

## Safety Data Sheet

### TRITON™ X-102 SURFACTANT

Version 1.4

Revision Date: 11/13/2023

#### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name** : TRITON™ X-102 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

Serious eye damage : Category 1

##### GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H318 Causes serious eye damage.

Precautionary statements : **Prevention:**  
P280 Wear eye protection/ face protection.  
**Response:**  
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.

##### Other hazards

None known.

#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

##### 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          |

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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.<br>Consult a physician.<br>Show this safety data sheet to the doctor in attendance.<br>Do not leave the victim unattended.                                                                                                                                                                                                                                        |
| If inhaled              | : | If unconscious, place in recovery position and seek medical advice.<br>If symptoms persist, call a physician.                                                                                                                                                                                                                                                                                 |
| In case of skin contact | : | If skin irritation persists, call a physician.<br>If on skin, rinse well with water.<br>If on clothes, remove clothes.                                                                                                                                                                                                                                                                        |
| In case of eye contact  | : | Small amounts splashed into eyes can cause irreversible tissue damage and blindness.<br>In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.<br>Continue rinsing eyes during transport to hospital.<br>Remove contact lenses.<br>Protect unharmed eye.<br>Keep eye wide open while rinsing.<br>If eye irritation persists, consult a specialist. |
| If swallowed            | : | Take victim immediately to hospital.<br>Keep respiratory tract clear.<br>Do NOT induce vomiting.<br>Do not give milk or alcoholic beverages.<br>Never give anything by mouth to an unconscious person.<br>If symptoms persist, call a physician.<br>Take victim immediately to hospital.                                                                                                      |

#### SECTION 5. FIREFIGHTING MEASURES

- |                                       |   |                                                                                                            |
|---------------------------------------|---|------------------------------------------------------------------------------------------------------------|
| Suitable extinguishing media          | : | Water spray<br>Dry chemical<br>Carbon dioxide (CO2)<br>Alcohol-resistant foam                              |
| Unsuitable extinguishing media        | : | 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.<br>toxic fumes<br>Carbon oxides<br>Nitrogen oxides (NOx)<br>Smoke |
| Further information                   | : | Collect contaminated fire extinguishing water separately. This must not be discharged into drains.         |

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Special protective equipment for firefighters : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.  
: 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.  
Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
Electrical installations / working materials must comply with the technological safety standards.

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

##### Components with workplace control parameters

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

##### Personal protective equipment

Respiratory protection : General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where

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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<br>Tightly fitting safety goggles<br>Wear face-shield and protective suit for abnormal processing problems. |
| Skin and body protection | : | Impervious clothing<br>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.<br>When using do not smoke.<br>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                                          | : | 8.8 @ 20 - 25 °C (68 - 77 °F)                            |
| Freezing Point (Freezing Point)             | : | 15 °C (59 °F)                                            |
| Boiling Point (Boiling point/boiling range) | : | > 200 °C (> 392 °F)<br>(1013 hPa)                        |
| Flash point                                 | : | 254.4 °C (489.9 °F)<br>Method: ASTM D 93, closed cup     |
| Evaporation rate                            | : | No data available                                        |
| Flammability (solid, gas)                   | : | No data available                                        |
| Upper explosion limit                       | : | No data available                                        |
| Lower explosion limit                       | : | No data available                                        |
| Vapour pressure                             | : | < 0.01 hPa @ 20 °C (68 °F)                               |
| Relative vapour density                     | : | > 1                                                      |
| Relative density                            | : | 1.08 @ 20 °C (68 °F)<br>Reference substance: (water = 1) |
| Density                                     | : | No data available                                        |
| Solubility(ies)                             | : | No data available                                        |

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|                                        |                           |
|----------------------------------------|---------------------------|
| Water solubility                       | : completely soluble      |
| Solubility in other solvents           | : No data available       |
| Partition coefficient: n-octanol/water | : log Pow: Calculated 1.8 |
| Auto-ignition temperature              | : No data available       |
| Thermal decomposition                  | : No data available       |

**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.                          |
| Conditions to avoid                | : Keep away from heat, flame, sparks and other ignition sources. |
| Incompatible materials             | : Strong acids<br>Strong bases<br>Strong oxidizing agents        |
| Hazardous decomposition products   | : ketones<br>Organic acids<br>Aldehydes                          |

**SECTION 11. TOXICOLOGICAL INFORMATION****Acute toxicity****Product:**

|                       |                                                                                |
|-----------------------|--------------------------------------------------------------------------------|
| Acute oral toxicity   | : Assessment: The component/mixture is minimally toxic after single ingestion. |
| Acute dermal toxicity | : Acute toxicity estimate: 2,500 mg/kg                                         |

**Components:****9036-19-5:**

|                           |                                                                                                            |
|---------------------------|------------------------------------------------------------------------------------------------------------|
| Acute oral toxicity       | : LD50 (Rat): 1,900 mg/kg<br>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****Product:****Components:**

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**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 - Assess-  
ment

: 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.

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

Fertility classification not possible from current data.

Teratogenicity - Assessment

: Embryotoxicity classification not possible from current data.

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**Further information****Product:**

Remarks: No data available

**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity****Product:**

Chronic aquatic toxicity- Assessment : This product has no known ecotoxicological effects.

**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

**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 manufac-

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Additional ecological information : tured 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).

: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.  
Toxic to aquatic life.  
Harmful to aquatic life with long lasting effects.

#### 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

| Components  | CAS-No.  | Component RQ (lbs) | Calculated product RQ (lbs) |
|-------------|----------|--------------------|-----------------------------|
| 1,4-Dioxane | 123-91-1 | 100                | *                           |

\*: Calculated RQ exceeds reasonably attainable upper limit.

##### SARA 304 Extremely Hazardous Substances Reportable Quantity

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

**SARA 311/312 Hazards** : Serious eye damage or eye irritation

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

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**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

123-91-1 1,4-Dioxane

#### Pennsylvania Right To Know

9036-19-5 Polyethylene glycol mono(tert-octylph-enyl)  
ether  
25322-68-3 Polyethylene glycol  
123-91-1 1,4-Dioxane

#### California Prop 65

 **WARNING:** This product can expose you to chemicals including 1,4-Dioxane, which is/are known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

#### 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

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

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

# Safety Data Sheet

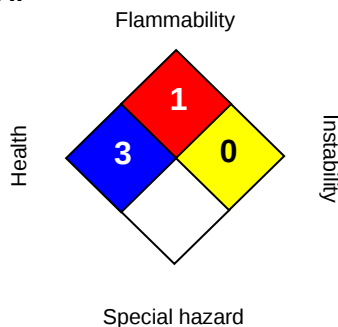
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### SECTION 16. OTHER INFORMATION

#### 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.

**Revision Date** : 11/13/2023

**Legacy SDS:** : 100000061555

#### Material number:

16144390, 16187314, 16187602, 16169420, 16137949, 16135710, 16121130

| 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 Scenario Tool                    | OSHA  | Occupational Safety & Health Administration         |
| EOSCA                                                                     | European Oilfield Specialty Chemicals Association       | PEL   | Permissible Exposure Limit                          |

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|        |                                                          |       |                                                                                      |
|--------|----------------------------------------------------------|-------|--------------------------------------------------------------------------------------|
| 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%                                 |       |                                                                                      |