Triton X-100

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: Triton X-100
Catalog Numbers: AC21586000, AC21586001, AC21586050, AC215862500
Synonyms: Polyoxyethylene mono-4-(1,3,3-trimethylbutyl)phenylether; Oxyethylphenoxypolyoxyethanol
Company Identification:

- Acros Organics NVBA
- Janssen Pharmaceutica laan 3a
- 2440 Oost, Belgium

- Acros Organics
- One Reagen Lane
- Fair Lawn, NJ 07410

For information in North America, call: 800-ACROS-01
For information in Europe, call: 031310.11875221
For emergencies in US, call CHEMREC 800-424-9900
For emergencies in Europe, call: 0027214575289

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

- CAS: 9002-83-1
- Triton X-100
- Chemical Name: Non listed
- 9002-83-1
- Triton X-100

Hazard Symbols: Xn
Risk Phrases: 2A 41

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW

Appearance: Clear, colorless liquid
Properties: This material shall not be fully investigated. May cause respiratory and digestive tract irritation.

Target Organs: Eyes

Potential Health Effects

- Eye: Causes severe eye irritation. Causes redness and pain. Risk of serious damage to eyes.
- Skin: May cause skin irritation. May cause skin sensitization. An allergic reaction, which becomes evident upon re-exposure to this material.
- Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May be harmful if swallowed.
- Inhalation: May cause respiratory tract irritation. The toxicological properties of this substance have not been fully investigated.

Chronic: Repeated exposure may cause sensitization dermatitis.

**** SECTION 4 - FIRST AID MEASURES ****

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin: Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before re-use.
Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4
infuls of milk or water. Get medical aid. Wash mouth out with water.
Inhalation: Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

Notes to Physician: Treat symptomatically and Antidote: None reported.

**** SECTION 5 - FIRE FIGHTING MEASURES ****

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Vapors may be heavier than air. They can spread along the ground and collect.

**** SECTION 6 - ACCIDENTAL RELEASE MEASURES ****

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Avoid spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Do not allow runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section.

Provide ventilation.

**** SECTION 7 - HANDLING AND STORAGE ****

Handling: Wash thoroughly after handling. Avoid breathing dust, vapor, mist, or gas. Remove contaminated clothing and shoes. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Use with adequate ventilation.

Storage: Do not store in direct sunlight. Store in a cool, dry, well-ventilated area away from incompatible substances.

**** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep air concentrations low.

OSHA Final PELs for Triton X-100:

<table>
<thead>
<tr>
<th>Compound</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triton X-100</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

Personal Protective Equipment

- Eyes: Wear appropriate protective eye glasses or chemical safety goggles as described by OSHA area face protection regulations in 29 CFR 1910.133 or European Standard EN 166.
- Skin: Wear appropriate protective gloves to prevent skin exposure.
- Clothing: Wear appropriate protective clothing to prevent skin exposure.
- Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

**** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****

Physical State: Liquid
Color: Clear, colorless
Odor: Not available.
Flame Color: Blue.
Vapor Pressure: 22.1 Torr.
Vapor Density: 1.127 g/L.
Boiling Point: 105 Deg C.
Flash Point: Not determinable.
Decomposition Temperature: 327 Deg C.
Specific Gravity/Density: Not available.
Molecular Weight: 687.15

6,870
**SECTION 10 - STABILITY AND REACTIVITY***

Chemical Stability:
Stable under normal temperatures and pressures.

Conditions to Avoid:
Avoid exposure to air, exposure to moist or wet air.

Incompatibilities with Other Materials:
Strong oxidising agents - strong reducing agents - high temperatures.

Hazardous Decomposition Products:
Carbon monoxide, carbon dioxide.

Hazardous Polymerisation: Will not occur.

***SECTION 11 - TOXICOLOGICAL INFORMATION***

RTCS:\
CAS\# 9002-93-1: MDOS07700 YM0616666 YM0683323
LD50/LC50:
CAS\# 9002-93-1: D50 test, rabbit: eye: 10 ul/24h Moderate; D50 test, rabbit: skin: 500 ul/24h NlId; Oral rat: LD50 = 1600 mg/kg.

Carcinogenicity:
Trifon X-100
Not listed by AGOSH, IARC, NIOSH, MTF, or OSHA.

Epidemiology:
No information found.

Teratogenicity:
No information found.

Reproductive Effects:
No information found.

Neurotoxicity:
No information found.

Mutagenicity:
SAN-HER: 2 mg/3D, eye-Rot:1.1 mg Standard Draize test Mut. DNA inhibition Ham Hela cells:21 mg/L Mut. Ham Hela cells:14 mg/L

Other Studies:
COD:1.99 g oxygen/g test:2.13 g oxygen/g BOD:5:0 g oxygen/g

***SECTION 12 - ECOTOLOGICAL INFORMATION***

Ecotoxicity:
Fish toxicity: bluegill Takr Karlhagen: 10 mg/l Static Bioassay: 12 mg/l

***SECTION 13 - DISPOSAL CONSIDERATIONS***

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. See the EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. RCRA U-Series: None listed

***SECTION 14 - TRANSPORT INFORMATION***

US DOT:
No information available.

Canadian TDG:
No information available.

***SECTION 15 - REGULATORY INFORMATION***

US FEDERAL

TSCA
CAS\# 9002-93-1 is listed on the TSCA inventory.
Health & Safety Reporting List:
None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rule:
None of the chemicals in this product are under a Chemical Test Rule.

Some of the chemicals in this product are under a Chemical Test Rule.

TSCA Significant New Use Rule:
None of the chemicals in this material have a SNUR under TSCA.

SARA

CERCLA Hazardous Substances and corresponding FQs:
None of the chemicals in this material have an FQ.

SARA Section 302 Extremely Hazardous Substances:
None of the chemicals in this product have a TP.

SARA Codes:
CAS\# 9002-93-1: acute.
Section 313
No chemicals are reportable under Section 313.

Clean Air Act:
This material does not contain any hazardous air pollutants.

Clean Water Act:
None of the chemicals in this product are listed as Hazardous Substances under the CWA.