

**MATERIAL SAFETY DATA SHEET**

**VIVANTIS TECHNOLOGIES SDN BHD  
REVONGEN CORPORATION CENTER**

Document No.: MSDSrev05\_PC0923

Date prepared: 10<sup>th</sup> January 2023

Reviewed: 10<sup>th</sup> January 2023

**SECTION 1: CHEMICAL IDENTIFICATION**

Catalogue Number: PC0923-1L

Product Name: Triton X-100

**Intended Use:**

For research use only. Not for use in diagnostic procedures.

**Company Headquarters:**

Vivantis Technologies Sdn Bhd  
Revongen Corporation Center  
Level 17, Top Glove Tower,  
No. 16, Persiaran Setia Dagang,  
Setia Alam, Seksyen U13, 40170 Shah Alam,  
Selangor Darul Ehsan, Malaysia.

Tel: +6 03 3359 1166

Fax: +6 03 3358 0303

Email: [info@vivanttechnologies.com](mailto:info@vivanttechnologies.com)

Website: [www.vivanttechnologies.com](http://www.vivanttechnologies.com)

**Company Manufacturing:**

Vivantis Technologies Sdn Bhd  
Level 1, Enterprise 2,  
Technology Park Malaysia,  
Lebuhraya Puchong-Sg. Besi,  
57000 Bukit Jalil,  
Kuala Lumpur, Malaysia.

Pairing Nature with  
Scientific Discoveries

**SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS No.	EC 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

**GHS Label elements, including precautionary statements**



Signal word: Danger

**Hazard statements**

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

Pairing Nature with  
Scientific Discoveries

## **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.

## **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.

Pairing Nature with  
Scientific Discoveries

## 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 vapors, 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 vapor 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).

Pairing Nature with  
Scientific Discoveries

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

Pairing Nature with  
Scientific Discoveries

Partition coefficient (n-octanol/water):	No data available
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.

Pairing Nature with  
Scientific Discoveries

## **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

## **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

Pairing Nature with  
Scientific Discoveries

**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.

All Vivantis products are supplied for manufacturing, research and laboratory use only. Researchers and laboratory personnel intending to use any of these products for medical investigation on human are solely responsible for such use and for compliance with the pertinent regulations of the United States Food & Drug Administration (US-FDA) and other regulations. We do not assume liability for damages resulting from the handling, use and/or disposal of these products, from their use in violation of patent or other rights or reliance upon this information.

Pairing Nature with  
Scientific Discoveries