



Material Safety Data Sheet

DOW CHEMICAL VIETNAM LLC

Product name: EcoSense™ 919 Surfactant

Issue Date: 08.05.2023

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DOW CHEMICAL VIETNAM LLC 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. PRODUCT AND COMPANY IDENTIFICATION

Product name: EcoSense™ 919 Surfactant

Recommended use of the chemical and restrictions on use

Identified uses: Multi-purpose surfactant. 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 VIETNAM LLC
UNIT 503, 5F, CENTRE POINT OFFICE BLDG
106 NGUYEN VAN TROI ST, WARD 8
PHU NHUAN DISTRICT
HO CHI MINH CITY
VIET NAM

Customer Information Number:

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SDSQuestion@dow.com

Fax:

84-28-3999-0009

EMERGENCY TELEPHONE NUMBER

24-Hour Emergency Contact: +84 28-3999-0007

Local Emergency Contact: 028-3999-0007

2. HAZARDS IDENTIFICATION

GHS Classification

Skin corrosion/irritation - Category 2

Serious eye damage/eye irritation - Category 1

Short-term (acute) aquatic hazard - Category 2

GHS label elements

Hazard pictograms



Signal word: **DANGER!**

Hazard statements

Causes skin irritation.
Causes serious eye damage.
Toxic to aquatic life.

Precautionary statements**Prevention**

Wash skin thoroughly after handling.
Avoid release to the environment.
Wear protective gloves/ eye protection/ face protection.

Response

IF ON SKIN: Wash with plenty of water.
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 and/or doctor.
If skin irritation occurs: Get medical advice/ attention.
Take off contaminated clothing and wash it before reuse.

Disposal

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

Other hazards

May form combustible dust concentrations in air.

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture.

Component	CASRN	Concentration
Water	7732-18-5	<= 50,0 %
D-Glucopyranose, Oligomeric, C10-16-Alkyl Glycosides	110615-47-9	>= 20,0 - <= 40,0 %
D-Glucopyranose, oligomeric, decyl octyl glycoside	68515-73-1	>= 10,0 - <= 30,0 %

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: No emergency medical treatment necessary.

Skin contact: Wash off with plenty of water. Suitable emergency safety shower facility should be available in work area.

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

Most important symptoms and effects, both acute and delayed:

Causes skin irritation. Causes serious eye damage.

Indication of any immediate medical attention and special treatment needed

Notes to physician: Chemical eye burns may require extended irrigation. Obtain prompt consultation, preferably from an ophthalmologist. 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:.. 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).. If protective equipment is not available or not used, fight fire from a protected location or safe distance..

6. ACCIDENTAL RELEASE MEASURES

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

Environmental precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

Methods and materials for containment and cleaning up: Contain spilled material if possible. Absorb with materials such as: Sand. Dirt. Collect in suitable and properly labeled containers. Do not use water for cleanup. See Section 13, Disposal Considerations, for additional information.

7. HANDLING AND STORAGE

Precautions for safe handling: Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION. Avoid breathing vapor. Use with adequate ventilation. Keep container closed.

Conditions for safe storage: No specific requirements. Additional storage and handling information on this product may be obtained by calling your sales or customer service contact.

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.

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.

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"). Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Polyvinyl chloride ("PVC" or "vinyl"). Examples of acceptable glove barrier materials include: Neoprene. 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: Under intended handling conditions, no respiratory protection should be needed.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state	liquid
Color	Yellow
Odor	Odorless to mild
Odor Threshold	No test data available
pH	11,5 - 12,5 <i>Vendor</i>
Melting point/range	Not applicable to liquids
Freezing point	No test data available
Boiling point (760 mmHg)	No test data available
Flash point	closed cup >100 °C <i>Vendor</i>
Evaporation Rate (Butyl Acetate = 1)	No test data available
Flammability (solid, gas)	Not Applicable
Flammability (liquids)	Not expected to be a static-accumulating flammable liquid.
Lower explosion limit	No test data available
Upper explosion limit	No test data available
Vapor Pressure	No test data available
Relative Vapor Density (air = 1)	No test data available
Relative Density (water = 1)	1,07 <i>Literature</i>
Water solubility	soluble
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No test data available
Decomposition temperature	No test data available
Kinematic Viscosity	2,000 - 3,000 cSt at 20 °C <i>Literature</i>
Explosive properties	No data available
Oxidizing properties	No data available
Molecular weight	No test 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: Strong oxidizers.

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.

Exposure routes

Ingestion, Inhalation, Skin contact, Eye contact.

Acute toxicity (represents short term exposures with immediate effects - no chronic/delayed effects known unless otherwise noted)

Acute Toxicity Endpoints:

Not classified based on available information.

Acute oral toxicity

Information for the Product:

Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

Typical for this family of materials.
LD50, Rat, > 5.000 mg/kg

Information for components:

D-Glucopyranose, Oligomeric, C10-16-Alkyl Glycosides

Rat, male and female, > 5.000 mg/kg

D-Glucopyranose, oligomeric, decyl octyl glycoside

Typical for this family of materials. LD50, Rat, > 3.000 mg/kg

Acute dermal toxicity

Information for the Product:

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

Typical for this family of materials.
LD50, Rat, > 5.000 mg/kg

Information for components:

D-Glucopyranose, Oligomeric, C10-16-Alkyl Glycosides

LD50, Rabbit, male and female, > 2.000 mg/kg OECD Test Guideline 402 No deaths occurred at this concentration.

D-Glucopyranose, oligomeric, decyl octyl glycoside

Typical for this family of materials. LD50, Rabbit, > 5.000 mg/kg

Acute inhalation toxicity

Information for the Product:

Vapors are primarily water; single exposure is not likely to be hazardous.

As product: The LC50 has not been determined.

Information for components:

D-Glucopyranose, Oligomeric, C10-16-Alkyl Glycosides

Prolonged excessive exposure may cause adverse effects. Excessive exposure may cause irritation to upper respiratory tract (nose and throat).

The LC50 has not been determined.

D-Glucopyranose, oligomeric, decyl octyl glycoside

The LC50 has not been determined.

Skin corrosion/irritation

Causes skin irritation.

Information for the Product:

Based on product testing:
Brief contact may cause slight skin irritation with local redness.

Information for components:

D-Glucopyranose, Oligomeric, C10-16-Alkyl Glycosides

Brief contact may cause moderate skin irritation with local redness.

D-Glucopyranose, oligomeric, decyl octyl glycoside

Brief contact may cause slight skin irritation with local redness.
Aqueous solutions may cause more severe effects including burns.

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:

D-Glucopyranose, Oligomeric, C10-16-Alkyl Glycosides

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

D-Glucopyranose, oligomeric, decyl octyl glycoside

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

Sensitization

For skin sensitization:

Not classified based on available information.

For respiratory sensitization:

Not classified based on available information.

Information for the Product:

For this family of materials:

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

For respiratory sensitization:

No relevant data found.

Information for components:

D-Glucopyranose, Oligomeric, C10-16-Alkyl Glycosides

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

For respiratory sensitization:

Relevant data not available.

D-Glucopyranose, oligomeric, decyl octyl glycoside

For skin sensitization:

No relevant data found.

For respiratory sensitization:

No relevant data found.

Specific Target Organ Systemic Toxicity (Single Exposure)

Not classified based on available information.

Information for the Product:

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

Information for components:

D-Glucopyranose, Oligomeric, C10-16-Alkyl Glycosides

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

D-Glucopyranose, oligomeric, decyl octyl glycoside

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

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:

D-Glucopyranose, Oligomeric, C10-16-Alkyl Glycosides

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

D-Glucopyranose, oligomeric, decyl octyl glycoside

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

Chronic toxicity (represents longer term exposures with repeated dose resulting in chronic/delayed effects - no immediate effects known unless otherwise noted)

Specific Target Organ Systemic Toxicity (Repeated Exposure)

Not classified based on available information.

Information for the Product:

For this family of materials:

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

Information for components:

D-Glucopyranose, Oligomeric, C10-16-Alkyl Glycosides

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

D-Glucopyranose, oligomeric, decyl octyl glycoside

For this family of materials:

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

Carcinogenicity

Not classified based on available information.

Information for the Product:

Product test data not available.

Information for components:

D-Glucopyranose, Oligomeric, C10-16-Alkyl Glycosides

Relevant data not available.

D-Glucopyranose, oligomeric, decyl octyl glycoside

No relevant data found.

Teratogenicity

Not classified based on available information.

Information for the Product:

For this family of materials: Did not cause birth defects or any other fetal effects in laboratory animals.

Information for components:

D-Glucopyranose, Oligomeric, C10-16-Alkyl Glycosides

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

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

D-Glucopyranose, oligomeric, decyl octyl glycoside

No relevant data found.

Reproductive toxicity

Not classified based on available information.

Information for the Product:

For this family of materials: In animal studies, did not interfere with reproduction.

Information for components:

D-Glucopyranose, Oligomeric, C10-16-Alkyl Glycosides

In animal studies, did not interfere with reproduction. In animal studies, did not interfere with fertility.

D-Glucopyranose, oligomeric, decyl octyl glycoside

No relevant data found.

Mutagenicity

Not classified based on available information.

Information for the Product:

For this family of materials: In vitro genetic toxicity studies were negative.

Information for components:

D-Glucopyranose, Oligomeric, C10-16-Alkyl Glycosides

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

D-Glucopyranose, oligomeric, decyl octyl glycoside

For this family of materials: In vitro genetic toxicity studies were negative.

12. ECOLOGICAL INFORMATION

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

Ecotoxicity**D-Glucopyranose, Oligomeric, C10-16-Alkyl Glycosides****Acute toxicity to fish**

Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested).

LC50, Zebra fish (Danio/Brachydanio rerio), semi-static test, 96 Hour, 5,9 mg/l

Acute toxicity to aquatic invertebrates

EC50, Daphnia (water flea), Static, 48 Hour, 14 mg/l

Acute toxicity to algae/aquatic plants

ErC50, Desmodesmus subspicatus (green algae), Static, 72 Hour, Growth rate, 25 mg/l

D-Glucopyranose, oligomeric, decyl octyl glycoside**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).

For this family of materials:

LC50, Zebra fish (Danio/Brachydanio rerio), 96 Hour, > 100 mg/l, Estimated.

Acute toxicity to aquatic invertebrates

For this family of materials:

EC50, Daphnia magna (Water flea), static test, 48 Hour, 150 mg/l, OECD Test Guideline 202 or Equivalent

Acute toxicity to algae/aquatic plants

For this family of materials:

ErC50, Desmodesmus subspicatus (green algae), 72 Hour, Growth rate inhibition, 37 mg/l, OECD Test Guideline 201 or Equivalent

Persistence and degradability**D-Glucopyranose, Oligomeric, C10-16-Alkyl Glycosides**

Biodegradability: Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

Biodegradation: > 60 %

Exposure time: 28 d

D-Glucopyranose, oligomeric, decyl octyl glycoside

Biodegradability: For this family of materials: Material is readily biodegradable. Passes OECD test(s) for ready biodegradability. Material is ultimately biodegradable under anaerobic conditions, according to the relevant OECD test(s).

10-day Window: Not applicable

Biodegradation: > 70 %

Exposure time: 28 d

Method: OECD Test Guideline 303A or Equivalent

10-day Window: Not applicable

Biodegradation: > 60 %

Exposure time: 28 d

Method: OECD Test Guideline 301F or Equivalent

10-day Window: Not applicable

Biodegradation: > 60 %

Exposure time: 35 d

Method: OECD 311 Test

Bioaccumulative potential

D-Glucopyranose, Oligomeric, C10-16-Alkyl Glycosides

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

Partition coefficient: n-octanol/water(log Pow): 1,72 Estimated.

D-Glucopyranose, oligomeric, decyl octyl glycoside

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

Partition coefficient: n-octanol/water(log Pow): Pow: 1,72 EU Method A.8 (Partition Coefficient)

Mobility in Soil

D-Glucopyranose, Oligomeric, C10-16-Alkyl Glycosides

No relevant data found.

D-Glucopyranose, oligomeric, decyl octyl glycoside

No relevant data found.

Results of PBT and vPvB assessment

D-Glucopyranose, Oligomeric, C10-16-Alkyl Glycosides

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

D-Glucopyranose, oligomeric, decyl octyl glycoside

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

Other adverse effects

D-Glucopyranose, Oligomeric, C10-16-Alkyl Glycosides

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

D-Glucopyranose, oligomeric, decyl octyl glycoside

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

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: Waste water treatment system.

14. TRANSPORT INFORMATION

Classification for ROAD and Rail transport:

Not regulated for transport

Classification for SEA transport (IMO-IMDG):

Not regulated for transport

**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):

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

Based on our best knowledge, following regulations provide the requirements on trading, safety use, transportation, labeling of chemicals in Vietnam:

Law No. 06/2007/QH12 on Chemicals, issued on November 21, 2007

Decree No. 113/2017/ND-CP, Specifying and Providing guidelines for implementation of certain articles of the Law on chemicals (issued October 09, 2017).

Decree 42/2020/ND-CP on prescribing the List of dangerous goods, the transportation of dangerous goods by land-road and domestic waterway (issued on April 08, 2020).

Decree No. 43/2017/ND-CP, on Labeling of Goods (issued on June 01, 2017).

Decree No. 111/2021/ND-CP, on amendments to some articles of Decree No. 43/2017/ND-CP on Labeling of Goods (issued on December 09, 2021).

It is recommended the customer to check in the location of use of this product whether it is specifically regulated for human perusal or veterinary applications, as food and pharmaceuticals additives or packaging, domissanitary, and cosmetics, or even as controlled agent recognized as precursor to drug, chemical weapons, and ammunition manufacture.

16. OTHER INFORMATION

Product Literature

Additional information on this product may be obtained by calling your sales or customer service contact. Ask for a product brochure.

Revision

Identification Number: 11016509 / A634 / Issue Date: 08.05.2023 / Version: 3.0

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

Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; 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; 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; IECS - 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; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; 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; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECL - 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; WHMIS - Workplace Hazardous Materials Information System

DOW CHEMICAL VIETNAM LLC 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.

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