www.gendepot.com
GenDEPOT

Material Safety Data Sheet

Version GHS 5.1
Revision date : 1/22/2015

1 . PRODUCT & COMPANY IDENTIFICATION

Product Name : Triton X-100
Product Cat No : T9500
CAS No : None
Manufacturer/Supplier : GenDEPOT LLC
PO Box 454
Barker, Tx 77413
Emergency Phone : 866.417.0078
Fax : 281-579-6876

2 . HAZARD IDENTIFICATION

OSHA/HCS Status

This material is considered hazardous by the OSHA Hazard

OSHA/HCS Status

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A

GHS Classification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Oral (Category 4), H302
Eye irritation (Category 2A), H319
Acute aquatic toxicity (Category 2), H401

GHS Label elements, including precautionary statements

Pictogram :

Signal word : Warning

Hazard statement(s) :

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

Precautionary statement(s) :

P264 : Wash skin thoroughly after handling.
P270 : Do not eat, drink or smoke when using this product.
P273 : Avoid release to the environment.
P280 : Wear protective gloves/ eye protection/ face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER or 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.
P337+P313 If eye irritation persists : Get medical advice/ attention.
P391 : Collect spillage.

Hazards not other classified (HNOC) or not covered by GHS

none

3 . COMPOSITION/INFORMATION ON INGREDIENT

Synonyms : t-Octylphenoxypolyethoxyethanol 4-(1,1,3,3-Tetramethylbutyl) phenyl-polyethylene glycol Polyethylene glycol tert-octylphenyl ether

Component	Classification	Concentration
p-tertiary-Octylphenoxy polyethyl alcohol Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)		
CAS No	9002-93-1	90-100%

4 . FIRST AID MEASURES

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Inhalation: If breathed in, move person into fresh air.
If not breathing, give artificial respiration. Consult a physician.

In case of skin contact: Wash off with soap and plenty of water.
Consult a physician.

In case of eye contact : Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed : Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician

5 . FIREFIGHTING MEASURES

Suitable extinguishing media: For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

Special protective equipment for firefighters: Wear self contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products: Hazardous decomposition products formed under fire conditions. - Carbon oxides, Sulphur oxides

Further information: Use water spray to cool unopened containers.

6 . ACCIDENTAL RELEASE MEASURES

Personal precaution: Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Environmental precaution: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for contaminant and cleaning up: Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

7 . HANDLING AND STORAGE

Precaution for safe handling: Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

Condition for safe storage: Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: Store between the following temperatures: 20 to 25°C (68 to 77°F).

8 . EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Occupational exposure limits : none

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Personal protective equipment: .

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection: Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection: Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Complete suit protecting against chemicals.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9 . PHYSICIAL AND CHEMICAL PROPERTIES

Appearance:

Form	Liquid
Color	Clear to slightly hazy. Colorless

Safety data:

pH	4 - 6.8
Melting point	no data available
Freezing point	no data available
Boiling point	no data available
Flash point	Closed cup: >109.85^{o}C (229.7^{o}F)
Ignition temperature	no data available
Auto-ignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Vapor pressure	< 0.13kPa (<1mm Hg) room temperature
Density	1.008
Water solubility	Easily soluble in water
Partition coefficient: n-octanol/water	no data available
Relative vapor density	no date available
Odor	Odorless
Odor threshold	no data available
Evaporation rate	no data available

10 . STABILITY AND REACTIVITY

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
no data available.

Condition to avoid
Heat, flames and sparks.

Materials to avoid
no data available.

Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11 . TOXICOLOGICAL INFORMATON

Acute Toxicity

Oral LD50

Poly(oxy-1,2-ethanediyl), α-[(1 ,1,3,3-tetramethylbutyl)phenyl]-ω-hydroxy-	LD50 Oral - rat - 1900 mg/kg

Inhalation

Poly(oxy-1,2-ethanediyl), α-[(1 ,1,3,3-tetramethylbutyl)phenyl]-ω-hydroxy-	Eyes– Mild irritant, Rabbit 15 mg Eyes - Severe irritant, Rabbit 1 percent

Dermal LD50

Dimethyl Sulfoxide - LD50 Dermal - rabbit - > 5,000 mg/kg

Other information on acute toxicity

no data available

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

no data available

Mutagenicity (Germ cell mutagenicity)

no data available

Carcinogenicity

no date available

Reproductive toxicity

no known significant effects or critical hazards.

Teratogenicity

no known significant effects or critical hazards.

Specific target organ toxicity— single exposure (GHS)

no data available

Specific target organ toxicity— repeated exposure (GHS)

no data available

Aspiration hazard

no data available

Potential health effects

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

Aggravated Medical Condition

Avoid contact with DMSO solutions containing toxic materials or materials with unknown toxicological properties. Dimethyl sulfoxide is readily absorbed through skin and may carry such materials into the body.

Synergistic effects

no known significant effects or critical hazards.

Additional information

RTECS : not available

12 . ECOLOGICAL INFORMATION

Toxicity

Product/ingredient name		
Poly(oxy-1,2-ethanediyl), α-[(1 ,1,3,3-tetramethylbutyl)phenyl]-ω-hydroxy-	Acute EC50 210 µg/l Fresh water Algae - Pseudokirchneriella subcapitata	96 hours
	Acute LC50 10800 µg/l Marine water Crustaceans - Pandalus montagui - Adult	48 hours
	Acute LC50 8600 µg/l Fresh water Daphnia - Daphnia magna - Neonate	48 hours
Glycols, polyethylene, mono (p-(1,1,3,3-tetramethylbutyl) phenyl) ether	Acute LC50 11.2 mg/l Fresh water Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 4500 µg/l Fresh water	96 hours

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

PBT and vPvB assessment

no data available

Other adverse effect

no data available

13 . DISPOSAL CONSIDERATIONS

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14 . TRANSPORT INFORMATION

DOT(US)

UN Number	Not regulated
Proper shipping name	–
Glass	-
Packing group	-

IMDG

Not dangerous goods

IATA

Not dangerous goods

15 . REGULATORY INFORMATION

United States

HCS Classification : not listed
TSCA 8(a) Pair : Glycols, polyethylene. Mono(p-(1,1,3,3-tetramethyl)phenyl ether
TSCA 8(a) IUR exempt/Partial exemption : all components are listed or exempted
United States Inventory (TSCA 8b) : not determined
SARA 302 TPQ : ethylene oxide 0-0.1%, EHS-Yes , lbs-1000

SARA 304 RQ : ethylene oxide 0-0.1% EHS-Yes, lbs-10
11111111.1 lbs/5044444.4kg(1231609.3 gal/4662148.3L)

SARA 311/312 Immediate health hazard
Poly(oxy-1,2-ethanediyl), α-[(1,1,3,3-tetramethylbutyl)phenyl]-ω-hydroxy- 7-10 % , Immediate health hazard

Clean Air Act Section 112(b) Hazardous air pollutants (HAPs) : not listed

Clean Air Act Section 602 Class I substances : not listed

Clean Air Act Section 602 Class II substances : not listed

DEA List I Chemicals (Precursor chemicals) : not listed

States Regulation

Massachusetts : None of the components are listed
New York : None of the components are listed
New Jersey : None of the components are listed
Pennsylvania : None of the components are listed
California Prop. 65 Components :
WARNING: This product contains less than 0.1% of a chemical known to the State of California to cause cancer.
WARNING: This product contains less than 1% of a chemical known to the

1,4-dioxane
Cancer cause - Yes. No significant level- 30 µg/day (ingestion)
30 µg/day (inhalation)
ethylene oxide
Cancer cause - Yes, Reproductive –Yes
No significant level - 2 µg/day (ingestion)
2 µg/day (inhalation)

Maximum acceptable -20 µg/day (ingestion)

Canada

All components are listed or exempted

Canadian lists
Canadian NPRI : None of the components are listed
CEPA Toxic substances : None of the components are listed

International Regulation

Australia (AICS) : All components are listed or exempted.
China Inventory (IECSC) : All components are listed or exempted.
Japan Inventory : All components are listed or exempted.
Korea Inventory : All components are listed or exempted.
New Zealand Inventory of Chemicals (NZloC): All components are listed or exempted.
Philippines Inventory (PICCS) : All components are listed or exempted.
Malaysia Inventory (EHS Register): Not determined.
Taiwan inventory (CSNN): Not determined.

HIMS Rating:

Health hazard : 2
Chronic Health Hazard : *
Flammability : 1
Physical hazards: 0

NFPA Rating:

Health Hazard: 2
Fire: 1
Reactivity Hazard: 0

16 . OTHER INFORMATION

This compound is sold only for research use by personnel familiar chemicals and who are well trained in good laboratory habits, such as avoiding spills, keeping hands clean at all times and no rubbing eyes with working in the laboratory.

This solution is sold only in microliter quantities for use in life sciences research. No other use is intended. And any other use may involve substantive hazards.

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish or legally valid contractual relationship. GenDEPOT LLC, shall not be held liable for any damage resulting from handling of or from with above product. The burden of safe use of this material rests entirely with the user.

Since the conditions of handling, storage and disposal of this material are beyond our control, it is the responsibility of the user to determine whether the material is fit for a particular purpose and/or suitable for the user's method of use or application, and to determine safe conditions for use of the material, and to assume full responsibility for loss, injury and expense arising out of or in connection with the use of material. NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, REGARDING THE MATERIAL DESCRIBED HEREIN SHALL BE CREATED BY OR INFERRED FROM ANY STATEMENT OR OMISSION FROM THIS MSDS.

Various government agencies and local authorities may have general or specific regulations applicable to the material which may not be covered in this MSDS. It is sole responsibility of the user to examine and confirm for its full compliance with any such regulations.

When the revision of this MSDS is received, please dispose of the old one.

Department issuing MSDS:
GenDEPOT LLC
Safety Department