# SAFETY DATA SHEET

**Product name: TRITON™ X-405 70% Surfactant**
**SDS Number:** 10388774

**Date of first issue:** 04.06.2011
**Issue Date:** 17.02.2020
**Print Date:** 18.02.2020

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name:** TRITON™ X-405 70% Surfactant

**Recommended use of the chemical and restrictions on use**
**Identified uses:** Coatings product

**COMPANY IDENTIFICATION**
Lab Alley LLC
22111 Highway 71 West, Suite 601
Spicewood, Texas 78669
Tel.: 512-668-9918

**EMERGENCY TELEPHONE NUMBER**
**InfoTrac:** 800-535-5053

## 2. HAZARDS IDENTIFICATION

**Emergency Overview**

| | |
|---|---|
| **Appearance** | liquid |
| **Color** | Pale yellow clear |
| **Odor** | Mild odor |

Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

**GHS Classification**
Classified as hazardous according to regulatory criteria.
Short-term (acute) aquatic hazard - Category 3
Long-term (chronic) aquatic hazard - Category 3

**GHS label elements**

**Hazard statements**
Harmful to aquatic life with long lasting effects.

**Precautionary statements**

**Prevention**
Avoid release to the environment.

**Disposal**
Dispose of contents/ container to an approved waste disposal plant.

**Physical and chemical hazards**
Not classified based on available information.

**Health hazards**
Not classified based on available information.

**Environmental hazards**
Harmful to aquatic life.
Harmful to aquatic life with long lasting effects.

**Other hazards**
No data available

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture.

| Component | CASRN | Concentration |
|---|---|---|
| Octylphenoxypolyethoxyethanol | 9036-19-5 | >= 50.0 - < 70.0 % |
| Polyethylene glycol | 25322-68-3 | >= 1.0 - < 10.0 % |

## 4. FIRST AID MEASURES

**Description of first aid measures**
**Inhalation:** Move to fresh air.

**Skin contact:** Wash with water and soap as a precaution. If skin irritation persists, call a physician.

**Eye contact:** Rinse with plenty of water. If eye irritation persists, consult a specialist.

**Ingestion:** Drink 1 or 2 glasses of water. Consult a physician if necessary. Never give anything by mouth to an unconscious person.

**Most important symptoms and effects, both acute and delayed:**
Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

**Indication of any immediate medical attention and special treatment needed**
**Notes to physician:** Treatment should be directed at preventing absorption, administering to symptoms (if they occur), and providing supportive therapy.

## 5. FIREFIGHTING MEASURES

**Extinguishing media**

**Suitable extinguishing media:** Use extinguishing media appropriate for surrounding fire..

**Unsuitable extinguishing media:** No data available

**Special hazards arising from the substance or mixture**

**Hazardous combustion products:** No data available

**Unusual Fire and Explosion Hazards:** Material can splatter above 100C/212F.. Dried product can burn..

**Advice for firefighters**

**Fire Fighting Procedures:** No data available

**Special protective equipment for firefighters:** Wear self-contained breathing apparatus and protective suit..

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:** Use personal protective equipment. Keep people away from and upwind of spill/leak. Material can create slippery conditions.

**Environmental precautions:** CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

**Methods and materials for containment and cleaning up:** Contain spills immediately with inert materials (e.g., sand, earth). Transfer liquids and solid diking material to separate suitable containers for recovery or disposal.

## 7. HANDLING AND STORAGE

**Precautions for safe handling:** Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Keep container tightly closed. Do not breathe vapors, mist or gas.

**Conditions for safe storage:** Keep from freezing - product stability may be affected. STIR WELL BEFORE USE.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**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 |
|---|---|---|---|
| Polyethylene glycol | US WEEL | TWA aerosol | 10 mg/m3 |

**Exposure controls**
**Engineering controls:** Use local exhaust ventilation with a minimum capture velocity of 100 ft/min. (0.5 m/sec.) at the point of vapor evolution. Refer to the current edition of Industrial Ventilation: A Manual of Recommended Practice published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

**Personal protective equipment:** Facilities storing or utilizing this material should be equipped with an eyewash facility.

**Individual protection measures**

**Eye/face protection:** Eye protection worn must be compatible with respiratory protection system employed. Use safety glasses with side shields (ANSI Z87.1or approved equivalent).

**Skin protection**

**Hand protection:** Chemical-resistant gloves should be worn whenever this material is handled. The glove(s) listed below may provide protection against permeation. (Gloves of other chemically resistant materials may not provide adequate protection): Polyvinyl chloride

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| **Appearance** | |
| **Physical state** | liquid |
| **Color** | Pale yellow clear |
| **Odor** | Mild odor |
| **Odor Threshold** | No data available |
| **pH** | 8.0 (5% solution) |
| **Melting point/range** | -9.00 °C |
| **Freezing point** | No data available |
| **Boiling point (760 mmHg)** | 101.00 °C |
| **Flash point** | Noncombustible |

| | |
|---|---|
| **Evaporation Rate (Butyl Acetate = 1)** | 0.70 |
| **Flammability (solid, gas)** | Not Applicable |
| **Lower explosion limit** | Not applicable |
| **Upper explosion limit** | Not applicable |
| **Vapor Pressure** | 14.65 mmHg at 20 °C |
| **Relative Vapor Density (air = 1)** | 0.6200 |
| **Relative Density (water = 1)** | 1.1000 |
| **Water solubility** | completely soluble |
| **Partition coefficient: n-octanol/water** | No data available |
| **Autoignition Temperature** | No data available |
| **Decomposition temperature** | No data available |
| **Dynamic Viscosity** | 490 mPa.s |
| **Kinematic Viscosity** | No data available |
| **Explosive properties** | No data available |
| **Oxidizing properties** | No data available |
| **Molecular weight** | No data available |
| **Percent volatility** | 31.00 % Water |

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

## 10. STABILITY AND REACTIVITY

**Reactivity:** No data available

**Chemical stability:** No data available

**Possibility of hazardous reactions:** None known.
Product will not undergo polymerization.
Stable

**Conditions to avoid:** No data available

**Incompatible materials:** Avoid contact with the following: Strong oxidizing agents Strong acids materials reactive with hydroxyl compounds

**Hazardous decomposition products**
No hazardous decomposition products are known.

## 11. TOXICOLOGICAL INFORMATION

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

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

**Acute oral toxicity**
Product test data not available.

**Information for components:**

**Octylphenoxypolyethoxyethanol**
LD50, Rat, > 5,000 mg/kg

**Polyethylene glycol**
Typical for this family of materials. LD50, Rat, > 10,000 mg/kg Estimated.

**Acute dermal toxicity**
Product test data not available.

**Information for components:**

**Octylphenoxypolyethoxyethanol**
LD50, Rabbit, > 5,000 mg/kg

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

**Acute inhalation toxicity**
Product test data not available.

**Information for components:**

**Octylphenoxypolyethoxyethanol**
The LC50 has not been determined.

**Polyethylene glycol**
LC50, Rat, 6 Hour, dust/mist, > 2.5 mg/l No deaths occurred at this concentration.

**Skin corrosion/irritation**
Product test data not available.

**Information for components:**

**Octylphenoxypolyethoxyethanol**
Brief contact is essentially nonirritating to skin.
Prolonged contact may cause slight skin irritation with local redness.

**Polyethylene glycol**
Prolonged exposure not likely to cause significant skin irritation.

**Serious eye damage/eye irritation**
Product test data not available.

**Information for components:**

**Octylphenoxypolyethoxyethanol**
May cause slight temporary eye irritation.
Corneal injury is unlikely.

**Polyethylene glycol**
May cause slight temporary eye irritation.
Corneal injury is unlikely.

**Sensitization**
Product test data not available.

**Information for components:**

**Octylphenoxypolyethoxyethanol**
Did not cause allergic skin reactions when tested in humans.

For respiratory sensitization:
No relevant data found.

**Polyethylene glycol**
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 data available

**Specific Target Organ Systemic Toxicity (Single Exposure)**
Product test data not available.

**Information for components:**

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

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

**Aspiration Hazard**
Product test data not available.

**Information for components:**

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

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

**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)**

Product test data not available.

**Information for components:**

**Octylphenoxypolyethoxyethanol**
In animals, effects have been reported on the following organs:
Liver.

**Polyethylene glycol**
Based on available data, repeated exposures are not anticipated to cause significant adverse effects.
The use of topical applications containing this material may not be appropriate in severely burned patients.
This product should not be used in patients with kidney disease; these effects would not result from normal industrial handling.

**Carcinogenicity**
Product test data not available.

**Information for components:**

**Octylphenoxypolyethoxyethanol**
No relevant data found.

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

**Teratogenicity**
Product test data not available.

**Information for components:**

**Octylphenoxypolyethoxyethanol**
Did not cause birth defects or any other fetal effects in laboratory animals.

**Polyethylene glycol**
Did not cause birth defects or any other fetal effects in laboratory animals.

**Reproductive toxicity**
Product test data not available.

**Information for components:**

**Octylphenoxypolyethoxyethanol**
No relevant data found.

**Polyethylene glycol**
In animal studies, did not interfere with reproduction.

**Mutagenicity**
Product test data not available.

**Information for components:**

**Octylphenoxypolyethoxyethanol**
In vitro genetic toxicity studies were negative.

**Polyethylene glycol**
In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

**Additional information**
No data available

## 12. ECOLOGICAL INFORMATION

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

**General Information**
There is no data available for this product.

**Ecotoxicity**

**Octylphenoxypolyethoxyethanol**

**Acute toxicity to fish**
Material is slightly toxic to aquatic organisms on an acute basis (LC50/EC50 between 10 and 100 mg/L in the most sensitive species tested).
LC50, Pimephales promelas (fathead minnow), 96 Hour, > 60 mg/l

**Acute toxicity to aquatic invertebrates**
LC50, Daphnia magna, 48 Hour, > 1,000 mg/l

**Toxicity to bacteria**
IC50, Bacteria, 16 Hour, Respiration rates., 1,000 - 2,400 mg/l

**Polyethylene glycol**

**Acute toxicity to fish**
For this family of materials:
Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

**Acute toxicity to aquatic invertebrates**
LC50, Daphnia magna (Water flea), 48 Hour, > 10,000 mg/l

**Persistence and Degradability**

**Octylphenoxypolyethoxyethanol**

**Biodegradability:** Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions.

**Theoretical Oxygen Demand:** 1.9 - 1.95 mg/mg Estimated.

**Chemical Oxygen Demand:** 2.0 mg/mg Estimated.

**Polyethylene glycol**

**Biodegradability:** For this family of materials: Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions.
10-day Window: Fail
**Biodegradation:** 48 %
**Exposure time:** 28 d
**Method:** OECD Test Guideline 301D or Equivalent

**Theoretical Oxygen Demand:** 1.67 - 1.77 mg/mg

**Chemical Oxygen Demand:** 1.81 mg/mg

**Bioaccumulative Potential**

**Octylphenoxypolyethoxyethanol**

**Bioaccumulation:** No relevant data found.

**Polyethylene glycol**

**Bioaccumulation:** For this family of materials: No bioconcentration is expected because of the relatively high water solubility.

**Mobility in Soil**

**Octylphenoxypolyethoxyethanol**

No relevant data found.

**Polyethylene glycol**

No data available.

**Results of PBT and vPvB assessment**

**Octylphenoxypolyethoxyethanol**

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

**Polyethylene glycol**

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

**Other adverse effects**

**Octylphenoxypolyethoxyethanol**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**Polyethylene glycol**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

## 13. DISPOSAL CONSIDERATIONS

**Disposal methods:** Incinerate liquid and contaminated solids in accordance with local, state, and federal regulations.

## 14. TRANSPORT INFORMATION

**Classification for ROAD and Rail transport:**

Not regulated for transport

**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 |

**Classification for AIR transport (IATA/ICAO):**

Not regulated for transport

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.

## 15. REGULATORY INFORMATION

The following statutes, regulations and standards have the related prescribes on chemicals in terms of safe use, storage, transportation, loading and unloading, classification and symbol etc.
Provisions on the Environmental Administration of New Chemical Substances.
The Regulation on Chemicals Safe Use at Working Site
Law on Prevention and Control of Environmental Pollution Caused by Solid Waste.
Regulation on the Safety Management of Hazardous Chemicals
Catalogue of Hazardous Chemicals: Not applicable
General rule of classification and hazard communication of chemicals (GB 13690)
Occupational Exposure Limits for Hazardous Agent in The workshop Chemical Hazardous Agents(GBZ 2.1).

**China. Inventory of Existing Chemical Substances in China (IECSC) (IECSC)**
All intentional components are listed on the inventory, are exempt, or are supplier certified.

## 16. OTHER INFORMATION

**Revision**
Identification Number: 10388774 / A160 / Issue Date: 17.02.2020 / Version: 2.1
Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

**Legend**

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

**Full text of other abbreviations**
AICS - Australian Inventory of Chemical Substances; 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; 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

necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.
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