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> Spectrum Chemical Mfg. Corp. 14422 South San Pedro St. Gardena, CA 90248 (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 Sensitivity to mechanical impac	t none.
Sensitivity to static discharge	none.
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
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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 Eyewash stations 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 Physical state Appearance Color Odor	<u>hemical properties</u> Liquid Clear Colorless to pale yellow No information available	
Odor threshold	No information available	
Property pH Melting point / freezing point Boiling point / boiling range Flash point Evaporation rate Flammability (solid, gas) Flammability Limit in Air Upper flammability or explosive limits Lower flammability or explosive 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 None known Pour Point None known CC (closed cup) None known None known None known
Vapor pressure Vapor density Relative density Water solubility	No data available no data available 1.06 Soluble in water	None known None known None known None known

Solubility(ies) Partition coefficient Autoignition temperature	Insoluble in aliphatic hydrocarbons No data available no data available	None known None known None known
Decomposition temperature		None known
Kinematic viscosity	no data available	None known
Dynamic viscosity	No data available	None known
Other information Explosive properties Oxidizing properties Softening point Molecular weight VOC Content (%) Liquid Density Bulk density	No information available No information available No information available No information available No information available 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 ether (Triton X-100) 9036-19-5	= 1700 mg/kg (Rat) = 4190 mg/kg (Rat)	-	-
Polyethylene Glycol 25322-68-3	= 22 g/kg (Rat)	> 20 g/kg (Rabbit)	> 2.5 mg/L(Rat, 6 hr)
1,4-Dioxane 123-91-1	= 4200 mg/kg(Rat)	= 7600 mg/kg (Rabbit)	= 46 mg/L (Rat)2 h
Ethylene oxide 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 Serious eye damage/eye irritation Respiratory or skin sensitization Germ cell mutagenicity Carcinogenicity	May cause skin irritation. Classification based on data available for ingredients. Causes serious eye irritation. No information available. No information available. No information available.
Reproductive toxicity	No information available.
STOT - single exposure STOT - repeated exposure Aspiration hazard	No information available. No information available. 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 123-91-1	-0.42
Ethylene oxide 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 developmental toxicity male reproductive toxicity 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	

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End of Safety Data Sheet