SAFETY DATA SHEET

THE DOW CHEMICAL COMPANY

Product name: VERSENE™ 100 Chelating Agent **Issue Date:** 09/15/2020
Print Date: 03/01/2021

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: VERSENE™ 100 Chelating Agent

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
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 29 CFR 1910.1200
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
May be corrosive to metals.
Causes skin irritation.
Causes serious eye damage.
Harmful if inhaled.
May cause damage to organs (Respiratory Tract) through prolonged or repeated exposure if inhaled.

Precautionary statements

Prevention
Keep only in original container.
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Wash skin thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/ eye protection/ face protection.

Response
IF ON SKIN: Wash with plenty of soap and water.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
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/ doctor.
Get medical advice/ attention if you feel unwell.
If skin irritation occurs: Get medical advice/ attention.
Take off contaminated clothing and wash before reuse.
Absorb spillage to prevent material damage.

Storage
Store in corrosive resistant container with a resistant inner liner.

Disposal
Dispose of contents/ container to an approved waste disposal plant.

Other hazards
No data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: EDTA
This product is a substance.

Component	CASRN	Concentration

Water	7732-18-5	56.0%
Tetrasodium ethylenediamine tetraacetate	64-02-8	>= 37.0 - < 39.0 %
Sodium hydroxyacetate	2836-32-0	3.0%
Sodium hydroxide	1310-73-2	< 1.6 %
Trisodium nitrilotriacetate	5064-31-3	< 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:
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: 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 (-0.0 - 120.0 °F)	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.

Component	Regulation	Type of listing	Value
Sodium hydroxide	ACGIH	C	2 mg/m3
	OSHA Z-1	TWA	2 mg/m3
	OSHA P0	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: Natural rubber ("latex"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyethylene. 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, 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/range	Not applicable to liquids
Freezing point	-25 °C (-13 °F) *Literature*
Boiling point (760 mmHg)	106 °C (223 °F) *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 (solid, gas)	Not applicable to liquids
Flammability (liquids)	Not expected to be a static-accumulating flammable liquid.
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Vapor Pressure	Same as water
Relative Vapor Density (air = 1)	Same as water
Relative Density (water = 1)	1.31 at 25 °C (77 °F) / 25 °C *Literature*
Water solubility	completely miscible with water
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	Not applicable
Decomposition temperature	No test data available
Kinematic Viscosity	20 cSt at 20 °C (68 °F) *Literature*
Explosive properties	Not explosive
Oxidizing properties	No
Molecular weight	380.2 g/mol *Literature*
Percent volatility	No data available

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 is 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 oral toxicity
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
Single dose oral LD50 has not been determined.

Trisodium nitrilotriacetate
LD50, Rat, 1,300 mg/kg

Acute dermal toxicity
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
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
Dust may cause irritation to upper respiratory tract (nose and throat).

LD50, Rat, male, 4 Hour, dust/mist, > 5.0 mg/l No deaths occurred at this concentration.

Skin corrosion/irritation
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
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:
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)
Available data are inadequate to determine single exposure specific target organ toxicity.

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
Aspiration into the lungs may occur during ingestion or vomiting, causing tissue damage or lung injury.

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 lungs may occur during ingestion or vomiting, causing tissue damage or lung injury.

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)
For the minor component(s):
In animals, effects have been reported on the following organs:
Kidney.
Urinary tract.
Repeated excessive exposures may alter concentrations of metals in the body.
In animals, has been shown to cause deposition of calcium salts in various urinary tract tissues.

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

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
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. The trisodium salt of EDTA did not cause cancer in laboratory animals.

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
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.

Carcinogenicity

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

Teratogenicity
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.

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
No relevant data found.

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
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.

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 is available.

Toxicity

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

Persistence and degradability

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 %

Bioaccumulative potential

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

Mobility in soil

No relevant data found.

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 solely 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 MSDS SECTION: Composition Information. FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: Recycler. Reclaimer.

14. TRANSPORT INFORMATION

DOT

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
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

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312
Corrosive to metals
Acute toxicity (any route of exposure)
Specific target organ toxicity (single or repeated exposure)
Skin corrosion or irritation
Serious eye damage or eye irritation

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

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

16. OTHER INFORMATION

Hazard Rating System
NFPA

Health	Flammability	Instability
3	0	0

Revision
Identification Number: / A001 / Issue Date: 09/15/2020 / Version: 22.0
Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

Legend

ACGIH	USA. ACGIH Threshold Limit Values (TLV)
C	Ceiling limit
OSHA P0	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
OSHA Z-1	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
TWA	8-hour time weighted average

Full text of other abbreviations
AICS - Australian Inventory of Chemical Substances; 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; 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