

## SPI Supplies Division

Structure Probe, Inc.

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Manufacturer's CAGE: 1P573

## Safety Data Sheet

Date Effective: April 1, 2019

SPI Catalog # 09912-AB  
Triton®-X100 Nonionic Surfactant Octyl Phenol  
Ethoxylate Ether, 0.08% Aqueous

### Section 1.1: Identification

Chemical Name/Synonyms ..... 0.08% Triton®-X100 aqueous solution

Product or Trade Name ..... Triton®-X100 Nonionic Surfactant Octyl Phenol Ethoxylate Ether, 0.08% Aqueous

CAS #'s ..... 7732-18-5; 9036-19-5; 25322-68-3

Chemical Formula..... Mixture

### Section 1.2: Relevant Uses/Restrictions

This is the 0.08% aqueous solution of Triton-X 100 for applications in microscopy and histology.

### Section 1.3: Supplier of the Safety Data Sheet

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### Section 1.4: Emergency telephone number

Emergencies

Contacting CHEMTREC:

24 Hour Emergency Use Only #'s...

Worldwide phone: 1-(703)-741-5970

Toll-free phone: 1-(800)-424-9300 USA + Canada only

### Section 2: Hazard Identification

#### 2.1 Classification of the substance

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

Eye irritation, Category 2A

Acute Toxicity, Category 3

Acute Aquatic Toxicity, Category 3

## 2.2 Label elements

### Pictogram



**Signal Word:** Warning

### Hazard statements:

- H319 Causes serious eye irritation.
- H412 Harmful to aquatic life with long lasting effects.

### Precautionary statements:

- P264 Wash thoroughly after handling.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
- P337 + P313 If eye irritation persists get medical advice/ attention.
- P501 Dispose of contents/ container to an approved disposal facility.

**2.3 Other Hazards:** No data available.

### Hazardous Material Information System USA

Health ..... 2  
Fire Hazard ..... 0  
Reactivity ..... 0  
Personal Protection .....

### NFPA Rating (estimated)

Health ..... 2  
Flammability ..... 0  
Reactivity ..... 0

## Section 3: Composition

Component Name	CAS #	Percentage	EC Number
Water	7732-18-5	~99.92	231-791-2
Triton X-100:			
2-(2-[4-(1,1,3,3-Tetramethylbutyl)phenoxy]ethoxy)ethanol	9036-19-5	0.072-<0.08	618-541-1
Poly(oxy-1,2-ethanediyl), $\alpha$ -hydro- $\omega$ -hydroxy-Ethane-1,2-diol, ethoxylated	25322-68-3	0.004-0.008	500-038-2

## **Section 4: First Aid Measures**

### **4.1 Description of first aid measures:**

**Eyes:** Flush eyes with copious amounts of water for at least 15 minutes, holding the eyelids open. Seek medical attention.

**Skin:** Immediately wash with plenty of soap and water. Flush skin with copious amounts of water for at least 15 minutes. If irritation develops or persists seek medical attention. Remove all contaminated clothing and wash before reuse.

**Ingestion:** Do not induce vomiting. Wash out mouth with water, provided person is conscious. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Seek medical attention.

**Inhalation:** Remove to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Seek medical attention, especially if cough or other symptoms appear.

### **4.2 Most important symptoms and effects, both acute and delayed:**

No additional information available.

### **4.3 Indication of any immediate medical attention and special treatment needed:**

**Notes to Physician:** Treat symptomatically and supportively.

## **Section 5: Fire Fighting Measures**

**5.1 Extinguishing media:** Water spray, CO<sub>2</sub>, Dry chemical powder, Appropriate foam.

**5.2 Special hazards arising from the substance or mixture:** Foam and water spray are effective, but may cause frothing.

**5.3 Hazardous combustion products:** Emits toxic Fumes under fire conditions.

**5.4 Advice for firefighters:** Use methods appropriate to the surrounding fire.

**5.5 Special protective equipment and precautions for firefighters:** Wear self-contained breathing apparatus MSHA/NIOSH approved or equivalent, and protective clothing to prevent contact with skin and eyes.

## **Section 6: Accidental Release Measures**

### **6.1 Personal precautions:**

Personal protective equipment not required.  
Ensure adequate ventilation.

**6.2 Environmental precautions:** No special measures required.

### **6.3 Methods and material for containment and cleaning up:**

Absorb with liquid binding material, such as sand, diatomite, acid binders, universal binders, sawdust.  
Dispose as waste according to Section 13.

### **6.4 Reference to other sections:**

See Section 7 for safe handling.  
See Section 8 for personal protective equipment.

See Section 13 for disposal information.

## ***Section 7: Handling and Storage***

### **7.1 Precautions for safe handling:**

#### **Protective measures:**

Ensure adequate ventilation.  
Prevent formation of aerosols.

#### **Advice on general hygiene conditions:**

Wash thoroughly after handling.  
Avoid contact with eyes, skin, and clothing.

### **7.2 Conditions for safe storage, including any incompatibilities:**

Store in tightly closed container in a cool, well-ventilated area.

### **7.3 Specific end uses:**

No further relevant information available.

This material is not being offered for clinical or diagnostic applications, agricultural uses or for human or animal consumption.

## ***Section 8: Exposure Controls and Personal Protection***

### **8.1 Control parameter and Personal Protection:**

#### **Workplace exposure limits:**

This material does not contain a substance with occupational exposure limits.

**Biological limit values:** No relevant information available.

### **8.2 Exposure controls:**

#### **8.2.1 Appropriate engineering controls:**

An eye-wash station should be available to the work area.

#### **8.2.2 Individual protection measures:**

Wear appropriate protective gloves to prevent skin contact.  
Wear safety goggles to prevent eye contact.  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing.  
Wash hands before breaks and at the end of work.  
Avoid contact with eyes and skin.

#### **8.2.3 Environmental exposure controls:**

No further relevant information available.

## ***Section 9: Physical and Chemical Properties***

### **9.1 Information on basic physical and chemical properties:**

**Appearance:** Clear to slightly hazy liquid

**Odor:** Slightly aromatic

**Odor threshold:** No data available

**pH:** 6-8

**Melting point/Freezing point:** -0.01 °C (water)

**Boiling point/Boiling point range:** 99.9 °C (water)

**Flash Point:** No data available

**Evaporation rate:** 0.36 (water)

**Flammability (solid, gas):** Substance is not flammable

**Upper/lower flammability or explosive limits:** No data available

**Vapor Pressure:** No data available

**Vapor density:** No data available

**Specific gravity:** No data available

**Solubility:** Completely miscible with water

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

**Auto-ignition temperature:** No data available

**Decomposition temperature:** No data available

**Viscosity:** No data available

**Explosive properties:** No data available

**Oxidizing Properties:** No data available

**9.2 Other information:** No further relevant information available.

## ***Section 10: Stability and Reactivity***

**10.1 Reactivity:** No dangerous reactions known under conditions of normal use.

**10.2 Chemical Stability:** Stable.

**10.3 Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**10.4 Conditions to avoid:** Exposure to air, light, or excessive heat.

**10.5 Incompatible materials:** Strong acids, Oxidizing agents.

**10.6 Hazardous decomposition products:** No decomposition under recommended storage conditions or under conditions of normal use.

## ***Section 11: Toxicological Information***

**Information on the likely routes of exposure:**

**11.1 Information on toxicological effects:**

**A. Acute toxicity:** No data available.

**B. Skin corrosion/irritation:** No data available.

**C. Serious eye damage/irritation:** No data available.

**D. Respiratory or skin sensitization:** No data available.

- E. Germ cell mutagenicity:** No data available.
- F. Carcinogenicity:** Not listed by ACGIH, IARC, NTP, OR CA Prop. 65.
- G. Reproductive toxicity:** No data available.
- H. STOT-single exposure:** No data available.
- I.. STOT-repeated exposure:** No data available.
- J. Aspiration hazard:** No data available.

## ***Section 12: Ecological Information***

### **12.1 Toxicity:**

CAS # 9036-19-5 is toxic to aquatic life with long lasting effects.

**12.2 Persistence and degradability:** This material is readily biodegradable.

**12.3 Bio-accumulative potential:** Bio-accumulation is not expected.

**12.4 Mobility in soil:** No relevant information available.

**12.5 Results of PBT and vPvB assessment:** No data available.

**12.6 Other adverse effects:** No further relevant information available.

## ***Section 13: Disposal Considerations***

### **13.1 Waste treatment methods:**

Avoid release to the environment.

Observe all federal, state, and local environmental regulations.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

## ***Section 14: Transport Information***

**DOT:** Not regulated for transport.

**IATA:** Not regulated for transport.

**IMDG:** Not regulated for transport.

## ***Section 15: Regulatory Information***

**15.1 Safety, health and environmental regulations/ legislation specific for the substance or mixture:**

**U.S. Government Regulations:**

**TSCA:** All components of this product are on the TSCA Active Inventory List.

**SARA Section 302 (RQ):** None of the components has an RQ.

**SARA Section 302 (TPQ):** None of the components has a TPQ.

**SARA Section 311/312:** CAS # 9036-1-95 is listed as Acute Health Hazard.

**SARA Section 313:** None of the components is subject to the reporting requirements of SARA Section 313.

**California Prop. 65:** None of the components is known to the State of California to cause cancer, birth defects, or other reproductive harm.

**CANADA:**

CAS # 7732-18-5 is on the DSL List.

CAS # 9036-19-5 is on the DSL List.

CAS # 25322-68-3 is on the DSL List.

**European / International Regulations:**

2-(2-[4-(1,1,3,3-Tetramethylbutyl)phenoxy]ethoxy)ethanol, CAS # 9036-19-5:

Is on the REACH Annex III Inventory List.

ECHA in the CLP Notifications lists it as:

Toxic to aquatic life with long-lasting effects [GHS07 – Aquatic chronic 2]

Causes serious eye damage [GHS09 – Eye irritant 2]

Harmful if swallowed [GHS05 – Acute toxicity – 4]

**15.2 Chemical Safety Assessment:** Has not been carried out.

Date of Preparation: 01 April 2019.

**Abbreviations and acronyms**

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

CMRG: Chemical Manufacturer's Recommended Guidelines

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

AIHA: American Industrial Hygiene Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bio-accumulative and Toxicological

vPvB: very Persistent and very Bio-accumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety Health

ATE: Acute Toxicity Estimates

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

STEL: Short Term Exposure Limit

CEIL: Ceiling

TSCA: Toxic Substances Control Act (USA)

DSL: Domestic Substances List (Canada)

PICCS: Philippine Inventory of Chemicals and Chemical Substances

ENCS: Existing and New Chemical Substances (Japan)

AICS: Australian Inventory of Chemical Substances

IECSC: Inventory of Existing Chemical Substances in China

KECL: Korea Existing Chemicals List

## **Section 16: Other Information**

### **Disclaimer of Liability:**

Caution! Do not use SPI Supplies products or materials in applications involving implantation within the body; direct or indirect contact with the blood pathway; contact with bone, tissue, tissue fluid, or blood; or prolonged contact with mucous membranes. Products offered by SPI Supplies are not designed or manufactured for use in implantation in the human body or in contact with internal body fluids or tissues. SPI Supplies will not provide to customers making devices for such applications any notice, certification, or information necessary for such medical device use required by US FDA (Food and Drug Administration) regulation or any other statute. SPI Supplies and Structure Probe, Inc. make no representation, promise, express warranty or implied warranty concerning the suitability of these materials for use in implantation in the human body or in contact with internal body tissues or fluids.

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