SAFETY DATA SHEET
DOW CHEMICAL CANADA ULC

Product name: VERSENE™ 100 Chelating Agent **Issue Date:** 08/28/2025
Print Date: 08/29/2025

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

1. IDENTIFICATION

Product name: VERSENE™ 100 Chelating Agent

Other means of identification: EDTA

Recommended use of the chemical and restrictions on use
Identified uses: A chelating agent - For industrial use only. We recommend that you use this product in a manner consistent with the listed use. If your intended use is not consistent with the stated use, please contact your sales or technical service representative.

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

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

EMERGENCY TELEPHONE NUMBER
24-Hour Emergency Contact (transportation emergencies only): 1-800-424-9300
Local Emergency Contact (transportation emergencies only): 1-800-424-9300
24-Hour Emergency Contact: 1-989-636-4400

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).
Corrosive to metals - Category 1
Acute toxicity - Category 4 - Inhalation
Skin irritation - Category 2
Serious eye damage - Category 1
Specific target organ toxicity - repeated exposure - Category 2 - Inhalation

Label elements
Hazard pictograms

Signal word: **DANGER!**

Hazards

H290	May be corrosive to metals.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H373	May cause damage to organs (Respiratory Tract) through prolonged or repeated exposure if inhaled.

Precautionary statements

Prevention

P234	Keep only in original packaging.
P260	Do not breathe mist or vapours.
P264	Wash skin thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves, eye protection and face protection.

Response

P302 + P352	IF ON SKIN: Wash with plenty of water.
P304 + P340 + P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a doctor if you feel unwell.
P305 + P351 + P338 + P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER.
P314	Get medical attention if you feel unwell.
P332 + P313	If skin irritation occurs: Get medical attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P390	Absorb spillage to prevent material damage.

Disposal

P501	Dispose of contents and container to an approved waste disposal plant.

Other hazards

No data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: EDTA

This product is a substance.

Chemical name	Common name and synonym	CASRN	Concentration (w/w)

Water	Water	7732-18-5	56.0%
Tetrasodium ethylenediamine tetraacetate	Tetrasodium ethylenediamine tetraacetate	64-02-8	>= 37.0 - < 39.0 %
Sodium hydroxyacetate	Glycolic acid sodium salt	2836-32-0	3.0%
Sodium hydroxide	sodium hydroxide	1310-73-2	> 1.0 - < 1.6 %
Trisodium nitrilotriacetate	trisodium nitrilotriacetate	5064-31-3	>= 0.1 - < 1.0 %

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. If not breathing, give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask, etc). If breathing is difficult, oxygen should be administered by qualified personnel. Call a physician or transport to a medical facility.

Skin contact: Wash off with plenty of water.

Eye contact: Wash immediately and continuously with flowing water for at least 30 minutes. Remove contact lenses after the first 5 minutes and continue washing. Obtain prompt medical consultation, preferably from an ophthalmologist. Suitable emergency eye wash facility should be immediately available.

Ingestion: Do not induce vomiting. Give one cup (8 ounces or 240 ml) of water or milk if available and transport to a medical facility. Do not give anything by mouth unless the person is fully conscious.

Most important symptoms and effects, both acute and delayed:
Causes skin irritation. Causes serious eye damage. Harmful if inhaled. May cause damage to organs through prolonged or repeated exposure if inhaled.

Indication of any immediate medical attention and special treatment needed
Notes to physician: Maintain adequate ventilation and oxygenation of the patient. Chemical eye burns may require extended irrigation. Obtain prompt consultation, preferably from an ophthalmologist. If burn is present, treat as any thermal burn, after decontamination. Due to irritant properties, swallowing may result in burns and/or ulceration of mouth, stomach and lower gastrointestinal tract with subsequent stricture. Aspiration of vomitus may cause lung injury. Suggest endotracheal or esophageal control if lavage is done. 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: To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam..

Unsuitable extinguishing media: No data available

Special hazards arising from the substance or mixture

Hazardous combustion products: Under fire conditions some components of this product may decompose. The smoke may contain unidentified toxic and/or irritating compounds.. Combustion products may include and are not limited to:. Nitrogen oxides.. Carbon monoxide.. Carbon dioxide..

Unusual Fire and Explosion Hazards: This material will not burn until the water has evaporated. Residue can burn..

Advice for firefighters

Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry.. To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam..

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).. Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location.. For protective equipment in post-fire or non-fire clean-up situations, see Section 8 of the safety data sheet..

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
Evacuate area. Keep upwind of spill. Ventilate area of leak or spill. Only trained and properly protected personnel must be involved in clean-up operations. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection. Refer to section 7, Handling, for additional precautionary measures.

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: Small spills: Contain spilled material if possible. Absorb with materials such as: Non-combustible material. Collect in suitable and properly labeled containers. Large spills: Dike area to contain spill. Wash the spill site with water. See Section 13, Disposal Considerations, for additional information.

7. HANDLING AND STORAGE

Precautions for safe handling: Do not get in eyes. Do not swallow. Avoid breathing vapor. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Keep container closed. Use with adequate ventilation. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

Conditions for safe storage: Store in accordance with good manufacturing practices. Do not store in: Opened or unlabeled containers. Zinc. Aluminum. Aluminum alloys. Copper. Copper alloys. Galvanized containers. Nickel. Store in original unopened container. See Section 10 for more specific information. Additional storage and handling information on this product may be obtained by calling your sales or customer service contact.

Storage stability

Storage temperature:	Shelf life: Use within
-17.8 - 48.9 °C	24 Month

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

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

Consult local authorities for recommended exposure limits.

Component	Regulation	Type of listing	Value
Sodium hydroxide	ACGIH	C	2 mg/m3
	CA AB OEL	(c)	2 mg/m3
	Further information: 3: Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required		
	CA BC OEL	C	2 mg/m3
	CA QC OEL	C	2 mg/m3

Exposure controls

Engineering controls: Use engineering controls to maintain airborne level below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use only with adequate ventilation. 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: Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl chloride ("PVC" or "vinyl"). 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: 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, use an approved respirator. Selection of air-purifying or positive-pressure supplied-air will depend on the specific operation and the potential airborne concentration of the material. For emergency conditions, use an approved positive-pressure self-contained breathing apparatus.
The following should be effective types of air-purifying respirators: Particulate filter.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	
Physical state	Liquid.
Color	Colorless to yellow
Odor	Mild
Odor Threshold	No test data available
pH	11.0 - 11.8 *Literature* 1% aqueous solution.
Melting point/freezing point	
Melting point/ range	Not applicable to liquids
Freezing point	-25 °C *Literature*
Boiling point, initial boiling point and boiling range	
Boiling point (760 mmHg)	106 °C *Literature*
Flash point	**closed cup** No measurable flash point, Pensky-Martens Closed Cup ASTM D 93
Evaporation Rate (Butyl Acetate = 1)	< 0.8 *Estimated.*
Flammability	
Flammability (solid, gas)	Not applicable to liquids
Flammability (liquids)	Not expected to be a static-accumulating flammable liquid.
Upper/lower flammability or explosive limits	
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Vapor Pressure	Same as water
Relative vapour density	
Relative Vapor Density (air = 1)	Same as water
Density and / or relative density	
Relative Density (water = 1)	1.31 at 25 °C / 25 °C *Literature*
Solubility(ies)	
Water solubility	completely miscible with water
Partition coefficient: n-octanol/water (log value)	No data available
Auto-ignition temperature	Not applicable
Decomposition temperature	No test data available
Kinematic Viscosity	20 cSt at 20 °C *Literature*
Explosive properties	Not explosive
Oxidizing properties	No

Molecular weight	380.2 g/mol *Literature*
Percent volatility	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: No data available

Chemical stability: Stable under recommended storage conditions. See Storage, Section 7.

Possibility of hazardous reactions: Polymerization will not occur.

Conditions to avoid: Some components of this product can decompose at elevated temperatures.

Incompatible materials: Avoid contact with metals such as: Aluminum alloys. Copper. Copper alloys. Nickel. Flammable hydrogen may be generated from contact with metals such as: Zinc. Aluminum.

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:
Harmful if inhaled.

Acute oral toxicity

Information for the Product:

Low toxicity if swallowed. Swallowing may result in gastrointestinal irritation or ulceration. Swallowing may result in burns of the mouth and throat.

Based on product testing:
LD50, Rat, 3,030 mg/kg

Information for components:

Tetrasodium ethylenediamine tetraacetate
LD50, Rat, > 1,780 - < 2,000 mg/kg

Sodium hydroxyacetate
LD50, Cat, 500 mg/kg

Sodium hydroxide
Oral LD50 has not been determined due to corrosivity.

Trisodium nitrilotriacetate
LD50, Rat, > 500 mg/kg

Acute dermal toxicity

Information for the Product:

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

Based on product testing:
LD50, Rabbit, > 5,000 mg/kg

Information for components:

Tetrasodium ethylenediamine tetraacetate
LD50, Rabbit, > 5,000 mg/kg

Sodium hydroxyacetate
The dermal LD50 has not been determined.

Sodium hydroxide
The dermal LD50 has not been determined.

Trisodium nitrilotriacetate
LD50, Rabbit, 10,000 mg/kg

Acute inhalation toxicity

Information for the Product:

Vapors are primarily water; single exposure is not likely to be hazardous. Prolonged excessive exposure to mist may cause serious adverse effects, even death. Mist may cause irritation of upper respiratory tract (nose and throat).

As product: The LC50 has not been determined.

Information for components:

Tetrasodium ethylenediamine tetraacetate
The LC50 has not been determined.

Sodium hydroxyacetate
As product: The LC50 has not been determined.

Sodium hydroxide

The LC50 has not been determined.

Trisodium nitrilotriacetate
LC50, Rat, 4 Hour, dust/mist, > 2.5 mg/l

Skin corrosion/irritation

Causes skin irritation.

Information for the Product:

Based on product testing:
Prolonged contact may cause skin irritation with local redness.
Repeated contact may cause skin burns. Symptoms may include pain, severe local redness, swelling, and tissue damage.
May cause more severe response if skin is abraded (scratched or cut).
May cause more severe response on covered skin (under clothing, gloves).
Mist may cause skin irritation.
Not classified as corrosive to the skin according to DOT guidelines.

Information for components:

Tetrasodium ethylenediamine tetraacetate
Essentially nonirritating to skin.
May cause more severe response if skin is abraded (scratched or cut).
May cause more severe response if skin is damp.

Sodium hydroxyacetate
Brief contact is essentially nonirritating to skin.

Sodium hydroxide
Brief contact may cause severe skin burns. Symptoms may include pain, severe local redness and tissue damage.

Trisodium nitrilotriacetate
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

Causes serious eye damage.

Information for the Product:

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

Information for components:

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

Sodium hydroxyacetate
May cause slight eye irritation.
Corneal injury is unlikely.

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

Trisodium nitrilotriacetate
May cause pain disproportionate to the level of irritation to eye tissues.
Solid.
May cause slight eye irritation.
May cause slight corneal injury.
Dust may irritate eyes.
For solutions:
May cause severe eye irritation.
May cause corneal injury.

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:

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

No signs of respiratory sensitization have been reported.

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

For respiratory sensitization:
No relevant data found.

Sodium hydroxide
Did not cause allergic skin reactions when tested in humans.

For respiratory sensitization:
No relevant data found.

Trisodium nitrilotriacetate
For respiratory sensitization:
Relevant data not available.

Did not cause allergic skin reactions when tested in humans.

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:

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

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

Sodium hydroxide
Material is corrosive. Material is not classified as a respiratory irritant; however, upper respiratory tract irritation or corrosivity may be expected.

Trisodium nitrilotriacetate
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 available information, aspiration hazard could not be determined.

Information for components:

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

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

Sodium hydroxide
Aspiration into the respiratory system may occur during ingestion or vomiting. Due to corrosivity, tissue damage or lung injury may occur.

Trisodium nitrilotriacetate
Based on available information, aspiration hazard could not be determined.

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)

May cause damage to organs (Respiratory Tract) through prolonged or repeated exposure if inhaled.

Information for the Product:

Product test data not available.

Information for components:

Tetrasodium ethylenediamine tetraacetate
Based on information for a similar material:
In animals, effects have been reported on the following organs:
Respiratory tract.

Sodium hydroxyacetate
In animals, effects have been reported on the following organs:
Kidney.
In animals, has been shown to cause deposition of calcium salts in various urinary tract tissues.

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

Trisodium nitrilotriacetate
In animals, effects have been reported on the following organs:
Urinary tract.
Repeated excessive exposures may alter concentrations of metals in the body.

Carcinogenicity

Not classified based on available information.

Information for the Product:

Product test data not available.

Information for components:

Tetrasodium ethylenediamine tetraacetate
The trisodium salt of EDTA did not cause cancer in laboratory animals. Although large dietary doses of NTA have caused urinary tumors in laboratory animals, there is little likelihood that NTA could cause cancer in humans, especially at subtoxic doses.

Sodium hydroxyacetate
No relevant data found.

Sodium hydroxide
No relevant data found.

Trisodium nitrilotriacetate
Large dietary doses have caused urinary tract tumors in laboratory animals. There is no evidence that these findings are relevant to humans.

Carcinogenicity

Component	List	Classification
Trisodium nitrilotriacetate	IARC	Group 2B: Possibly carcinogenic to humans

Teratogenicity

Not classified based on available information.

Information for the Product:

Product test data not available.

Information for components:

Tetrasodium ethylenediamine tetraacetate
EDTA and its sodium salts have been reported to cause birth defects in laboratory animals only at exaggerated doses that were toxic to the mother. These effects are likely associated with zinc deficiency due to chelation.

Sodium hydroxyacetate
No relevant data found.

Sodium hydroxide
No relevant data found.

Trisodium nitrilotriacetate
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:

Product test data not available.

Information for components:

Tetrasodium ethylenediamine tetraacetate
For similar material(s): Limited data in laboratory animals suggest that the material does not affect reproduction.

Sodium hydroxyacetate
No relevant data found.

Sodium hydroxide
No relevant data found.

Trisodium nitrilotriacetate
In animal studies, did not interfere with reproduction.

Mutagenicity

Not classified based on available information.

Information for the Product:

Product test data not available.

Information for components:

Tetrasodium ethylenediamine tetraacetate
Most data indicate that EDTA and its salts are not mutagenic. Minimal effects reported are likely due to trace metal deficiencies resulting from chelating by EDTA.

Sodium hydroxyacetate
No relevant data found.

Sodium hydroxide
In vitro genetic toxicity studies were negative.

Trisodium nitrilotriacetate
In vitro genetic toxicity studies were negative in some cases and positive in other cases. Animal genetic toxicity studies were predominantly 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 practically non-toxic to fish on an acute basis (LC50 > 100 mg/L).

LC50, Pimephales promelas (fathead minnow), 96 Hour, > 100 mg/l

LC50, Lepomis macrochirus (Bluegill sunfish), 96 Hour, 157 - 2,070 mg/l

Information for components:

Tetrasodium ethylenediamine tetraacetate
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), static test, 96 Hour, 1,592 mg/l, Other guidelines

Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), 24 Hour, 610 - 1,033 mg/l, OECD Test Guideline 202 or Equivalent

Acute toxicity to algae/aquatic plants
EC50, Pseudokirchneriella subcapitata (green algae), static test, 72 Hour, Growth rate inhibition, > 100 mg/l, OECD Test Guideline 201 or Equivalent

Chronic toxicity to fish
NOEC, Danio rerio (zebra fish), flow-through test, 35 d, Other, > 25.7 mg/l

Chronic toxicity to aquatic invertebrates
NOEC, Daphnia magna (Water flea), semi-static test, 21 d, number of offspring, 25 mg/l

Sodium hydroxyacetate
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).
For similar material(s):
EC50, Danio rerio (zebra fish), 96 Hour, > 100 mg/l, OECD Test Guideline 203

Acute toxicity to aquatic invertebrates
Based on data from similar materials
EC50, Daphnia magna (Water flea), 48 Hour, > 100 mg/l, OECD Test Guideline 202

Acute toxicity to algae/aquatic plants
Based on data from similar materials
ErC50, Skeletonema costatum (marine diatom), 72 Hour, > 100 mg/l
Based on data from similar materials
NOEC, Skeletonema costatum (marine diatom), 72 Hour, > 1 mg/l

Toxicity to bacteria
Based on data from similar materials
EC50, Pseudomonas putida, 16 Hour, > 1,000 mg/l, DIN 38 412 Part 8

Sodium hydroxide
Acute toxicity to fish
May increase pH of aquatic systems to > pH 10 which may be toxic to aquatic organisms.

Trisodium nitrilotriacetate
Acute toxicity to fish
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).
LC50, Pimephales promelas (fathead minnow), flow-through test, 96 Hour, 103 mg/l, Method Not Specified.

Acute toxicity to aquatic invertebrates
LC50, scud Gammarus sp., flow-through test, 96 Hour, 80 mg/l

Acute toxicity to algae/aquatic plants
ErC50, Desmodesmus subspicatus (green algae), static test, 72 Hour, Growth rate inhibition, > 91.5 mg/l, OECD Test Guideline 201 or Equivalent

Toxicity to bacteria
EC50, Pseudomonas fluorescens, Cell multiplication inhibition test, 8 Hour, 3,200 - 5,600 mg/l

Chronic toxicity to fish
NOEC, Pimephales promelas (fathead minnow), flow-through test, 229 d, mortality, 54 mg/l

Chronic toxicity to aquatic invertebrates
NOEC, scud Gammarus sp., flow-through test, 141 d, mortality, 9.3 mg/l

Persistence and degradability

Information for the Product:

Biodegradability:
Biodegradation under aerobic laboratory conditions is below detectable limits (BOD20 or BOD28/ThOD < 2.5%).

Theoretical Oxygen Demand: 1.31 mg/mg

Chemical Oxygen Demand: 0.19 - 0.28 mg/mg

Biological oxygen demand (BOD)

Incubation Time	BOD
5 d	15 %
10 d	15 %
20 d	15 %

Information for components:

Tetrasodium ethylenediamine tetraacetate
Biodegradability: Material is expected to biodegrade very slowly (in the environment). Fails to pass OECD/EEC tests 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: Not applicable
Biodegradation: 90 - 100 %
Exposure time: 28 d
Method: OECD Test Guideline 302A or Equivalent
10-day Window: Fail
Biodegradation: 10 %
Exposure time: 28 d
Method: OECD Test Guideline 301E or Equivalent
10-day Window: Not applicable
Biodegradation: 0 - 10 %
Exposure time: 28 d
Method: OECD Test Guideline 302B or Equivalent

Theoretical Oxygen Demand: 1.05 mg/mg

Sodium hydroxyacetate
Biodegradability: For similar material(s): Material is expected to be readily biodegradable.

Theoretical Oxygen Demand: 0.49 mg/mg

Photodegradation
Test Type: Half-life (indirect photolysis)
Sensitization: OH radicals
Atmospheric half-life: 9.3 d
Method: Estimated.

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

Trisodium nitrilotriacetate
Biodegradability:
Material has inherent, ultimate biodegradability according to OECD test (s) guidelines (reaches > 60 or 70% biodegradation in OECD test(s).
Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.
10-day Window: Pass
Biodegradation: 100 %
Exposure time: 14 d
Method: OECD Test Guideline 301E or Equivalent
10-day Window: Not applicable
Biodegradation: 96 %
Exposure time: 28 d
Method: OECD Test Guideline 302B or Equivalent

Biological oxygen demand (BOD)

Incubation Time	BOD
5 d	59 %
20 d	91 %

Photodegradation
Sensitization: OH radicals
Atmospheric half-life: 0.144 d
Method: Estimated.

Bioaccumulative potential

Information for the Product:

Bioaccumulation: Based on information for a similar material: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Information for components:

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

Partition coefficient: n-octanol/water(log Pow): -3.86 Estimated.
Bioconcentration factor (BCF): 1 - 2 Lepomis macrochirus (Bluegill sunfish) 28 d Measured

Sodium hydroxyacetate
Bioaccumulation: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).
Partition coefficient: n-octanol/water(log Pow): -5.19 Estimated.
Bioconcentration factor (BCF): 3.2 Fish Estimated.

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

Trisodium nitrilotriacetate
Bioaccumulation: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).
Partition coefficient: n-octanol/water(log Pow): -13.2 Estimated.
Bioconcentration factor (BCF): 3.00 Fish Estimated.

Mobility in soil

Information for the Product:

Product test data not available.

Information for components:

Tetrasodium ethylenediamine tetraacetate
Partition coefficient (Koc): 1046 Estimated.

Sodium hydroxyacetate
Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process.
Partition coefficient (Koc): 1 Estimated.

Sodium hydroxide
Partition coefficient (Koc): 14 Estimated.

Trisodium nitrilotriacetate
Partition coefficient (Koc): 44.06

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.

14. TRANSPORT INFORMATION

TDG

Proper shipping name	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.(Sodium hydroxide, Tetrasodium ethylenediaminetetraacetate)
UN number	UN 3267
Class	8
Packing group	III

Classification for SEA transport (IMO-IMDG):

Proper shipping name	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.(Sodium hydroxide, Tetrasodium ethylenediaminetetraacetate)
UN number	UN 3267
Class	8
Packing group	III
Marine pollutant	No
Special precautions for user	EmS: F-A, S-B
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	Corrosive liquid, basic, organic, n.o.s.(Sodium hydroxide, Tetrasodium ethylenediaminetetraacetate)
UN number	UN 3267
Class	8
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

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

Hazard Rating System
NFPA

Health	Flammability	Instability
3	0	0

Revision
Identification Number: 40278 / A208 / Issue Date: 08/28/2025 / Version: 16.0

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

(c)	ceiling occupational exposure limit
ACGIH	USA. ACGIH Threshold Limit Values (TLV)
C	ceiling limit
CA AB OEL	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
CA BC OEL	Canada. British Columbia OEL
CA QC OEL	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants

Full text of other abbreviations
AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonised System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organisation; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardisation; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organisation for

Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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

DOW CHEMICAL CANADA ULC urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The informationherein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express orimplied, 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