SAFETY DATA SHEET
THE DOW CHEMICAL COMPANY

Product name: UCARE™ Polymer JR-30M

Issue Date: 11/21/2025
Print Date: 11/22/2025

THE DOW CHEMICAL COMPANY 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.

1. IDENTIFICATION

Product name: UCARE™ Polymer JR-30M

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
THE DOW CHEMICAL COMPANY
2211 H.H. DOW WAY
MIDLAND MI 48674
UNITED STATES

Customer Information Number: 800-258-2436
SDSQuestion@dow.com

EMERGENCY TELEPHONE NUMBER
24-Hour Emergency Contact: CHEMTREC +1 800-424-9300
Local Emergency Contact: 800-424-9300

2. HAZARDS IDENTIFICATION

Hazard classification
GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)
Combustible dust

Label elements

Signal word: **WARNING!**
Hazards
May form combustible dust concentrations in air.

Other hazards
No data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture.

Component	CASRN	Concentration
Cationic hydroxyethyl cellulose-High Charge Density	68610-92-4	>= 88.0 - <= 96.0 %
Sodium acetate	127-09-3	>= 1.0 - <= 3.0 %
Sodium chloride	7647-14-5	>= 1.0 - <= 4.0 %
Water	7732-18-5	>= 0.0 - <= 5.6 %
Isopropanol	67-63-0	>= 0.02 - <= 1.0 %

4. FIRST AID MEASURES

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.

5. FIREFIGHTING MEASURES

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..

6. ACCIDENTAL RELEASE MEASURES

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. Avoid temperatures above 200°C (392°F) Avoid moisture.

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.

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		
	OSHA Z-1	TWA	980 mg/m3 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	
Physical state	Powder or granules
Color	White to off-white
Odor	Amine.
Odor Threshold	No test data available
pH	5 - 7 *Literature*
Melting point/ range	160 °C (320 °F) *Literature* Decomposes above
Freezing point	Not applicable to solids
Boiling point (760 mmHg)	Not applicable
Flash point	**closed cup** No test data available
Evaporation Rate (Butyl Acetate = 1)	Not applicable
Flammability (solid, gas)	May form combustible dust concentrations in air.
Lower explosion limit	No test data available
Upper explosion limit	No test data available
Vapor Pressure	Not applicable
Relative Vapor Density (air = 1)	No test data available
Relative Density (water = 1)	No test data available
Water solubility	soluble
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	320 °C (608 °F) *ASTM D1929*
Decomposition temperature	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 *Literature*
Molecular weight	200 - 800 kg/mol *Literature*

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

10. STABILITY AND REACTIVITY

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..

11. TOXICOLOGICAL INFORMATION

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 acetate
LD50, Rat, > 3,500 mg/kg

Sodium chloride
Excessive exposure may cause: Nausea and/or vomiting. LD50, Rat, > 3,550 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, 5,840 mg/kg OECD 401 or equivalent

ALD - Approximate Lethal Dose, Humans, 3.2 Ounces 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 acetate
LD50, Rabbit, > 10,000 mg/kg

Sodium chloride
LD50, Rabbit, 10,000 mg/kg

Isopropanol
LD50, Rabbit, > 12,800 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 acetate
LC50, Rat, 1 Hour, dust/mist, > 30 mg/l No deaths occurred at this concentration.

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

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 acetate
Prolonged exposure not likely to cause significant skin irritation.

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).

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 acetate
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.

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 acetate
A similar material 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.

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 acetate
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.

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

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

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.

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 acetate
No relevant data found.

Sodium chloride
Did not cause cancer in laboratory animals.

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

Sodium chloride
No relevant data found.

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

Sodium chloride
No relevant data found.

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

Sodium chloride
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.

12. ECOLOGICAL INFORMATION

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 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

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

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: Material has inherent, primary biodegradability according to OECD test (s) guidelines (reaches > 20% biodegradation in OECD test(s).

Biodegradation: 30.9 %
Exposure time: 70 d
Method: OECD Test Guideline 302B

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 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

Sodium chloride
Biodegradability: Biodegradability is not applicable to inorganic substances.

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 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

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

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 acetate
Partition coefficient (Koc): 1 Estimated.

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

Isopropanol
Partition coefficient (Koc): 1.1 Estimated.

13. DISPOSAL CONSIDERATIONS

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: Incinerator or other thermal destruction device.

14. TRANSPORT INFORMATION

DOT

Not regulated for transport

Classification for SEA transport (IMO-IMDG):

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(Cationic hydroxyethyl cellulose)

UN number	UN 3077
Class	9
Packing group	III
Marine pollutant	Cationic hydroxyethyl cellulose
Special precautions for user	EmS: F-A, S-F
Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code	Consult IMO regulations before transporting ocean bulk

Classification for AIR transport (IATA/ICAO):

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

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.

15. REGULATORY INFORMATION

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312
Combustible dust

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313
This product contains the following substances which are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and which are listed in 40 CFR 372.

Components	**CASRN**
Isopropanol	67-63-0

Pennsylvania Worker and Community Right-To-Know Act:
To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

California Prop. 65

This product contains a chemical that is at or below California Propositions 65's "safe harbor level" as determined via a risk assessment. Therefore, the chemical is not required to be listed as a Prop 65 chemical on the SDS or label.

United States TSCA Inventory (TSCA)
All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

16. OTHER INFORMATION

Revision
Identification Number: 165664 / A001 / Issue Date: 11/21/2025 / Version: 12.0

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)
Dow IHG	Dow Industrial Hygiene Guideline
OSHA Z-1	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
STEL	Short-term exposure limit
TWA	Time weighted average

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.