

**Safety Data Sheet** 

# Triton X-100<sup>®</sup>

### **1. PRODUCT AND COMPANY IDENTIFICATION**

Product Name: Triton X-100<sup>®</sup>

**Synonyms/Generic Names:** Polyethylene glycol octylphenyl ether; Octylphenoxypolyethoxyethanol; Polyethylene glycol mono [4-(1,1,3,3-tetramethylbutyl) phenyl] ether; t-Octylphenoxypolyethoxyethanol; Polyethylene glycol tert-octylphenyl ether

Product Number: CP-A9100, CP-B9100, CP-C9100, CP-D9100, CP-E9100

Product Use: Industrial, Manufacturing or Laboratory use

Manufacturer: ChemPure Brand Chemicals 39103 Warren Road Westland, MI. 48185

For More Information Call: 734-729-1805 (Monday-Friday 8:00-4:30)

In Case of Emergency Call: CHEMTREC - 800-424-9300 or 908-859-2151 (24 Hours/Day, 7 Days/Week)

#### 2. HAZARDS IDENTIFICATION

OSHA Hazards: Harmful by ingestion, Irritant

Target Organs: None

Signal Word: Warning

**Pictograms:** 



#### **GHS Classification:**

Acute toxicity, Oral Category 4	
Serious eye damage	Category 2A
Acute aquatic toxicity	Category 2
Chronic aquatic toxicity	Category 2

#### GHS Label Elements, including precautionary statements:

#### Hazard Statements:

H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.

#### **Precautionary Statements:**

P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.

P273	Avoid release to the environment.	
P280	Wear eye protection/face protection.	
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.	
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact	
	lenses, if present and easy to do. Continue rinsing.	
P330	Rinse mouth.	
P332+P313	If skin irritation occurs: Get medical advice/attention.	
P337+P313	If eye irritation persists: Get medical advice/attention.	
P391	Collect spillage.	
P501	Dispose of contents/container in accordance with local regulations.	

#### **Potential Health Effects**

Eyes	Causes eye irritation.	
Inhalation	May be harmful if inhaled. Causes respiratory tract irritation.	
Skin	Harmful if absorbed through skin. Causes skin irritation.	
Ingestion	Harmful if swallowed.	

#### **NFPA Ratings**

Health	2
Flammability	1
Reactivity	0
Specific hazard	Not Available

#### HMIS Ratings

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Health	2
Fire	1
Reactivity	0
Personal	J

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

Component	Weight %	CAS #	EINECS# / ELINCS#	Formula	Molecular Weight
Triton X-100	>99	9002-93-1	N/A	(C <sub>2</sub> H <sub>4</sub> O) <sub>n</sub> C <sub>14</sub> H <sub>22</sub> O	N/A

### **4. FIRST-AID MEASURES**

Eyes	Rinse with plenty of water for at least 15 minutes and seek medical attention.	
Inhalation	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not	
	breathing, give artificial respiration. Get medical attention.	
Skin	Flush with plenty of water for at least 15 minutes while removing contaminated clothing and	
	wash using soap. Get medical attention.	
Ingestion	Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If	
	conscious, wash out mouth with water. Get medical attention.	

### **5. FIRE-FIGHTING MEASURES**

Suitable (and unsuitable) extinguishing media	Product may be flammable or combustible at high temperatures. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Use appropriate media for adjacent fire. Cool containers with water.
Special protective equipment	Wear self-contained, approved breathing apparatus and full protective
and precautions for firefighters	clothing, including eye protection and boots.
Specific hazards arising from	Emits toxic fumes (carbon oxides) under fire conditions. (See also
the chemical	Stability and Reactivity section).

### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	See section 8 for recommendations on the use of personal protective equipment.
Environmental precautions	Prevent spillage from entering drains. Any release to the environment
	may be subject to federal/national or local reporting requirements.
Methods and materials for	Neutralize spill. Absorb spill with noncombustible absorbent material,
containment and cleaning up	then place in a suitable container for disposal. Clean surfaces thoroughly
	with water to remove residual contamination. Dispose of all waste and
	cleanup materials in accordance with regulations.

### 7. HANDLING AND STORAGE

#### Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of aerosols.

#### Conditions for safe storage, including any incompatibilities

Store in cool, dry well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities).

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls: Contains no substances with occupational exposure limit values.

#### Personal Protection

Eyes	Wear chemical safety glasses or goggles.
Inhalation	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.
Skin	Wear nitrile or rubber gloves, apron or lab coat. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Other	Not Available

#### **Other Recommendations**

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	Clear, colorless to light yellow liquid.
Odor	Odorless.
Odor threshold	Not Available
рН	9.7
Melting point/freezing point	6°C (43°F)
Initial boiling point and boiling range	270°C (518°F)
Flash point	251°C (484°F)
Evaporation rate	Not Available
Flammability (solid, gas)	Possibly Flammable
Upper/lower flammability or explosive limit	Not Explosive

Vapor pressure	Not Available
Vapor density	Not Available
Density	1.06
Solubility (ies)	Soluble in cold water, hot water. Insoluble in mineral
	spirits and kerosene.
Partition coefficient: n-octanol/water	Not Available
Auto-ignition temperature	Not Available
Decomposition temperature	Not Available

### **10. STABILITY AND REACTIVITY**

Chemical Stability	Stable
Possibility of Hazardous Reactions	Will not occur.
Conditions to Avoid	Excessive heat, moisture.
Incompatible Materials	Strong oxidizing agents, strong acids, strong bases.
Hazardous Decomposition Products	Carbon oxides.

### **11. TOXICOLOGICAL INFORMATION**

## Acute Toxicity

Triton X-100	
Skin	LD50 Dermal - rabbit - 8,000 mg/kg
Eyes	Eyes - rabbit Result: Moderate eye irritation - 24 h
Respiratory	Not Available
Ingestion	LD50 Oral - rat - 1,800 mg/kg

#### Carcinogenicity

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IARC	No components of this product present at levels greater than or equal to 0.1% is identified
	as probable, possible or confirmed human carcinogen by IARC.
ACGIH	No components of this product present at levels greater than or equal to 0.1% is identified
	as a carcinogen or potential carcinogen by ACGIH.
NTP	No components of this product present at levels greater than or equal to 0.1% is identified
	as a known or anticipated carcinogen by NTP.
OSHA	No components of this product present at levels greater than or equal to 0.1% is identified
	as a carcinogen or potential carcinogen by OSHA.

#### Signs & Symptoms of Exposure

Skin	Irritation, redness, itchiness.
Eyes	Irritation, redness, watering eyes, itchiness.
Respiratory	Irritation, coughing, wheezing.
Ingestion	Irritation, nausea, vomiting, diarrhea.

Chronic Toxicity	Not Available
Teratogenicity	Not Available
Mutagenicity	Not Available
Embryotoxicity	Not Available
Specific Target Organ Toxicity	Not Available
Reproductive Toxicity	Not Available
<b>Respiratory/Skin Sensitization</b>	Not Available

### 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

Triton X-100			
Aquatic Vertebrate	LC50 - Pimephales promelas (fathead minnow) - 8.9 mg/l - 96.0 h		
Aquatic Invertebrate	EC50 - Da	EC50 - Daphnia - 26 mg/l - 48 h	
Terrestrial	Not Available		
Persistence and Degr	radability Biotic/Aerobic Biochemical oxygen demand		
	Result: 36 % - Not readily biodegradable		
Bioaccumulative Pote	ential Chemical Oxygen Demand (COD): 2.19 mg/g		
Mobility in Soil	Not Available		
PBT and vPvB Assess	sment	Not Available	
Other Adverse Effects	6	Toxic to aquatic life with long lasting effects.	

#### **13. DISPOSAL CONSIDERATIONS**

Waste Product or	Users should review their operations in terms of the applicable federal/national or local regulations and
Residues	consult with appropriate regulatory agencies if necessary before disposing of waste product or residue.
Product Containers	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

### **14. TRANSPORTATION INFORMATION**

US DOT	Not Regulated
TDG	Not Regulated
IMDG	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S., (P-TERIARY-OCTYLPHENOXY POLYETHYL ALCOHOL), 9, PG III
Marine Pollutant	No
IATA/ICAO	Not Regulated

### **15. REGULATORY INFORMATION**

TSCA Inventory Status	All ingredients are listed on the TSCA inventory.
DSCL (EEC)	All ingredients are listed on the DSCL inventory.
California Proposition 65	Not Listed
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	Acute Health Hazard
SARA 312	Acute Health Hazard
SARA 313	Not Listed
WHMIS Canada	Class D-2B: Poisonous and infectious material- Other effects- Toxic

### **16. OTHER INFORMATION**

Revision	Date
Revision 1	11/01/2013
Revision 2	06/08/2015
Revision 3	06/29/2016
Revision 4	06/29/2022

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