



SAFETY DATA SHEET

THE DOW CHEMICAL COMPANY

Product name: DEXCARE™ CD-2 Polymer

Issue Date: 11/02/2023

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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: DEXCARE™ CD-2 Polymer

Recommended use of the chemical and restrictions on use

Identified uses: Cosmetic products

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)

Not a hazardous substance or mixture.

Other hazards

No data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture.

Component

CASRN

Concentration

Water	7732-18-5	60.0 - 65.0 %
Dextran hydroxypropyltrimonium/laurdimonium chloride	83855-79-2	20.0 - 24.0 %
2,3 dihydroxypropyl trimethylammonium chloride	34004-36-9	0.0 - 6.0 %
Sodium acetate	127-09-3	0.0 - 2.0 %
Sodium chloride	7647-14-5	0.0 - 2.0 %

4. FIRST AID MEASURES

Description of first aid measures

General advice:

First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). 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. Suitable emergency eye wash facility should be available in work area.

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: Alcohol-resistant foam. Carbon dioxide (CO₂). Dry chemical. Water spray.

Unsuitable extinguishing media: None known..

Special hazards arising from the substance or mixture

Hazardous combustion products: No data available

Unusual Fire and Explosion Hazards: Exposure to combustion products may be a hazard to health..

Advice for firefighters

Fire Fighting Procedures: Use water spray to cool unopened containers.. Evacuate area.. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage.. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Remove undamaged containers from fire area if it is safe to do so.

Special protective equipment for firefighters: Wear self-contained breathing apparatus for firefighting if necessary.. Use personal protective equipment..

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Follow safe handling advice and personal protective equipment recommendations.

Environmental precautions: Do not release the product to the aquatic environment above defined regulatory levels. Prevent further leakage or spillage if safe to do so. Prevent spreading over a wide area (e.g. by containment or oil barriers). Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up: Soak up with inert absorbent material. Clean up remaining materials from spill with suitable absorbent. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable. For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container. See sections: 7, 8, 11, 12 and 13.

7. HANDLING AND STORAGE

Precautions for safe handling: Take care to prevent spills, waste and minimize release to the environment. Handle in accordance with good industrial hygiene and safety practice. CONTAINERS MAY BE HAZARDOUS WHEN EMPTY. Since emptied containers retain product residue follow all (M)SDS and label warnings even after container is emptied. Use only with adequate ventilation. See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

Conditions for safe storage: Keep in properly labelled containers. Do not store in: Aluminum. Carbon steel. Copper. Store in accordance with the particular national regulations.

Do not store with the following product types: Strong oxidizing agents.
Unsuitable materials for containers: None known.

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

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. If hands are cut or scratched, use gloves chemically resistant to this material even for brief exposures. Examples of preferred glove barrier materials include: Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl chloride ("PVC" or "vinyl"). Avoid gloves made of: Polyvinyl alcohol ("PVA"). 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, if discomfort is experienced, use an approved air-purifying respirator.

The following should be effective types of air-purifying respirators: Particulate filter.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state	Liquid.
Color	Yellow to brown
Odor	Amine
Odor Threshold	No data available
pH	5.0 - 7.0 2%
Melting point/range	Not applicable
Freezing point	estimated

Boiling point (760 mmHg)	100 °C (212 °F) at 760 hPa <i>estimated</i> (based on water)
Flash point	93.3 °C (199.9 °F) at 760 mmHg <i>open cup</i>
Evaporation Rate (Butyl Acetate = 1)	<i>Nil</i>
Flammability (solid, gas)	Not expected to form explosive dust-air mixtures.
Flammability (liquids)	Not expected to be a static-accumulating flammable liquid.
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Vapor Pressure	No data available
Relative Vapor Density (air = 1)	<i>No data available.</i>
Relative Density (water = 1)	1.12 at 25 °C (77 °F) <i>No data available.</i>
Water solubility	No data available
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	Not applicable
Decomposition temperature	No data available
Kinematic Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No test data available
Molecular weight	Not reported

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

10. STABILITY AND REACTIVITY

Reactivity: Not classified as a reactivity hazard.

Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions: Can react with strong oxidizing agents. Vapours may form explosive mixture with air.
Polymerization will not occur.

Conditions to avoid: None known.

Incompatible materials: Avoid contact with oxidizing materials. Strong oxidizers. Strong bases.

Hazardous decomposition products: No hazardous decomposition products are known..

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. Inhalation, Eye contact, Skin contact, Ingestion.

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.

As product: Single dose oral LD50 has not been determined.

Based on information for component(s):
LD50, > 5,000 mg/kg Estimated.

Information for components:

Dextran hydroxypropyltrimonium/laurdimonium chloride

Single dose oral LD50 has not been determined.

2,3 dihydroxypropyl trimethylammonium chloride

LD50, Rat, female, > 2,000 mg/kg

Sodium acetate

LD50, Rat, > 3,500 mg/kg

Sodium chloride

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

Acute dermal toxicity

Information for the Product:

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

As product: The dermal LD50 has not been determined.

Based on information for component(s):
LD50, > 2,000 mg/kg Estimated.

Information for components:

Dextran hydroxypropyltrimonium/laurdimonium chloride

The dermal LD50 has not been determined.

2,3 dihydroxypropyl trimethylammonium chloride

LD50, Rabbit, male, > 2,000 mg/kg

Sodium acetate

LD50, Rabbit, > 10,000 mg/kg

Sodium chloride

LD50, Rabbit, 10,000 mg/kg

Acute inhalation toxicity

Information for the Product:

No adverse effects expected from single exposure. Excessive exposure may cause irritation to upper respiratory tract (nose and throat).

As product: The LC50 has not been determined.

Information for components:

Dextran hydroxypropyltrimonium/laurdimonium chloride

The LC50 has not been determined.

2,3 dihydroxypropyl trimethylammonium chloride

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

Skin corrosion/irritation

Not classified based on available information.

Information for the Product:

Based on information for component(s):

Prolonged contact may cause slight skin irritation with local redness.

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

Information for components:

Dextran hydroxypropyltrimonium/laurdimonium chloride

No relevant data found.

2,3 dihydroxypropyl trimethylammonium chloride

Prolonged exposure not likely to cause significant skin irritation.

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).

Serious eye damage/eye irritation

Not classified based on available information.

Information for the Product:

Based on information for component(s):

May cause eye irritation.

May cause slight temporary corneal injury.

May cause pain disproportionate to the level of irritation to eye tissues.

Information for components:

Dextran hydroxypropyltrimonium/laurdimonium chloride

No relevant data found.

2,3 dihydroxypropyl trimethylammonium chloride

May cause slight temporary eye irritation.

Corneal injury is unlikely.

May cause pain disproportionate to the level of irritation to eye tissues.

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.

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:

Dextran hydroxypropyltrimonium/laurdimonium chloride

For skin sensitization:

No relevant data found.

For respiratory sensitization:

No relevant data found.

2,3 dihydroxypropyl trimethylammonium chloride

Did not demonstrate the potential for contact allergy in mice.

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.

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:

Dextran hydroxypropyltrimonium/laurdimonium chloride

Available data are inadequate to determine single exposure specific target organ toxicity.

2,3 dihydroxypropyl trimethylammonium chloride

Available data are inadequate to determine single exposure specific target organ toxicity.

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.

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:

Dextran hydroxypropyltrimonium/laurdimonium chloride

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

2,3 dihydroxypropyl trimethylammonium 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.

Sodium chloride

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

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:

Dextran hydroxypropyltrimonium/laurdimonium chloride

No relevant data found.

2,3 dihydroxypropyl trimethylammonium chloride

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

Other central nervous system effects.

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.

Carcinogenicity

Not classified based on available information.

Information for the Product:

Product test data not available.

Information for components:

Dextran hydroxypropyltrimonium/laurdimonium chloride

No relevant data found.

2,3 dihydroxypropyl trimethylammonium chloride

No relevant data found.

Sodium acetate

No relevant data found.

Sodium chloride

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:

Dextran hydroxypropyltrimonium/laurdimonium chloride

No relevant data found.

2,3 dihydroxypropyl trimethylammonium chloride

No relevant data found.

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.

Reproductive toxicity

Not classified based on available information.

Information for the Product:

Product test data not available.

Information for components:

Dextran hydroxypropyltrimonium/laurdimonium chloride

No relevant data found.

2,3 dihydroxypropyl trimethylammonium chloride

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.

Mutagenicity

Not classified based on available information.

Information for the Product:

Product test data not available.

Information for components:

Dextran hydroxypropyltrimonium/laurdimonium chloride

No relevant data found.

2,3 dihydroxypropyl trimethylammonium chloride

In vitro 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.

12. ECOLOGICAL INFORMATION

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

Toxicity

Dextran hydroxypropyltrimonium/laurdimonium chloride

Acute toxicity to aquatic invertebrates

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).

EC50, Daphnia magna (Water flea), Static, 48 Hour, 6.8 mg/l

2,3 dihydroxypropyl trimethylammonium 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, zebra fish (Brachydanio rerio), 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, 707 mg/l, OECD Test Guideline 202 or Equivalent

Acute toxicity to algae/aquatic plants

ErC50, Desmodesmus subspicatus (green algae), Cell multiplication inhibition test, 72 Hour, Growth rate inhibition, > 100 mg/l, OECD Test Guideline 201 or Equivalent

Toxicity to bacteria

IC50, Pseudomonas putida, Cell multiplication inhibition test, 17 Hour, Growth rate, > 94.4 mg/l, Method Not Specified.

Chronic toxicity to aquatic invertebrates

NOEC, Daphnia magna (Water flea), semi-static test, 21 d, survival, 5.34 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

Persistence and degradability**Dextran hydroxypropyltrimonium/laurdimonium chloride**

Biodegradability: Material has inherent, ultimate biodegradability according to OECD test (s) guidelines (reaches > 60 or 70% biodegradation in OECD test(s)).

Biodegradation: 70 %

Exposure time: 42 d

Method: OECD Test Guideline 302B

2,3 dihydroxypropyl trimethylammonium chloride

Biodegradability: Material has inherent, ultimate biodegradability according to OECD test (s) guidelines (reaches > 60 or 70% biodegradation in OECD test(s)).

10-day Window: Not applicable

Biodegradation: 100 %

Exposure time: 7 d

Method: OECD Test Guideline 302B or Equivalent

10-day Window: Fail

Biodegradation: 51 %

Exposure time: 28 d

Method: OECD Test Guideline 301B or Equivalent

Theoretical Oxygen Demand: 1.89 mg/mg

Biological oxygen demand (BOD)

Incubation Time	BOD
28 d	0 %

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.

Bioaccumulative potential

Dextran hydroxypropyltrimonium/laurdimonium chloride

Bioaccumulation: No relevant data found.

2,3 dihydroxypropyl trimethylammonium chloride

Bioaccumulation: No bioconcentration is expected because of the relatively high water solubility.

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.

Mobility in soil

Dextran hydroxypropyltrimonium/laurdimonium chloride

No relevant data found.

2,3 dihydroxypropyl trimethylammonium chloride

No relevant data found.

Sodium acetate

Partition coefficient (Koc): 1 Estimated.

Sodium chloride

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

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: Recycler. Reclaimer. Incinerator or other thermal destruction device. Landfill.

14. TRANSPORT INFORMATION

DOT

Not regulated for transport

Classification for SEA transport (IMO-IMDG):

Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Dextran hydroxypropyltrimonium/laurdimonium chloride)
UN number	UN 3082
Class	9
Packing group	III
Marine pollutant	Dextran hydroxypropyltrimonium/laurdimonium chloride
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, liquid, n.o.s.(Dextran hydroxypropyltrimonium/laurdimonium chloride)
UN number	UN 3082

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

No SARA Hazards

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

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 does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

United States TSCA Inventory (TSCA)

The product is used in a food, drug or cosmetic application and is subject to the applicable regulation. The product may only be used in the exempt application.

16. OTHER INFORMATION

Revision

Identification Number: 99210531 / A001 / Issue Date: 11/02/2023 / Version: 1.0

Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

Legend

Dow IHG	Dow Industrial Hygiene Guideline
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 Harmonized 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 Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; 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 - Organization 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.

THE DOW CHEMICAL COMPANY 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.

US