



SAFETY DATA SHEET

DOW CHEMICAL CANADA ULC

Product name: XIAMETER™ MEM-0039 Emulsion

Issue Date: 06/03/2024

Print Date: 06/04/2024

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.

1. IDENTIFICATION

Product name: XIAMETER™ MEM-0039 Emulsion

Other means of identification: No data available

Recommended use of the chemical and restrictions on use

Identified uses: Anti-set off and adhesive agents Additives

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

2. HAZARDS IDENTIFICATION

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).
Eye irritation - Category 2A

Label elements

Hazard pictograms



Signal word: **WARNING!**

Hazards

H319 Causes serious eye irritation.

Precautionary statements**Prevention**

P261 Avoid breathing spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear eye protection and/or face protection.

Response

P305 + P351 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
+ P338
P337 + P313 If eye irritation persists: Get medical advice and/or attention.

Other hazards

No data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature: Silicone emulsion

This product is a mixture.

Chemical name	Common name and synonym	CASRN	Concentration (w/w)
Poly(oxy-1,2-ethanediyl),alpha-(2-propylheptyl)-omega hydroxy	Poly(oxy-1,2-ethanediyl), .alpha.-(2-propylheptyl)-.omega.-hydroxy-	160875-66-1	>= 1.6 - <= 2.5 %
Octamethyl Cyclotetrasiloxane	octamethylcyclotetrasiloxane; D4	556-67-2	<= 0.066 %

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. Suitable emergency safety shower facility should be available in work area.

Eye contact: Immediately flush eyes with water; remove contact lenses, if present, after the first 5 minutes, then continue flushing eyes for at least 15 minutes. Obtain medical attention without delay, preferably from an ophthalmologist. Suitable emergency eye wash facility should be immediately available.

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

Most important symptoms and effects, both acute and delayed:

Causes serious eye irritation.

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: Carbon oxides. Silicon oxides.

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: In the event of fire, wear self-contained breathing apparatus.. Use personal protective equipment..

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. 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 absorbant. 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: Avoid inhalation of vapour or mist. Do not swallow. Do not get in eyes. Avoid prolonged or repeated contact with skin. 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. 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.

Consult local authorities for recommended exposure limits.

Component	Regulation	Type of listing	Value
Octamethyl Cyclotetrasiloxane	US WEEL	TWA	10 ppm

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 chemical goggles.

Skin protection

Hand protection: Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Butyl rubber. Natural rubber ("latex"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Ethyl vinyl alcohol laminate ("EVAL"). 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: Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

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 material is heated or sprayed, use an approved air-purifying respirator. The following should be effective types of air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state	liquid
Color	white
Odor	odourless
Odor Threshold	No data available
pH	6.5 - 6.8
Melting point/freezing point	
Melting point/range	No data available
Freezing point	No data available
Boiling point, initial boiling point and boiling range	
Boiling point (760 mmHg)	> 35 °C
Flash point	closed cup >101.1 °C
Evaporation Rate (Butyl Acetate = 1)	No data available
Flammability	
Flammability (solid, gas)	Not applicable
Flammability (liquids)	No data available
Upper/lower flammability or explosive limits	
Lower explosion limit	No data available
Upper explosion limit	No data available
Vapor Pressure	No data available
Relative vapour density	
Relative Vapor Density (air = 1)	No data available
Density and / or relative density	
Relative Density (water = 1)	1
Solubility(ies)	

Water solubility	No data available
Partition coefficient: n-octanol/water (log value)	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Dynamic Viscosity	< 100 mPa.s
Kinematic Viscosity	No data available
Explosive properties	Not explosive
Oxidizing properties	The substance or mixture is not classified as oxidizing.
Molecular weight	No data available
Particle characteristics	
Particle size	Not applicable

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. When heated to temperatures above 150 °C (300 °F) in the presence of air, trace quantities of formaldehyde may be released. Adequate ventilation is required.

Conditions to avoid: None known.

Incompatible materials: Avoid contact with oxidizing materials.

Hazardous decomposition products:

Decomposition products can include and are not limited to: Formaldehyde.

11. TOXICOLOGICAL INFORMATION

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

Information on likely routes of exposure

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:**Poly(oxy-1,2-ethanediyl),alpha-(2-propylheptyl)-omega hydroxy**

Single dose oral LD50 has not been determined.

For similar material(s): LD50, Rat, male and female, > 300 - < 2,000 mg/kg OECD
Test Guideline 423

Octamethyl Cyclotetrasiloxane

LD50, Rat, male, > 4,800 mg/kg No deaths occurred at this concentration.

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

Information for components:**Poly(oxy-1,2-ethanediyl),alpha-(2-propylheptyl)-omega hydroxy**

The dermal LD50 has not been determined.

Octamethyl Cyclotetrasiloxane

LD50, Rat, male and female, > 2,400 mg/kg No deaths occurred at this concentration.

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

Brief exposure (minutes) is not likely to cause adverse effects. Vapor from heated material or mist may cause respiratory irritation.

As product: The LC50 has not been determined.

Information for components:**Poly(oxy-1,2-ethanediyl),alpha-(2-propylheptyl)-omega hydroxy**

The LC50 has not been determined.

Octamethyl Cyclotetrasiloxane

LC50, Rat, male and female, 4 Hour, dust/mist, 36 mg/l OECD Test Guideline 403

Skin corrosion/irritation

Not classified based on available information.

Information for the Product:

Based on information for component(s):

Brief contact may cause slight skin irritation with local redness.

Prolonged or repeated exposure may cause defatting of the skin leading to drying or flaking of skin.

Information for components:

Poly(oxy-1,2-ethanediyl),alpha-(2-propylheptyl)-omega hydroxy

For similar material(s):

Brief contact may cause slight skin irritation with local redness.

Octamethyl Cyclotetrasiloxane

Brief contact is essentially nonirritating to skin.

Serious eye damage/eye irritation

Causes serious eye irritation.

Information for the Product:

Based on information for component(s):

May cause moderate eye irritation.

May cause corneal injury.

Information for components:

Poly(oxy-1,2-ethanediyl),alpha-(2-propylheptyl)-omega hydroxy

For similar material(s):

May cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness. Chemical burns may occur.

Octamethyl Cyclotetrasiloxane

Essentially nonirritating to 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:

Poly(oxy-1,2-ethanediyl),alpha-(2-propylheptyl)-omega hydroxy

For skin sensitization:
No relevant data found.

For respiratory sensitization:
No relevant data found.

Octamethyl Cyclotetrasiloxane

Did not cause allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:
No relevant data found.

Specific Target Organ Systemic Toxicity (Single Exposure)

Not classified based on available information.

Information for the Product:

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

Information for components:

Poly(oxy-1,2-ethanediyl),alpha-(2-propylheptyl)-omega hydroxy

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

Octamethyl Cyclotetrasiloxane

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:

Poly(oxy-1,2-ethanediyl),alpha-(2-propylheptyl)-omega hydroxy

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

Octamethyl Cyclotetrasiloxane

Material is not classified as an aspiration hazard based on insufficient data, however materials with low viscosity may be aspirated into the lungs during ingestion or vomiting.

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:

Contains component(s) which have been reported to cause effects on the following organs in animals:

Liver.

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

Information for components:**Poly(oxy-1,2-ethanediyl),alpha-(2-propylheptyl)-omega hydroxy**

No relevant data found.

Octamethyl Cyclotetrasiloxane

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

Kidney.

Liver.

Respiratory tract.

Female reproductive organs.

Carcinogenicity

Not classified based on available information.

Information for the Product:

No relevant data found.

Information for components:**Poly(oxy-1,2-ethanediyl),alpha-(2-propylheptyl)-omega hydroxy**

No relevant data found.

Octamethyl Cyclotetrasiloxane

Results from a 2 year repeated vapour inhalation exposure study to rats of octamethylcyclotetrasiloxane (D4) indicate effects (benign uterine adenomas) in the uterus of female animals. This finding occurred at the highest exposure dose (700 ppm) only. Studies to date have not demonstrated if these effects occur through pathways that are relevant to humans. Repeated exposure in rats to D4 resulted in protoporphyrin accumulation in the liver. Without knowledge of the specific mechanism leading to the protoporphyrin accumulation the relevance of this finding to humans is unknown.

Teratogenicity

Not classified based on available information.

Information for the Product:

No relevant data found.

Information for components:**Poly(oxy-1,2-ethanediyl),alpha-(2-propylheptyl)-omega hydroxy**

No relevant data found.

Octamethyl Cyclotetrasiloxane

Did not cause birth defects or any other fetal effects in laboratory animals.

Reproductive toxicity

Not classified based on available information.

Information for the Product:

No relevant data found.

Information for components:**Poly(oxy-1,2-ethanediyl),alpha-(2-propylheptyl)-omega hydroxy**

No relevant data found.

Octamethyl Cyclotetrasiloxane

In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals. In animal studies, has been shown to interfere with fertility.

Mutagenicity

Not classified based on available information.

Information for the Product:

Based on information for component(s): In vitro genetic toxicity studies were predominantly negative. Animal genetic toxicity studies were negative.

Information for components:**Poly(oxy-1,2-ethanediyl),alpha-(2-propylheptyl)-omega hydroxy**

No relevant data found.

Octamethyl Cyclotetrasiloxane

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**Poly(oxy-1,2-ethanediyl),alpha-(2-propylheptyl)-omega hydroxy**

Acute toxicity to aquatic invertebrates

Material is slightly toxic to aquatic organisms on an acute basis (LC50/EC50 between 10 and 100 mg/L in the most sensitive species tested).

For similar material(s):

EC50, *Daphnia magna* (Water flea), 48 Hour, > 10 - 100 mg/l, OECD Test Guideline 202

Acute toxicity to algae/aquatic plants

For similar material(s):

EC50, *Algae* (*Scenedesmus subspicatus*), 72 Hour, > 10 - 100 mg/l

Chronic toxicity to fish

For similar material(s):

NOEC, Fish, > 1 mg/l

Octamethyl Cyclotetrasiloxane

Acute toxicity to fish

Not expected to be acutely toxic to aquatic organisms.

No toxicity at the limit of solubility

LC50, *Oncorhynchus mykiss* (rainbow trout), flow-through, 96 Hour, > 0.022 mg/l

No toxicity at the limit of solubility

LC50, *Cyprinodon variegatus* (sheepshead minnow), flow-through, 14 d, > 0.0063 mg/l

Acute toxicity to aquatic invertebrates

No toxicity at the limit of solubility

EC50, *Mysidopsis bahia* (opossum shrimp), flow-through test, 96 Hour, > 0.0091 mg/l

No toxicity at the limit of solubility

EC50, *Daphnia magna* (Water flea), flow-through test, 48 Hour, > 0.015 mg/l

Acute toxicity to algae/aquatic plants

No toxicity at the limit of solubility

ErC50, *Pseudokirchneriella subcapitata* (green algae), 96 Hour, Growth rate, > 0.022 mg/l

No toxicity at the limit of solubility

EC10, *Pseudokirchneriella subcapitata* (green algae), 96 Hour, Growth rate, >= 0.022 mg/l

Chronic toxicity to fish

No toxicity at the limit of solubility

NOEC, *Oncorhynchus mykiss* (rainbow trout), 93 d, growth, >= 0.0044 mg/l

Chronic toxicity to aquatic invertebrates

NOEC, *Daphnia magna* (Water flea), 21 d, survival, 0.0079 mg/l

Persistence and degradability

Poly(oxy-1,2-ethanediyl),alpha-(2-propylheptyl)-omega hydroxy

Biodegradability: Material is expected to be readily biodegradable.

For similar material(s):

Biodegradation: > 60 %

Exposure time: 28 d

Method: OECD Test Guideline 301B

Octamethyl Cyclotetrasiloxane

Biodegradability: Material is expected to biodegrade very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.

10-day Window: Not applicable

Biodegradation: 3.7 %

Exposure time: 28 d

Method: OECD Test Guideline 310

Stability in Water (1/2-life)

Hydrolysis, DT50, 3.9 d, pH 7, Half-life Temperature 25 °C, OECD Test Guideline 111

Hydrolysis, DT50, 16.7 d, pH 7, Half-life Temperature 12 °C, OECD Test Guideline 111

Hydrolysis, DT50, 0.075 d, pH 4, Half-life Temperature 25 °C, OECD Test Guideline 111

Photodegradation

Atmospheric half-life: 16 d

Method: Estimated.

Bioaccumulative potential

Poly(oxy-1,2-ethanediyl),alpha-(2-propylheptyl)-omega hydroxy

Bioaccumulation: Bioaccumulation is unlikely. No relevant data found.

Octamethyl Cyclotetrasiloxane

Bioaccumulation: Bioconcentration potential is high (BCF > 3000 or Log Pow between 5 and 7).

Partition coefficient: n-octanol/water(log Pow): 6.49 Measured

Bioconcentration factor (BCF): 12,400 Pimephales promelas (fathead minnow) Measured

Mobility in soil

Poly(oxy-1,2-ethanediyl),alpha-(2-propylheptyl)-omega hydroxy

No relevant data found.

Octamethyl Cyclotetrasiloxane

Partition coefficient (Koc): 16596 OECD Test Guideline 106

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. For additional information, refer to: Handling & Storage Information, MSDS Section 7 Stability & Reactivity Information, MSDS Section 10 Regulatory Information, MSDS Section 15

Treatment and disposal methods of used packaging: Empty containers should be recycled or otherwise disposed of by an approved waste management facility. Waste characterizations and compliance with applicable laws are the responsibility of the waste generator. Do not re-use containers for any purpose.

14. TRANSPORT INFORMATION

TDG

Not regulated for transport

Classification for SEA transport (IMO-IMDG):

**Transport in bulk
according to Annex I or II
of MARPOL 73/78 and the
IBC or IGC Code**

Not regulated for transport
Consult IMO regulations before transporting ocean bulk

Classification for AIR transport (IATA/ICAO):

Not regulated for transport

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

Canadian Domestic Substances List (DSL)

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

16. OTHER INFORMATION

Revision

Identification Number: 4088823 / A208 / Issue Date: 06/03/2024 / Version: 9.0

In case this version of the SDS contains significant changes from the previous version, they are listed below. If no significant changes are displayed, then no significant changes occurred.

- 2. HAZARDS IDENTIFICATION/Hazards
- 2. HAZARDS IDENTIFICATION/Precautionary statements
- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 9. PHYSICAL AND CHEMICAL PROPERTIES/Melting point/range
- 9. PHYSICAL AND CHEMICAL PROPERTIES/Freezing point

- 9. PHYSICAL AND CHEMICAL PROPERTIES/Boiling point (760 mmHg)
- 9. PHYSICAL AND CHEMICAL PROPERTIES/Flash point
- 9. PHYSICAL AND CHEMICAL PROPERTIES/Flammability (liquids)
- 9. PHYSICAL AND CHEMICAL PROPERTIES/Relative Density (water = 1)
- 9. PHYSICAL AND CHEMICAL PROPERTIES/Water solubility
- 9. PHYSICAL AND CHEMICAL PROPERTIES/Oxidizing properties
- 9. PHYSICAL AND CHEMICAL PROPERTIES/Molecular weight
- 11. TOXICOLOGICAL INFORMATION/Acute oral toxicity
- 11. TOXICOLOGICAL INFORMATION/Aspiration Hazard
- 12. ECOLOGICAL INFORMATION/Toxicity
- 12. ECOLOGICAL INFORMATION/Bioaccumulative potential

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

TWA	8-hr TWA
US WEEL	USA. Workplace Environmental Exposure Levels (WEEL)

Full text of other abbreviations

AIIIC - 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.

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.

CA