reactions:** Polymerization will not occur.

**Conditions to avoid:** Avoid temperatures above 200°C (392°F) Exposure to elevated temperatures can cause product to decompose. Avoid static discharge. Avoid moisture.

**Incompatible materials:** Avoid contact with oxidizing materials.

**Hazardous decomposition products:** Decomposition products depend upon temperature, air supply and the presence of other materials..

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## 11. TOXICOLOGICAL INFORMATION

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*Toxicological information appears in this section when such data are available.*

**Information on likely routes of exposure**

Ingestion, Inhalation, Skin contact, Eye contact.

**Acute toxicity (represents short term exposures with immediate effects - no chronic/delayed effects known unless otherwise noted)**

**Acute Toxicity Endpoints:**

Not classified based on available information.

**Acute oral toxicity**

**Information for the Product:**

Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

For this family of materials:

LD50, Rat, > 10,000 mg/kg Estimated.

**Information for components:****Cationic hydroxyethyl cellulose-High Charge Density**

For this family of materials: LD50, Rat, > 10,000 mg/kg Estimated.

**Sodium chloride**

Excessive exposure may cause: Nausea and/or vomiting. LD50, Rat, > 3,550 mg/kg

**Sodium acetate**

LD50, Rat, > 3,500 mg/kg

**Isopropanol**

May cause central nervous system depression. Signs and symptoms of excessive exposure may include: Facial flushing. Low blood pressure. Irregular heartbeats. May cause nausea and vomiting.

LD50, Rat, 4,700 mg/kg

ALD - Approximate Lethal Dose, Humans, 100 ml Estimated.

**Acute dermal toxicity****Information for the Product:**

Prolonged skin contact is unlikely to result in absorption of harmful amounts.

For this family of materials:

LD50, Rat, > 2,000 mg/kg OECD Test Guideline 402 No deaths occurred at this concentration.

**Information for components:****Cationic hydroxyethyl cellulose-High Charge Density**

For this family of materials: LD50, Rat, > 2,000 mg/kg OECD Test Guideline 402 No deaths occurred at this concentration.

**Sodium chloride**

LD50, Rabbit, 10,000 mg/kg

**Sodium acetate**

LD50, Rabbit, > 10,000 mg/kg

**Isopropanol**

LD50, Rabbit, 6,280 mg/kg

### Acute inhalation toxicity

#### Information for the Product:

No adverse effects are anticipated from single exposure to dust.

As product: The LC50 has not been determined.

#### Information for components:

##### Cationic hydroxyethyl cellulose-High Charge Density

The LC50 has not been determined.

##### Sodium chloride

LC50, Rat, 1 Hour, dust/mist, > 42 mg/l

##### Sodium acetate

LC50, Rat, 1 Hour, dust/mist, > 30 mg/l No deaths occurred at this concentration.

##### Isopropanol

LC50, Rat, male and female, 6 Hour, vapour, > 10000 ppm

### Skin corrosion/irritation

Not classified based on available information.

#### Information for the Product:

Based on product testing:

Prolonged contact may cause slight skin irritation with local redness.

#### Information for components:

##### Cationic hydroxyethyl cellulose-High Charge Density

Prolonged contact may cause slight skin irritation with local redness.

##### Sodium chloride

Brief contact is essentially nonirritating to skin.

Prolonged contact may cause slight skin irritation with local redness.

May cause more severe response if skin is abraded (scratched or cut).

##### Sodium acetate

Prolonged exposure not likely to cause significant skin irritation.

##### Isopropanol

Prolonged exposure not likely to cause significant skin irritation.

May cause drying and flaking of the skin.

### Serious eye damage/eye irritation

Not classified based on available information.

#### Information for the Product:

Based on product testing:  
May cause slight eye irritation.  
Corneal injury is unlikely.

**Information for components:**

**Cationic hydroxyethyl cellulose-High Charge Density**

May cause slight eye irritation.  
Corneal injury is unlikely.

**Sodium chloride**

May cause eye irritation.  
May cause slight temporary corneal injury.  
Dust may irritate eyes.

**Sodium acetate**

May cause slight eye irritation.  
Corneal injury is unlikely.

**Isopropanol**

May cause pain disproportionate to the level of irritation to eye tissues.  
May cause moderate eye irritation.  
May cause moderate corneal injury.  
Vapor may cause eye irritation experienced as mild discomfort and redness.  
Vapor may cause lacrimation (tears).

**Sensitization**

**For skin sensitization:**

Not classified based on available information.

**For respiratory sensitization:**

Not classified based on available information.

**Information for the Product:**

For skin sensitization:  
No relevant data found.

For respiratory sensitization:  
No relevant data found.

**Information for components:**

**Cationic hydroxyethyl cellulose-High Charge Density**

For skin sensitization:  
Did not cause allergic skin reactions when tested in humans.

For respiratory sensitization:  
No relevant data found.

**Sodium chloride**

For skin sensitization:  
No relevant data found.

For respiratory sensitization:  
No signs of respiratory sensitization have been reported.

**Sodium acetate**

A similar material did not cause allergic skin reactions when tested in humans.

For respiratory sensitization:  
No relevant data found.

**Isopropanol**

For skin sensitization:  
Did not cause allergic skin reactions when tested in guinea pigs.  
Did not demonstrate the potential for contact allergy in mice.

For respiratory sensitization:  
No relevant data found.

**Specific Target Organ Systemic Toxicity (Single Exposure)**

Not classified based on available information.

**Information for the Product:**

Product test data not available.

**Information for components:**

**Cationic hydroxyethyl cellulose-High Charge Density**

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

**Sodium chloride**

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

**Sodium acetate**

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

**Isopropanol**

May cause drowsiness or dizziness.  
Route of Exposure: Ingestion  
Target Organs: Central nervous system

**Aspiration Hazard**

Not classified based on available information.

**Information for the Product:**

Based on physical properties, not likely to be an aspiration hazard.

**Information for components:**

**Cationic hydroxyethyl cellulose-High Charge Density**

Based on physical properties, not likely to be an aspiration hazard.

**Sodium chloride**

Based on physical properties, not likely to be an aspiration hazard.

**Sodium acetate**

Based on physical properties, not likely to be an aspiration hazard.

**Isopropanol**

Aspiration into the lungs may occur during ingestion or vomiting, causing lung damage or even death due to chemical pneumonia.

**Chronic toxicity (represents longer term exposures with repeated dose resulting in chronic/delayed effects - no immediate effects known unless otherwise noted)**

**Specific Target Organ Systemic Toxicity (Repeated Exposure)**

Not classified based on available information.

**Information for the Product:**

Product test data not available.

**Information for components:**

**Cationic hydroxyethyl cellulose-High Charge Density**

For the minor component(s):

In animals, effects have been reported on the following organs:

Liver.

Kidney.

Kidney effects have been observed in male rats. These effects are believed to be species specific and unlikely to occur in humans.

Observations in animals include:

Lethargy.

**Sodium chloride**

Medical experience with sodium chloride has shown a strong association between elevated blood pressure and prolonged dietary overuse. Related effects could occur in the kidneys.

**Sodium acetate**

Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

**Isopropanol**

In animals, effects have been reported on the following organs:

Kidney.

Liver.

Kidney effects have been observed in male rats. These effects are believed to be species specific and unlikely to occur in humans.

Observations in animals include:

Lethargy.

**Carcinogenicity**

Not classified based on available information.

**Information for the Product:**

Product test data not available.

**Information for components:**

**Cationic hydroxyethyl cellulose-High Charge Density**

No relevant data found.

**Sodium chloride**

Did not cause cancer in laboratory animals.

**Sodium acetate**

No relevant data found.

**Isopropanol**

Did not cause cancer in laboratory animals.

**Teratogenicity**

Not classified based on available information.

**Information for the Product:**

Product test data not available.

**Information for components:**

**Cationic hydroxyethyl cellulose-High Charge Density**

For the minor component(s): Isopropanol has been toxic to the fetus in laboratory animals at doses toxic to the mother.

**Sodium chloride**

No relevant data found.

**Sodium acetate**

For similar material(s): Did not cause birth defects or any other fetal effects in laboratory animals.

**Isopropanol**

Isopropanol has been toxic to the fetus in laboratory animals at doses toxic to the mother.

**Reproductive toxicity**

Not classified based on available information.

**Information for the Product:**

Product test data not available.

**Information for components:**

**Cationic hydroxyethyl cellulose-High Charge Density**

No relevant data found.

**Sodium chloride**

No relevant data found.

**Sodium acetate**

In animal studies, a similar material has been shown not to interfere with reproduction.

**Isopropanol**

In animal studies, did not interfere with reproduction. In animal studies, did not interfere with fertility.

**Mutagenicity**

Not classified based on available information.

**Information for the Product:**

Product test data not available.

**Information for components:****Cationic hydroxyethyl cellulose-High Charge Density**

In vitro genetic toxicity studies were predominantly negative. Animal genetic toxicity studies were negative.

**Sodium chloride**

In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

**Sodium acetate**

In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

**Isopropanol**

In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

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**12. ECOLOGICAL INFORMATION**

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*Ecotoxicological information appears in this section when such data are available.*

**Toxicity****Information for the Product:****Acute toxicity to fish**

Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested).

LC50, Pimephales promelas (fathead minnow), static test, 96 Hour, 2.4 - 3.7 mg/l

**Acute toxicity to aquatic invertebrates**

LC50, Daphnia magna (Water flea), static test, 48 Hour, 34 - 48 mg/l

**Toxicity to bacteria**

EC50, activated sludge, 3 Hour, Respiration rates., > 1,000 mg/l

EC50, Bacteria, 16 Hour, 2,500 mg/l

**Information for components:****Cationic hydroxyethyl cellulose-High Charge Density****Acute toxicity to fish**

Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested).

LC50, Pimephales promelas (fathead minnow), static test, 96 Hour, 2.4 - 3.7 mg/l

**Acute toxicity to aquatic invertebrates**

LC50, Daphnia magna (Water flea), static test, 48 Hour, 34 - 48 mg/l

**Toxicity to bacteria**

EC50, activated sludge, 3 Hour, Respiration rates., > 1,000 mg/l

EC50, Bacteria, 16 Hour, 2,500 mg/l

**Sodium chloride****Acute toxicity to fish**

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

LC50, Lepomis macrochirus (Bluegill sunfish), flow-through test, 96 Hour, 5,840 mg/l, OECD Test Guideline 203 or Equivalent

LC50, Pimephales promelas (fathead minnow), static test, 96 Hour, 10,610 mg/l, OECD Test Guideline 203 or Equivalent

**Acute toxicity to aquatic invertebrates**

EC50, Daphnia magna (Water flea), static test, 48 Hour, 1,900 mg/l

**Acute toxicity to algae/aquatic plants**

EC50, Other, static test, 120 Hour, Growth inhibition (cell density reduction), 2,430 mg/l, OECD Test Guideline 201 or Equivalent

**Toxicity to bacteria**

IC50, activated sludge, > 1,000 mg/l, OECD 209 Test

**Chronic toxicity to fish**

NOEC, Pimephales promelas (fathead minnow), 33 d, 252 mg/l

**Chronic toxicity to aquatic invertebrates**

NOEC, Daphnia pulex (Water flea), 21 d, 314 mg/l

**Sodium acetate****Acute toxicity to fish**

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

LC50, Danio rerio (zebra fish), semi-static test, 96 Hour, > 100 mg/l, OECD Test Guideline 203 or Equivalent

**Acute toxicity to aquatic invertebrates**

EC50, Daphnia magna (Water flea), static test, 48 Hour, > 1,000 mg/l, OECD Test Guideline 202 or Equivalent

**Acute toxicity to algae/aquatic plants**

Based on data from similar materials

EC50, Skeletonema costatum (marine diatom), 72 Hour, > 1,000 mg/l, ISO 10253

**Toxicity to bacteria**

EC50, Bacteria, static test, 18 Hour, 7,200 mg/l

**Isopropanol****Acute toxicity to fish**

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

LC50, Pimephales promelas (fathead minnow), flow-through test, 96 Hour, 9,640 mg/l, OECD Test Guideline 203 or Equivalent

**Acute toxicity to aquatic invertebrates**

LC50, Daphnia magna (Water flea), static test, 24 Hour, > 10,000 mg/l, OECD Test Guideline 202 or Equivalent

**Acute toxicity to algae/aquatic plants**

NOEC, alga Scenedesmus sp., static test, 7 d, Growth inhibition (cell density reduction), 1,800 mg/l

ErC50, alga Scenedesmus sp., static test, 72 Hour, Growth rate inhibition, > 1,000 mg/l

**Toxicity to bacteria**

EC50, activated sludge, Static, 16 hrs, Respiration rates., > 1,000 mg/l, DIN 38 412 Part 8

**Chronic toxicity to aquatic invertebrates**

NOEC, Daphnia magna (Water flea), semi-static test, 21 d, 30 mg/l

**Persistence and degradability****Information for the Product:**

**Biodegradability:** Biodegradation under aerobic static laboratory conditions is low (BOD20 or BOD28/ThOD between 2.5 and 10%).

**Chemical Oxygen Demand:** 1.27 mg/mg Estimated.

**Biological oxygen demand (BOD)**

| Incubation Time | BOD     |
|-----------------|---------|
| 5 d             | 5.000 % |
| 10 d            | 5.000 % |
| 20 d            | 5.000 % |

**Information for components:****Cationic hydroxyethyl cellulose-High Charge Density**

**Biodegradability:** Biodegradation under aerobic static laboratory conditions is low (BOD20 or BOD28/ThOD between 2.5 and 10%).

**Chemical Oxygen Demand:** 1.27 mg/mg Estimated.

**Biological oxygen demand (BOD)**

| Incubation Time | BOD     |
|-----------------|---------|
| 5 d             | 5.000 % |
| 10 d            | 5.000 % |
| 20 d            | 5.000 % |

**Sodium chloride**

**Biodegradability:** Biodegradability is not applicable to inorganic substances.

**Sodium acetate**

**Biodegradability:** Material is readily biodegradable. Passes OECD test(s) for ready biodegradability. Material has inherent, ultimate biodegradability according to OECD test (s) guidelines (reaches > 60 or 70% biodegradation in OECD test(s)).

10-day Window: Pass

**Biodegradation:** 79 %

**Exposure time:** 28 d

**Method:** OECD Test Guideline 301D or Equivalent

10-day Window: Not applicable

**Biodegradation:** 100 %

**Exposure time:** 5 d

**Method:** OECD Test Guideline 302B or Equivalent

**Theoretical Oxygen Demand:** 0.78 mg/mg

**Isopropanol**

**Biodegradability:** Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

10-day Window: Pass

**Biodegradation:** 95 %

**Exposure time:** 21 d

**Method:** OECD Test Guideline 301E or Equivalent

10-day Window: Not applicable

**Biodegradation:** 53 %

**Exposure time:** 5 d

**Method:** Regulation (EC) No. 440/2008, Annex, C.6 (COD)

**Theoretical Oxygen Demand:** 2.40 mg/mg Estimated.

**Chemical Oxygen Demand:** 2.09 mg/mg Estimated.

**Biological oxygen demand (BOD)**

| Incubation Time | BOD       |
|-----------------|-----------|
| 5 d             | 20 - 72 % |
| 20 d            | 78 - 86 % |

**Photodegradation****Test Type:** Half-life (indirect photolysis)**Sensitization:** OH radicals**Atmospheric half-life:** 1.472 d**Method:** Estimated.**Bioaccumulative potential****Information for the Product:**

**Bioaccumulation:** No bioconcentration is expected because of the relatively high molecular weight (MW greater than 1000).

**Information for components:****Sodium chloride**

**Bioaccumulation:** Partitioning from water to n-octanol is not applicable.

**Sodium acetate**

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

**Partition coefficient: n-octanol/water(log Pow):** -3.72 Estimated.

**Bioconcentration factor (BCF):** 10 Fish 3 d Measured

**Isopropanol**

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

**Partition coefficient: n-octanol/water(log Pow):** 0.05 Measured

**Mobility in soil****Information for the Product:**

No data available.

**Information for components:****Sodium chloride**

Potential for mobility in soil is very high (Koc between 0 and 50).

**Sodium acetate**

**Partition coefficient (Koc):** 1 Estimated.

**Isopropanol**

**Partition coefficient (Koc):** 1.1 Estimated.

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### 13. DISPOSAL CONSIDERATIONS

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**Disposal methods:** DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility of the waste generator. AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN SDS SECTION 1: Identified Uses. FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: Recycler. Reclaimer. Incinerator or other thermal destruction device. Landfill.

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### 14. TRANSPORT INFORMATION

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**TDG**

|                             |                                                                                     |
|-----------------------------|-------------------------------------------------------------------------------------|
| <b>Proper shipping name</b> | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(Cationic hydroxyethyl cellulose) |
| <b>UN number</b>            | UN 3077                                                                             |
| <b>Class</b>                | 9                                                                                   |
| <b>Packing group</b>        | III                                                                                 |
| <b>Marine pollutant</b>     | Cationic hydroxyethyl cellulose                                                     |

**Classification for SEA transport (IMO-IMDG):**

|                                                                                             |                                                                                     |
|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>Proper shipping name</b>                                                                 | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(Cationic hydroxyethyl cellulose) |
| <b>UN number</b>                                                                            | UN 3077                                                                             |
| <b>Class</b>                                                                                | 9                                                                                   |
| <b>Packing group</b>                                                                        | III                                                                                 |
| <b>Marine pollutant</b>                                                                     | Cationic hydroxyethyl cellulose                                                     |
| <b>Special precautions for user</b>                                                         | EmS: F-A, S-F                                                                       |
| <b>Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code</b> | Consult IMO regulations before transporting ocean bulk                              |

**Classification for AIR transport (IATA/ICAO):**

|                             |                                                                                     |
|-----------------------------|-------------------------------------------------------------------------------------|
| <b>Proper shipping name</b> | Environmentally hazardous substance, solid, n.o.s.(Cationic hydroxyethyl cellulose) |
| <b>UN number</b>            | UN 3077                                                                             |
| <b>Class</b>                | 9                                                                                   |
| <b>Packing group</b>        | III                                                                                 |

**Further information:**

NOT REGULATED PER TDG EXEMPTION 1.45.1 FOR ROAD OR RAIL

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

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## 15. REGULATORY INFORMATION

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### Canadian Domestic Substances List (DSL) (CA. DSL)

All substances contained in this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.

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## 16. OTHER INFORMATION

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### Revision

Identification Number: 99222737 / A208 / Issue Date: 11/03/2025 / Version: 11.0

In case this version of the SDS contains significant changes from the previous version, they are listed below or noted by bold, double bars in the left-hand margin throughout this document.

Changes encompass identification, hazards, tox/eco-tox information and the addition/removal of the ingredients, and regulatory information, hazard information, uses, risk management measures and other key regulatory changes of the product. Detailed explanation of the changes can be obtained upon request.

### Legend

|           |                                                                                                                                         |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------|
| ACGIH     | USA. ACGIH Threshold Limit Values (TLV)                                                                                                 |
| ACGIH BEI | ACGIH - Biological Exposure Indices (BEI)                                                                                               |
| CA AB OEL | Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)                                                                     |
| CA BC OEL | Canada. British Columbia OEL                                                                                                            |
| CA QC OEL | Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants |
| Dow IHG   | Dow Industrial Hygiene Guideline                                                                                                        |
| STEL      | short-term exposure limit                                                                                                               |
| STEV      | Short-term exposure value                                                                                                               |
| TWA       | Time weighted average                                                                                                                   |
| TWAEV     | Time-weighted average exposure value                                                                                                    |

### Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic

Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonised System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organisation; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardisation; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organisation for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

#### **Information Source and References**

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

DOW CHEMICAL CANADA ULC urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.

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