



## MATERIAL SAFETY DATA SHEET

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### SECTION 1: CHEMICAL IDENTIFICATION

Code: PC0923-1L

Name: Triton X-100

### SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name:	CAS NO.:	%
Polyethylene glycol octolphenol ether	9002-93-1	97-99
Polyethylene glycol	25322-68-3	1-3
Ethylene oxide (trace amounts)	075-21-8	*

For more information see complete RTECS entry.

### SECTION 3: HAZARDS IDENTIFICATION

#### WHMIS Classification

D2B Toxic Material causing other toxic effects

Moderate skin irritant  
Severe eye irritant

#### GHS Classification

Acute toxicity (Oral) –	Category 4
Skin corrosion/irritation –	Category 2
Serious eye damage –	Category 1
Acute aquatic toxicity –	Category 1
Chronic aquatic toxicity –	Category 1

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## GHS Label elements, including precautionary statements



Signal word: Danger

### Hazard statements

H302 Harmful if swallowed.  
H315 Causes skin irritation.  
H318 Causes serious eye damage.

### Precautionary statements

P264 Wash skin thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P273 Avoid release to environment.  
P280 Wear eye protection/face protection.  
P301 + P312 + P330 If swallowed, call a poison center/doctor if you feel unwell. Rinse mouth.  
P302 + P352 If on skin, wash with plenty of water.  
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.  
P332 + P313 If skin irritation occurs, get medical advice/ attention.  
P391 Collect spillage.  
P501 Dispose of contents/container to an approved waste disposal plant.

### HMIS Classification

Health hazard: 2  
Flammability: 1  
Physical hazards: 0

### Potential health effects

In case of inhalation, may be harmful and causes respiratory tract irritation.  
In case of skin contact, may be harmful and causes skin irritation.  
In case of eyes contact, cause eye irritation.  
In case of ingestion, may be harmful.

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## **SECTION 4: FIRST-AID MEASURES**

In case of eye contact, immediately flush eyes with copious amount of water for at least 15 minutes. Consult a physician.

In case of skin contact, immediately wash skin with soap and copious amount of water. Consult a physician.

In case of inhalation, move person to fresh air. If not breathing give artificial respiration. Consult a physician.

In case of ingestion, wash out to mouth with water. Never give anything by mouth to an unconscious person. Consult a physician.

## **SECTION 5: FIRE FIGHTING MEASURES**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Hazardous decomposition products formed under fire conditions: No data available.

Flash point:

No data available.

Explosion data – sensitivity to mechanical impact:

No data available.

Explosion data – sensitivity to static discharge:

No data available

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

For personal protection, use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

For environmental precautions, prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

For cleaning up, soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

## **SECTION 7: HANDLING AND STORAGE**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

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.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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	Tightly fitting safety goggles. Face shield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin and body protection	Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Use engineering measures such as mechanical exhaust or laboratory fume hood to avoid exposure. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Light yellow
Physical state:	Liquid
Odor:	No information available
Odor threshold:	No information available
Density:	1.06 g/mL at 25°C (77°F)
pH:	9.7
Melting point/freezing point:	6° (43°F)
Initial Boiling point:	No information available
Boiling point:	> 200°C (> 392°F)
Flash point:	251°C (484°F) closed cup
Autoignition temperature:	No data available
Decomposition temperature:	No information available
Upper Flammability limit in air:	No data available
Lower Flammability limit in air:	No data available
Explosive properties:	No information available
Oxidizing properties:	No information available
Solubility:	Water soluble
Partition coefficient (n-octanol/water):	No data available

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Vapor pressure:	<1.33 hPa (<1.00 mmHg) at 20°C (68°F)
Vapor density:	No data available
Evaporation rate:	No data available
Specific gravity:	No data available
Viscosity:	No information available

## SECTION 10: STABILITY AND REACTIVITY

Stable under recommended storage conditions.

Materials to avoid:	Strong acids, strong bases, strong oxidizing agents
Hazardous decomposition product:	Carbon oxides
Possibility of hazardous reactions:	No data available.
Conditions to avoid:	No data available

## SECTION 11: TOXICOLOGICAL INFORMATION

Oral LD50:	Rat – 1800 mg/kg
Inhalation LC50:	No data available
Dermal LD50:	Rabbit – 8000 mg/kg
Other information on acute toxicity:	No data available

Skin corrosion/irritation:	No data available
Serious eye damage/eye irritation:	Rabbit – moderate eye irritation – 24 hrs
Respiratory or skin sensitization:	No data available
Germ cell mutagenicity:	No data available
Reproductive toxicity:	No data available
Teratogenicity:	No data available
Aspiration hazard:	No data available
Synergistic effects:	No data available
STOT – single exposure:	No data available
STOT – repeated exposure:	No data available

### Carcinogenicity

IARC: No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

### Potential health effects

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

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

RTECS: MD0907700

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## SECTION 12: ECOLOGICAL INFORMATION

### Ecotoxicity

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

## SECTION 13: DISPOSAL CONSIDERATIONS

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.  
For contaminated packaging, dispose as waste materials.

## SECTION 14: TRANSPORT INFORMATION

### DOT

Not regulated.

### IATA

Not regulated

## SECTION 15: REGULATORY INFORMATION

### WHMIS Classification

D2B                      Toxic Material Causing Other Toxic Effects                      Moderate eye irritant

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

## SECTION 16: OTHER INFORMATION

The information contained in this MSDS relates only to the material(s) designed and does not relate to use(s) in combination with any other material, process(es) and /or chemical reaction(s). Vivantis Technologies Sdn. Bhd. provides this information in good faith, from sources believed to be accurate; however, Vivantis assumes no liability for its accuracy or completeness, and thus shall not be held liable for any damage resulting from handling or from contact with the above product.



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