SAFETY DATA SHEET

SECTION 1. PRODUCT IDENTIFICATION

1.1 Product Name: Triton X-100

1.2 Catalog Number: APL-0084
Synonyms Name: Octylphenol Ethoxylate

♦ **Recommended use of the chemical and restrictions on use**

Identified uses: Multi-purpose surfactant. We recommend that you use this product in a manner consistent with the listed use. If your intended use is not consistent with the stated use, please contact your sales or technical service representative.

♦ **Details of the supplier of the safety data sheet**

1.3 Company: APOLO Biochemical, Inc
575 ELMWOOD AVE.
MC56940A, ROCHESTER,
NY 14642, USA

1.4 Customer Information E-mail: info@apolobiochem.com / order@apolo.com.tw

SECTION 2. HAZARDS IDENTIFICATION

2.1 GHS Classification

Acute toxicity - Category 4 – Oral

Acute toxicity - Category 5 – Dermal

Serious eye damage/eye irritation - Category 1

Short-term (acute) aquatic hazard - Category 2

2.2 GHS label elements

Hazard pictograms

Signal word: **DANGER!**

Hazard statements

Harmful if swallowed.

May be harmful in contact with skin.

Causes serious eye damage.

Toxic to aquatic life.

Not classified based on available information.

- **Information for the Product:**

  Based on product testing: Oral exposure in laboratory animals: Has been toxic to the fetus in laboratory animals at doses toxic to the mother. These effects were only observed at exaggerated doses. Did not cause birth defects in laboratory animals. Dermal exposure of laboratory animals has caused an increased incidence of a naturally-occurring developmental variation (extra lumbar rib) in fetuses at dose levels nontoxic to the mother.

- **Information for components:**

  Polyethylene glycol octylphenyl ether

  Oral exposure in laboratory animals: Has been toxic to the fetus in laboratory animals at doses toxic to the mother. These effects were only observed at exaggerated doses. Did not cause birth defects in laboratory animals. Dermal exposure of laboratory animals has caused an increased incidence of a naturally-occurring developmental variation (extra lumbar rib) in fetuses at dose levels nontoxic to the mother.

  Poly(ethylene oxide)

  For this family of materials: Did not cause birth defects or any other fetal effects in laboratory animals.

♦ **Reproductive toxicity**

Not classified based on available information.

- **Information for the Product:**

  Product test data not available.

- **Information for components:**

  Polyethylene glycol octylphenyl ether

  No relevant data found.

  Poly(ethylene oxide)

  For this family of materials: In animal studies, did not interfere with reproduction.

♦ **Mutagenicity**

Not classified based on available information.

- **Information for the Product:**

  For this family of materials: In vitro genetic toxicity studies were negative.

- **Information for components:**

  Polyethylene glycol octylphenyl ether

  For this family of materials: In vitro genetic toxicity studies were negative.

  Poly(ethylene oxide)

  For this family of materials: In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicological information appears in this section when such data is available.

12.1 Ecotoxicity

- **Acute toxicity to fish**

  Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested).

  For this family of materials:

  LC50, Pimephales promelas (fathead minnow), static test, 96 Hour, 4 - 8.9 mg/l

- **Acute toxicity to aquatic invertebrates**

  For this family of materials:

  EC50, Daphnia magna (Water flea), static test, 48 Hour, 18 - 26 mg/l

- **Toxicity to bacteria**

  For this family of materials:

  IC50, Bacteria, static test, 16 Hour, 5,000 mg/l

12.2 Persistence and degradability

- **Biodegradability:** For this family of materials: Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

  10-day Window: Not applicable

- **Biodegradation:** > 60 %
- **Exposure time:** 28 d
- **Method:** OECD Test Guideline 301B or Equivalent
- **Theoretical Oxygen Demand:** 2.05 - 2.61 mg/mg Calculated.
- **Chemical Oxygen Demand:** 1.71 - 2.18 mg/mg Dichromate
- **Biological oxygen demand (BOD)**

Incubation Time	BOD
5 d	17 - 30 %
10 d	25 - 40 %
20 d	23 - 51 %

12.3 Bioaccumulative potential

- **Partition coefficient: n-octanol/water(log Pow):** 2.7 Estimated.
- **Bioconcentration factor (BCF):** 15 Estimated.

12.4 Mobility in soil: No relevant data found.

12.5 Results of PBT and vPvB assessment: This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

12.6 Other adverse effects: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Disposal methods: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and

local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION: Composition Information. FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: Incinerator or other thermal destruction device. Waste water treatment system.

SECTION 14. TRANSPORT INFORMATION

14.1 Classification for ROAD and Rail transport: Not regulated for transport

14.2 Classification for SEA transport (IMO-IMDG): Not regulated for transport

- **Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code:** Consult IMO regulations before transporting ocean bulk

14.3 Classification for AIR transport (IATA/ICAO): Not regulated for transport

14.4 Specific transport measures and precautionary conditions: No

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

SECTION 15. REGULATORY INFORMATION

15.1 Taiwan Chemical Substance Inventory (TCSI)

All intentional components are either listed on the Inventory or exempted by regulations, or certified by venders of their supply chemicals.

15.2 Applicable regulations in Taiwan:

- **Occupation Safety and Health Law**
- **Waste Disposal Act.**
- **Regulations on Labelling and Hazard Communication of Hazardous Chemicals**

SECTION 16. OTHER INFORMATION

16.1 Product Literature

Additional information on this and other products may be obtained by visiting our web page. Additional information on this product may be obtained by calling your sales or customer service contact. Ask for a product brochure.

16.2 Hazard Rating System

♦ **NFPA**

Health	Flammability	Instability
3	1	0

♦ **Legend**

TWA	8-hr TWA
US WEEL	USA. Workplace Environmental Exposure Levels (WEEL)

16.3 Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

Product has not been fully validated for medical applications. For research use only.

16.4 Prepared by: APOLO Biochemical, Inc.

The information provided above is believed to be correct to our best knowledge, but does not purport to be all inclusive, and shall be used only as a guide. This material is sold for research purposes only and is not required to appear on the TSCA inventory. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals. APOLO shall not be held liable for any damage resulting from handling or contact with the above product.

2.3 Precautionary statements

Prevention

Wash skin thoroughly after handling.

Do not eat, drink or smoke when using this product.

Avoid release to the environment.

Wear eye protection/ face protection.

Response

IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.

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 and/or doctor.

Call a POISON CENTER/ doctor if you feel unwell.

Disposal

Dispose of contents and/or container to an approved waste disposal plant.

2.4 Other hazards

Slipping hazard.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Synonyms: Octylphenol Ethoxylate

This product is a substance.

Component	CASRN	Concentration
Polyethylene glycol octylphenyl ether	9036-19-5	>= 97.0 %
Poly(ethylene oxide)	25322-68-3	<= 3.0 %

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

- **General advice:**

  First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

- **Inhalation:** Move person to fresh air and keep comfortable for breathing; consult a physician.
- **Skin contact:** Wash off with plenty of water.
- **Eye contact:** Wash immediately and continuously with flowing water for at least 30 minutes. Remove contact lenses after the first 5 minutes and continue washing. Obtain prompt medical consultation, preferably from an ophthalmologist. Suitable emergency eye wash facility should be immediately available.

- **Ingestion:** If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.
- **Most important symptoms and effects, both acute and delayed:** Harmful if swallowed. May be harmful in contact with skin. Causes serious eye damage.

4.2 Protection of first-aiders

- **Indication of any immediate medical attention and special treatment needed**

  Notes to physician: Chemical eye burns may require extended irrigation. Obtain prompt consultation, preferably from an ophthalmologist. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

SECTION 5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

- **Suitable extinguishing media:** Water fog or fine spray.. Dry chemical fire extinguishers.. Carbon dioxide fire extinguishers.. Foam.. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective..
- **Unsuitable extinguishing media:** Do not use direct water stream.. May spread fire..

5.2 Special hazards arising from the substance or mixture

- **Hazardous combustion products:** During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating.. Combustion products may include and are not limited to:. Carbon monoxide.. Carbon dioxide..
- **Unusual Fire and Explosion Hazards:** Container may rupture from gas generation in a fire situation.. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids..

5.3 Advice for firefighters

- **Fire Fighting Procedures:** Keep people away. Isolate fire and deny unnecessary entry.. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed.. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles.. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container.. Burning liquids may be extinguished by dilution with water.. Do not use direct water stream. May spread fire.. Move container from fire area if this is possible without hazard.. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage..
- **Special protective equipment for firefighters:** Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves).. If protective equipment is not available or not used, fight fire from a protected location or safe distance..

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures: Evacuate area. Refer to section 7, Handling, for additional precautionary measures. Only trained and properly protected personnel must be involved in clean-up operations. Keep upwind of spill. Ventilate area of leak or spill. Spilled material may cause a slipping hazard. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

6.2 Environmental precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

6.3 Methods and materials for containment and cleaning up: Contain spilled material if possible. Absorb with materials such as: Sand. Dirt. Collect in suitable and properly labeled containers. Do not use water for cleanup. See Section 13, Disposal Considerations, for additional information. Contain spilled material if possible. Absorb with materials such as: Sand. Dirt. Collect in suitable and properly labeled containers. Do not use water for cleanup. See Section 13, Disposal Considerations, for additional information.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling: Do not get in eyes. Avoid contact with skin and clothing. Do not swallow. Wash thoroughly after handling. Avoid breathing vapor. Use with adequate ventilation. Keep container closed. Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperatures possibly resulting in spontaneous combustion. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

7.2 Conditions for safe storage: No specific requirements. Additional storage and handling information on this product may be obtained by calling your sales or customer service contact. The shelf life given is for unopened containers stored under moderate temperature conditions.

Storage stability

Shelf life: Use within

24 Month

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

♦ Control parameters

If exposure limits exist, they are listed below. If no exposure limits are displayed, then no values are applicable.

Component	Regulation	Type of listing	Value/Notation
Poly(ethylene oxide)	US WEEL	TWA aerosol	10 g/m3

8.2 Exposure controls

♦ **Engineering controls:** Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

♦ **Individual protection measures**

- **Eye/face protection: Use chemical goggles.**
- **Skin protection**
  - **Hand protection:** Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. Examples of preferred glove barrier materials include: Butyl rubber. Ethyl vinyl alcohol laminate ("EVAL"). Examples of acceptable glove barrier materials include: Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account

all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

- **Other protection:** Wear clean, body-covering clothing.

- **Respiratory protection:** Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. In misty atmospheres, use an approved particulate respirator.

  The following should be effective types of air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.

Hygiene measures: No smoking and drinking

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	
Physical state	Liquid.
Color	Yellow
Odor	Mild
Odor Threshold	No test data available
pH	6 Calculated. (5% aqueous solution)
Melting point/range	Not applicable to liquids
Freezing point	See Pour Point
Boiling point (760 mmHg)	> 200 °C Calculated.
Flash point	**closed cup** 251 °C *ASTM D 93*
Evaporation Rate (Butyl Acetate = 1)	<0.01 *Calculated*
Flammability (solid, gas)	Not applicable to liquids
Flammability (liquids)	Not expected to be a static-accumulating flammable liquid.
Lower explosion limit	No test data available
Upper explosion limit	No test data available
Vapor Pressure	< 0.01 mmHg at 20 °C *Calculated.*
Relative Vapor Density (air = 1)	>1 *Calculated.*
Relative Density (water = 1)	1.061 at 20 °C / 20 °C *Calculated.*
Water solubility	partly soluble
Partition coefficient: n-octanol/water	log Pow: 2.7 *Estimated.*
Auto-ignition temperature	No test data available
Decomposition temperature	No test data available
Kinematic Viscosity	226 cSt *Calculated.*
Explosive properties	No data available
Oxidizing properties	No data available
Molecular weight	624 g/mol *Calculated.*

Percent volatility	No data available
Pour point	2 °C *Calculated.*

NOTE: The physical data presented above are typical values and should not be construed as a specification.

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity: No data available

10.2 Chemical stability: Thermally stable at typical use temperatures.

10.3 Possibility of hazardous reactions: Polymerization will not occur.

10.4 Conditions to avoid: Do not distill to dryness. Product can oxidize at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems.

10.5 Inhibitor: None

10.6 Incompatible materials: Avoid contact with: Strong acids. Strong oxidizers.

10.7 Hazardous decomposition products: Decomposition products depend upon temperature, air supply and the presence of other materials.. Decomposition products can include and are not limited to:. Aldehydes.. Ketones.. Organic acids..

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicological information appears in this section when such data is available.

11.1 Exposure routes

Ingestion, Inhalation, Skin contact, Eye contact.

11.2 Acute toxicity (represents short term exposures with immediate effects - no chronic/delayed effects known unless otherwise noted)

♦ **Acute Toxicity Endpoints:** Harmful if swallowed., May be harmful in contact with skin.

- **Acute oral toxicity**
  - **Information for the Product:**

    Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury.

    Typical for this family of materials.

    LD50, Rat, 1,900 - 5,000 mg/kg
  - **Information for components:**

    Polyethylene glycol octylphenyl ether

    Typical for this family of materials. LD50, Rat, 1,900 - 5,000 mg/kg

    Poly(ethylene oxide)

    Typical for this family of materials. LD50, Rat, > 10,000 mg/kg
- **Acute dermal toxicity**

▪ **Information for the Product:**

Prolonged skin contact is unlikely to result in absorption of harmful amounts.

Typical for this family of materials.

LD50, Rabbit, > 3,000 mg/kg

▪ **Information for components:**

Polyethylene glycol octylphenyl ether

Typical for this family of materials. LD50, Rabbit, > 3,000 mg/kg

Poly(ethylene oxide)

Typical for this family of materials. LD50, Rabbit, > 20,000 mg/kg

• **Acute inhalation toxicity**

▪ **Information for the Product:**

At room temperature, exposure to vapor is minimal due to low volatility; single exposure is not likely to be hazardous. Mist may cause irritation of upper respiratory tract (nose and throat).

As product: The LC50 has not been determined.

▪ **Information for components:**

Polyethylene glycol octylphenyl ether

The LC50 has not been determined.

Poly(ethylene oxide)

Typical for this family of materials. LC50, Rat, 6 Hour, dust/mist, > 2.5 mg/l No deaths occurred at this concentration.

♦ **Skin corrosion/irritation**

Not classified based on available information.

• **Information for the Product:**

Based on product testing:

Brief contact is essentially nonirritating to skin.

Prolonged contact may cause moderate skin irritation with local redness.

Repeated contact may cause moderate skin irritation with local redness.

• **Information for components:**

Polyethylene glycol octylphenyl ether

Brief contact is essentially nonirritating to skin.

Prolonged contact may cause moderate skin irritation with local redness.

Repeated contact may cause moderate skin irritation with local redness.

Poly(ethylene oxide)

Prolonged exposure not likely to cause significant skin irritation.

May cause more severe response if skin is abraded (scratched or cut).

♦ **Serious eye damage/eye irritation**

Causes serious eye damage.

• **Information for the Product:**

Based on product testing:

May cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness. Chemical burns may occur.

Mist may cause eye irritation.

- **Information for components:**

Polyethylene glycol octylphenyl ether

May cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness. Chemical burns may occur.

Mist may cause eye irritation.

Poly(ethylene oxide)

May cause slight temporary eye irritation.

Corneal injury is unlikely.

♦ **Sensitization**

- **For skin sensitization:**

Not classified based on available information.

- **For respiratory sensitization:**

Not classified based on available information.

▪ **Information for the Product:**

For skin sensitization:

Did not cause allergic skin reactions when tested in humans.

Did not cause allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:

No relevant data found.

▪ **Information for components:**

Polyethylene glycol octylphenyl ether

Did not cause allergic skin reactions when tested in humans.

Did not cause allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:

No relevant data found.

Poly(ethylene oxide)

For this family of materials:

Did not cause allergic skin reactions when tested in humans.

For this family of materials, sensitization studies done in guinea pigs have been negative.

For respiratory sensitization:

No relevant data found.

♦ **Specific Target Organ Systemic Toxicity (Single Exposure)**

Not classified based on available information.

- **Information for the Product:**

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

- **Information for components:**

Polyethylene glycol octylphenyl ether

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

Poly(ethylene oxide)

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

♦ **Aspiration Hazard**

Not classified based on available information.

• **Information for the Product:**

Based on physical properties, not likely to be an aspiration hazard.

• **Information for components:**

Polyethylene glycol octylphenyl ether

Based on physical properties, not likely to be an aspiration hazard.

Poly(ethylene oxide)

Based on physical properties, not likely to be an aspiration hazard.

11.3 Chronic toxicity (represents longer term exposures with repeated dose resulting in chronic/delayed effects - no immediate effects known unless otherwise noted)

♦ **Specific Target Organ Systemic Toxicity (Repeated Exposure)**

Not classified based on available information.

• **Information for the Product:**

Product test data not available.

• **Information for components:**

Polyethylene glycol octylphenyl ether

No relevant data found.

Poly(ethylene oxide)

Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

Recent findings of kidney failure and death in burn patients, as well as some studies using animal burn models, suggest that polyethylene glycol may have been a factor.

The use of topical applications containing this material may not be appropriate in severely burned patients.

♦ **Carcinogenicity**

Not classified based on available information.

• **Information for the Product:**

Product test data not available.

• **Information for components:**

Polyethylene glycol octylphenyl ether

No relevant data found.

Poly(ethylene oxide)

Polyethylene glycols did not cause cancer in long-term animal studies.

♦ **Teratogenicity**