# SAFETY DATA SHEET

Revision date 04-May-2022

| 1. Identification   |                          |
|---|--------------------------|
| Product identifier  |                          |
| Product Name  | TRITON(R) X-100          |
| Other means of identification   |                          |
| Product Code(s)   | TR135                    |
| Synonyms  | None                     |
| Recommended use of the chemical   | and restrictions on use  |
| Recommended use   | No information available |
| Restrictions on use   | No information available |
| Details of the supplier of the safety   | data sheet               |
| <u>Supplier Address</u><br>Spectrum Chemical Mfg. Corp.<br>14422 South San Pedro St.<br>Gardena, CA 90248<br>(310) 516-8000 |                          |

Emergency telephone number

**Emergency Telephone** 

Chemtrec 1-800-424-9300

# 2. Hazard(s) identification

## **Classification**

| Acute toxicity - Oral             | Category 4  |
|-----------------------------------|-------------|
| Serious eye damage/eye irritation | Category 2A |

## Hazards not otherwise classified (HNOC)

Not applicable

## Label elements

Warning

Hazard statements

Harmful if swallowed Causes serious eye irritation



Revision Number 3



Physical state Liquid

Odor No information available

## **Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Wear eye protection/ face protection

## **Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell Rinse mouth

## **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

## Other information

No information available.

## 3. Composition/information on ingredients

## Substance

Not applicable.

## Mixture

| Chemical name  | CAS No     | Weight-% | Trade secret |
|--|------------|----------|--------------|
| Polyethylene glycol octylphenyl ether (Triton X-100) | 9036-19-5  | 80 - 100 | *            |
| Polyethylene Glycol                                  | 25322-68-3 | 3 - <5   | *            |
| 1,4-Dioxane  | 123-91-1   | <0.1     | *            |
| Ethylene oxide                                       | 75-21-8    | <0.1     | *            |

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

## 4. First-aid measures

# Description of first aid measures General advice Show this safety data sheet to the doctor in attendance. Inhalation Remove to fresh air. Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists. Skin contact Wash skin with soap and water. Ingestion Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water.

 Never give anything by mouth to an unconscious person. Call a physician.

 Self-protection of the first aider
 Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

 Most important symptoms and effects, both acute and delayed
 Symptoms

 May cause redness and tearing of the eyes. Burning sensation.

 Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

## 5. Fire-fighting measures

| Suitable Extinguishing Media                      | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.                            |
|---|--|
| Large Fire  | CAUTION: Use of water spray when fighting fire may be inefficient.   |
| Unsuitable extinguishing media                    | Do not scatter spilled material with high pressure water streams.  |
| Specific hazards arising from the chemical        | No information available.  |
| Hazardous combustion products                     | Carbon dioxide (CO2).  |
| Explosion data<br>Sensitivity to mechanical impac | t none.  |
| Sensitivity to static discharge                   | none.  |
| Special protective equipment for<br>fire-fighters | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. |
| C Apple and a second second second                |  |

## 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

| Personal precautions   | Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. |
|--|---|
| Other information Refer to protective measures listed in Sections 7 and 8. |   |
| Methods and material for containm  | ent and cleaning up   |
| Methods for containment  | Prevent further leakage or spillage if safe to do so.                                     |
| Methods for cleaning up  | Pick up and transfer to properly labeled containers.                                      |

# 7. Handling and storage

| Precautions for safe handling       |   |
|-------------------------------------|---|
| Advice on safe handling             | Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. |
| Conditions for safe storage, includ | ing any incompatibilities   |
| Storage Conditions                  | Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.   |

## 8. Exposure controls/personal protection

## Control parameters

## **Exposure Limits**

The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

| Chemical name  | ACGIH TLV         | OSHA PEL      | NIOSH IDLH   |
|----------------|-------------------|---------------|--------------|
| 1,4-Dioxane    | No data available | 100 ppm TWA   | 500 ppm IDLH |
| 123-91-1       |                   | 360 mg/m³ TWA |              |
| Ethylene oxide | No data available | 1 ppm TWA     | 800 ppm IDLH |
| 75-21-8        |                   | 5 ppm STEL    |              |

## Appropriate engineering controls

| Engineering controls               | Showers<br>Eyewash stations<br>Ventilation systems.  |
|------------------------------------|--|
| Individual protection measures, su | ich as personal protective equipment   |
| Eye/face protection                | If splashes are likely to occur, wear safety glasses with side-shields.  |
| Hand protection                    | Wear suitable gloves.  |
| Skin and body protection           | Wear suitable protective clothing.   |
| Respiratory protection             | No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. |
| General hygiene considerations     | Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.                             |

# 9. Physical and chemical properties

| Information on basic physical and of<br>Physical state<br>Appearance<br>Color<br>Odor  | <u>hemical properties</u><br>Liquid<br>Clear<br>Colorless to pale yellow<br>No information available  |   |
|--|---|---|
| Odor threshold   | No information available  |   |
| Property<br>pH<br>Melting point / freezing point<br>Boiling point / boiling range<br>Flash point<br>Evaporation rate<br>Flammability (solid, gas)<br>Flammability Limit in Air<br>Upper flammability or explosive<br>limits<br>Lower flammability or explosive<br>limits | Valuesno data available $4 \ ^{\circ}C \ / \ 39.2 \ ^{\circ}F$ >200 \ ^{\circ}C \ / \ ^{\circ}F251 \ ^{\circ}C \ / \ 483.8 \ ^{\circ}Fno data availableno data availableNo data availableNo data availableNo data available | Remarks • Method<br>None known<br>Pour Point<br>None known<br>CC (closed cup)<br>None known<br>None known<br>None known |
| Vapor pressure<br>Vapor density<br>Relative density<br>Water solubility  | No data available<br>no data available<br>1.06<br>Soluble in water  | None known<br>None known<br>None known<br>None known  |

| Solubility(ies)<br>Partition coefficient<br>Autoignition temperature  | Insoluble in aliphatic hydrocarbons<br>No data available<br>no data available  | None known<br>None known<br>None known |
|---|--|--|
| Decomposition temperature   |  | None known                             |
| Kinematic viscosity   | no data available  | None known                             |
| Dynamic viscosity   | No data available  | None known                             |
| Other information<br>Explosive properties<br>Oxidizing properties<br>Softening point<br>Molecular weight<br>VOC Content (%)<br>Liquid Density<br>Bulk density | No information available<br>No information available<br>No information available<br>No information available<br>No information available<br>No information available |  |

## 10. Stability and reactivity

| Reactivity                         | No information available.                 |
|------------------------------------|---|
| Chemical stability                 | Stable under normal conditions.           |
| Possibility of hazardous reactions | None under normal processing.             |
| Conditions to avoid                | None known based on information supplied. |
| Incompatible materials             | None known based on information supplied. |
|                                    |   |

Hazardous decomposition products None known based on information supplied.

| 11. Toxicological information |   |  |  |
|-------------------------------|---|--|--|
| Information on likely routes  | <u>of exposure</u>  |  |  |
| Product Information           |   |  |  |
| Inhalation                    | Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.  |  |  |
| Eye contact                   | Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.                     |  |  |
| Skin contact                  | Specific test data for the substance or mixture is not available. May cause irritation. Prolonged contact may cause redness and irritation.                                       |  |  |
| Ingestion                     | Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if swallowed. (based on |  |  |

Symptoms related to the physical, chemical and toxicological characteristics

components).

Symptoms

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

| Component Information |           |             |                 |
|-----------------------|-----------|-------------|-----------------|
| Chemical name         | Oral LD50 | Dermal LD50 | Inhalation LC50 |

May cause redness and tearing of the eyes.

| Polyethylene glycol octylphenyl<br>ether (Triton X-100)<br>9036-19-5 | = 1700 mg/kg (Rat)<br>= 4190 mg/kg (Rat) | -                     | -                     |
|--|--|-----------------------|-----------------------|
| Polyethylene Glycol<br>25322-68-3                                    | = 22 g/kg (Rat)                          | > 20 g/kg (Rabbit)    | > 2.5 mg/L(Rat, 6 hr) |
| 1,4-Dioxane<br>123-91-1  | = 4200 mg/kg(Rat)                        | = 7600 mg/kg (Rabbit) | = 46 mg/L (Rat)2 h    |
| Ethylene oxide<br>75-21-8  | = 72 mg/kg (Rat)                         | -                     | = 800 ppm (Rat)4 h    |

## Delayed and immediate effects as well as chronic effects from short and long-term exposure

| Skin corrosion/irritation<br>Serious eye damage/eye irritation<br>Respiratory or skin sensitization<br>Germ cell mutagenicity<br>Carcinogenicity | May cause skin irritation.<br>Classification based on data available for ingredients. Causes serious eye irritation.<br>No information available.<br>No information available.<br>No information available. |
|--|---|
| Reproductive toxicity  | No information available.   |
| STOT - single exposure<br>STOT - repeated exposure<br>Aspiration hazard  | No information available.<br>No information available.<br>No information available.   |
| Other adverse effects  | No information available.   |
| Interactive effects  | No information available.   |

## 12. Ecological information

#### Ecotoxicity

| Chemical name       | Algae/aquatic plants | Fish                    | Toxicity to    | Crustacea            |
|---------------------|----------------------|-------------------------|----------------|----------------------|
|                     |                      |                         | microorganisms |                      |
| Polyethylene Glycol | -                    | LC50: >5000mg/L (24h,   | -              | -                    |
| 25322-68-3          |                      | Carassius auratus)      |                |                      |
| 1,4-Dioxane         | -                    | LC50: 10306 -           | -              | EC50: =163mg/L (48h, |
| 123-91-1            |                      | 14742mg/L (96h,         |                | water flea)          |
|                     |                      | Pimephales promelas)    |                |                      |
|                     |                      | LC50: =9850mg/L (96h,   |                |                      |
|                     |                      | Pimephales promelas)    |                |                      |
|                     |                      | LC50: >10000mg/L (96h,  |                |                      |
|                     |                      | Lepomis macrochirus)    |                |                      |
| Ethylene oxide      | -                    | LC50: 73 - 96mg/L (96h, | -              | LC50: 137 - 300mg/L  |
| 75-21-8             |                      | Pimephales promelas)    |                | (48h, Daphnia magna) |

Persistence and degradability Bioaccumulation

No information available. Inherently biodegradable.

| Chemical name             | Partition coefficient |
|---------------------------|-----------------------|
| 1,4-Dioxane<br>123-91-1   | -0.42                 |
| Ethylene oxide<br>75-21-8 | -0.3                  |

Other adverse effects

No information available.

# 13. Disposal considerations

## Waste treatment methods

Waste from residues/unused

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

Contaminated packaging Do not reu

Do not reuse empty containers.

# 14. Transport information

| DOT        | not regulated |
|------------|---------------|
| TDG        | not regulated |
| MEX        | not regulated |
| ICAO (air) | not regulated |
| IATA       | not regulated |
| IMDG       | not regulated |
| RID        | not regulated |
| ADR        | not regulated |
| ADN        | not regulated |

# 15. Regulatory information

#### International Inventories

TSCA

Complies

| DSL/NDSL      | Complies   |
|---------------|--|
| EINECS/ELINCS | Does not Comply  |
| ENCS          | This product complies with ENCS:   |
| IECSC         | This product complies with China:  |
| KECL          | Complies   |
| PICCS         | Complies   |
| AICS          | All the constituents of this material are listed on the Australian Inventory of Chemical |
|               | Substances (AICS).   |

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

## US Federal Regulations

## SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

| Chemical name            | SARA 313 - Threshold Values % |
|--------------------------|-------------------------------|
| 1,4-Dioxane - 123-91-1   | 0.1                           |
| Ethylene oxide - 75-21-8 | 0.1                           |

## SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate

classifications.

#### **CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

## **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

| Chemical name  | Hazardous Substances RQs | Extremely Hazardous Substances RQs |
|----------------|--------------------------|------------------------------------|
| 1,4-Dioxane    | 100 lb final RQ          | -                                  |
| 123-91-1       | 45.4 kg final RQ         |                                    |
| Ethylene oxide | 10 lb final RQ           | -                                  |
| 75-21-8        | 4.54 kg final RQ         |                                    |

#### US State Regulations

#### California Proposition 65

This product contains the following Proposition 65 chemicals:.

| Chemical name            | California Proposition 65  |
|--------------------------|--|
| 1,4-Dioxane - 123-91-1   | carcinogen   |
| Ethylene oxide - 75-21-8 | female reproductive toxicity<br>developmental toxicity<br>male reproductive toxicity<br>carcinogen |

## U.S. State Right-to-Know Regulations

| Chemical name  | New Jersey | Massachusetts | Pennsylvania                |
|----------------|------------|---------------|-----------------------------|
| 1,4-Dioxane    | 0789       | Present       | Environmental hazard        |
| 123-91-1       |            |               | Special hazardous substance |
| Ethylene oxide | 0882       | Present       | Environmental hazard        |
| 75-21-8        |            |               | Special hazardous substance |

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

## 16. Other information

NFPA Health hazards 2 Flammability 1 Instability 0 Physical and chemical properties -HMIS Health hazards 2 Flammability 1 Physical hazards 0 Personal protection X Key or legend to abbreviations and acronyms used in the safety data sheet Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION TŴĂ TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database European Food Safety Authority (EFSA) EPA (Environmental Protection Agency) Acute Exposure Guideline Level(s) (AEGL(s)) U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act U.S. Environmental Protection Agency High Production Volume Chemicals Food Research Journal Hazardous Substance Database International Uniform Chemical Information Database (IUCLID) Japan GHS Classification Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS) NIOSH (National Institute for Occupational Safety and Health) National Library of Medicine's ChemID Plus (NLM CIP) National Library of Medicine's PubMed database (NLM PUBMED) National Toxicology Program (NTP) New Zealand's Chemical Classification and Information Database (CCID) Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program Organization for Economic Co-operation and Development Screening Information Data Set World Health Organization

| Revision date | 04-May-2022               |
|---------------|---------------------------|
| Revision Note | No information available. |
| Disclaimer    |                           |

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet