

Safety Data Sheet

Triton™ X-100 Surfactant

Version 1.7

Revision Date: 11/13/2023

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Triton™ X-100 Surfactant

Recommended use of the chemical and restrictions on use

Recommended use : Surfactant

Supplier or Repackaging Details

Company : Univar Solutions USA
Address : 3075 Highland Pkwy Suite 200
 Downers Grove, IL 60515
 United States of America (USA)
Manufactured By : THE DOW CHEMICAL COMPANY

Emergency telephone number:

Transport North America: CHEMTREC (1-800-424-9300)

CHEMTREC INTERNATIONAL Tel # 703-527-3887

Additional Information: : Responsible Party: Product Compliance Department
 E-mail: SDSNA@univarsolutions.com
 SDS Requests: 1-855-429-2661
 Website: www.univarsolutions.com

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Acute toxicity (Oral) : Category 4

Serious eye damage : Category 1

GHS label elements

Hazard pictograms : 

Signal word : Danger

Hazard statements : H302 Harmful if swallowed.
 H318 Causes serious eye damage.

Precautionary statements : **Prevention:**
 P264 Wash skin thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P280 Wear eye protection/ face protection.
Response:
 P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
 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/ doctor.
Disposal:
 P501 Dispose of contents/ container to an approved waste disposal plant.

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Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

CAS-No.	Chemical name	Weight percent
9036-19-5	Polyethylene glycol mono(tert-octylph-enyl) ether	90 - 100
25322-68-3	Polyethylene glycol	1 - 5

Actual concentration is withheld as a trade secret

Any Concentration shown as a range is due to batch variation.

SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
Consult a physician.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
- If inhaled : If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.
Move to fresh air.
- In case of skin contact : If skin irritation persists, call a physician.
If on skin, rinse well with water.
If on clothes, remove clothes.
- In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
In case of contact, immediately flush eyes with plenty of water for at least 30 minutes.
Continue rinsing eyes during transport to hospital.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
Take victim immediately to hospital.
- If swallowed : Keep respiratory tract clear.
Do not induce vomiting without medical advice.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.
If accidentally swallowed obtain immediate medical attention.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Dry chemical
Carbon dioxide (CO2)

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Unsuitable extinguishing media	: Alcohol-resistant foam : High volume water jet
Specific hazards during fire-fighting	: Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	: Irritating fumes or substances may form. toxic fumes Carbon oxides Nitrogen oxides (NOx) Smoke
Further information	: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Special protective equipment for firefighters	: Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment.
Environmental precautions	: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	: Normal measures for preventive fire protection.
Advice on safe handling	: Do not breathe vapours/dust. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. To avoid spills during handling keep bottle on a metal tray. Dispose of rinse water in accordance with local and national regulations.
Conditions for safe storage	: Keep container tightly closed in a dry and well-ventilated place. Electrical installations / working materials must comply with the technological safety standards.
Storage period	: 24 Months

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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

CAS-No.	Components	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
25322-68-3	Polyethylene glycol	TWA	10 mg/m ³	US WEEL
		TWA (aerosol)	10 mg/m ³	US WEEL

Personal protective equipment

Respiratory protection : General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

Hand protection

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : yellow

Odour : mild

Odour Threshold : No data available

pH : Calculated 6 @ 5 % @ 20 - 25 °C (68 - 77 °F)
(as aqueous solution)

Freezing Point (Pour point) : Calculated 2 °C (36 °F)

Boiling Point (Boiling point/boiling range) : Calculated > 200 °C (> 392 °F)
(1013 hPa)

Flash point : 251 °C (484 °F)
Method: ASTM D 93, closed cup

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Evaporation rate	: Calculated < 0.01 (Butyl Acetate = 1)
Flammability (solid, gas)	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: Calculated < 0.01 mmHg @ 20 °C (68 °F)
Relative vapour density	: > 1(Air = 1.0)
Relative density	: 1.061 @ 20 °C (68 °F) Reference substance: (water = 1)
Density	: No data available
Solubility(ies)	
Water solubility	: completely soluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: log Pow: Estimated 2.7 @ 20 - 25 °C (68 - 77 °F)
Auto-ignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity	
Viscosity, kinematic	: Calculated 226 mm ² /s @ 20 - 25 °C (68 - 77 °F)

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No hazards to be specially mentioned. Hazardous polymerisation does not occur.
Conditions to avoid	: Keep away from heat, flame, sparks and other ignition sources. Do not allow evaporation to dryness. Possible emission of gaseous decomposition products may lead to a dangerous pressure build-up. elevated temperatures
Incompatible materials	: Strong acids Strong bases Strong oxidizing agents
Hazardous decomposition products	: Aldehydes Ketones Organic acids

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

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Components:

9036-19-5:

Acute oral toxicity : LD50 (Rat): 1,900 mg/kg
Assessment: The component/mixture is moderately toxic after single ingestion.

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

Skin corrosion/irritation

Components:

9036-19-5:

Species: Rabbit
Result: Not irritating to skin

Serious eye damage/eye irritation

Components:

9036-19-5:

Species: Rabbit
Result: Risk of serious damage to eyes.

Respiratory or skin sensitisation

Components:

9036-19-5:

Remarks: No data available

Germ cell mutagenicity

Components:

9036-19-5:

Germ cell mutagenicity - Assessment : Mutagenicity classification not possible from current data

Carcinogenicity

Components:

9036-19-5:

Carcinogenicity - Assessment : Carcinogenicity classification not possible from current data.

IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

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Reproductive toxicity**Components:****9036-19-5:**

Reproductive toxicity - Assessment

Fertility classification not possible from current data.

Teratogenicity - Assessment : Embryotoxicity classification not possible from current data.

Further information**Product:**

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Components:****9036-19-5:**

Toxicity to fish

: LC50 (Oncorhynchus mykiss (rainbow trout)): 7.2 mg/l
Exposure time: 96 hToxicity to daphnia and other
aquatic invertebrates: (Daphnia magna (Water flea)): 8.6 mg/l
Exposure time: 48 h

Toxicity to algae

: Remarks: No data available

Acute aquatic toxicity- Assessment

: Toxic to aquatic life.

Chronic aquatic toxicity- Assessment

: Toxic to aquatic life with long lasting effects.

Persistence and degradability**Components:****9036-19-5:**

Biodegradability

: Remarks: No data available

25322-68-3:**Bioaccumulative potential**

No data available

Mobility in soil

No data available

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Other adverse effects

Product:

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of in accordance with all applicable local, state and federal regulations.
For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Univar Solutions ChemCare: 1-800-637-7922

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

DOT (Department of Transportation): Not regulated as a dangerous good

IATA (International Air Transport Association): Not regulated as a dangerous good

IMDG-Code: Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Acute toxicity (any route of exposure)
Skin corrosion or irritation
Serious eye damage or eye irritation

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SARA 302 : This material does not contain any components with a section 302 EHS TPQ.

SARA 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.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489):

25322-68-3 Polyethylene glycol

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

9036-19-5 Polyethylene glycol mono(tert-octylph-enyl)
ether
25322-68-3 Polyethylene glycol

California Prop 65 : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

The components of this product are reported in the following inventories:

TSCA : On TSCA Inventory

DSL : All components of this product are on the Canadian DSL

AICS : On the inventory, or in compliance with the inventory

NZIoC : On the inventory, or in compliance with the inventory

ENCS : On the inventory, or in compliance with the inventory

KECI : On the inventory, or in compliance with the inventory

PHIL : On the inventory, or in compliance with the inventory

IECSC : On the inventory, or in compliance with the inventory

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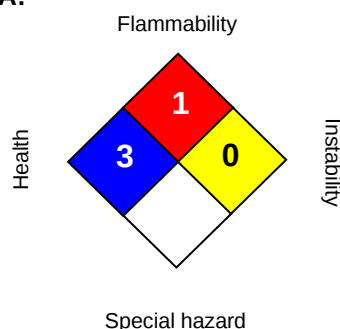
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SECTION 16. OTHER INFORMATION

NFPA:



HMIS III:

HEALTH	3
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

The information accumulated is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made become available subsequently to the date hereof, we do not assume any responsibility for the results of its use. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Univar Solutions Product Compliance Department (1-855-429-2661) SDSNA@univarsolutions.com.

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Legacy SDS: : R0383555, 100000002799

Material number:

16148743, 16144285, 16146818, 16144491, 16143320, 16141337, 16142515, 16141122, 16140646, 16134093, 16101026, 16084647, 16051045, 643540, 89276, 87893, 59292, 108023, 104877, 103804, 56518, 105974

Key or legend to abbreviations and acronyms used in the safety data sheet			
ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenar-	OSHA	Occupational Safety & Health

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	io Tool		Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50	Lethal Concentration 50%		