Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 02.12.2011 *Version number 1* *Revision: 25.09.2009*

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1 Identification of the substance/mixture and of the company/undertaking

· **1.1. Product identifier**

· **Trade name: Triton® X-100**

· **Article number:** 39795
· **CAS Number:**
9036-19-5
· **1.2. Relevant identified uses of the substance or mixture and uses advised against**
· **Application of the substance / the preparation** Laboratory chemicals

· **1.3. Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
SERVA Electrophoresis GmbH
Carl-Benz-Str. 7
D-69115 Heidelberg
Tel.: +49 6221 13840-0
FAX: +49 6221 13840-10
msds.info@serva.de

· **Information department:** Product Safety department Tel.: +49 6221 13840-35
· **1.4. Emergency telephone number:** +49 6131 19240 (university hospital Mainz)

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2 Hazards identification

· **2.1. Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**


GHS05

Eye Dam. 1 H318 Causes serious eye damage.


GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

· **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**


Xn; Harmful

R22: Harmful if swallowed.


Xi; Irritant

R41: Risk of serious damage to eyes.

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
· **Classification system:**
The classification was made according to the latest editions of the EU-lists, and expanded upon fom company and literature data.

· **2.2. Label elements**
· **Labelling according to Regulation (EC) No 1272/2008**
The substance is classified and labelled according to the CLP regulation.
· **Hazard pictograms** GHS05, GHS07
· **Signal word** Danger
· **Hazard statements**
H302 Harmful if swallowed.
H318 Causes serious eye damage.

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H412 Harmful to aquatic life with long lasting effects.

· ***Precautionary statements***

P273	*Avoid release to the environment.*
P264	*Wash thoroughly after handling.*
P270	*Do no eat, drink or smoke when using this product.*
P301+P312	*IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.*
P305+P351+P338	*IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*
P330	*Rinse mouth.*

· ***2.3. Other hazards***
· ***Results of PBT and vPvB assessment***
· ***PBT:*** *Not applicable.*
· ***vPvB:*** *Not applicable.*

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3 Composition/information on ingredients

· ***3.1. Chemical characterization: Substances***
· ***CAS No. Description:***
9036-19-5 Octylphenol-polyethylene glycol ether
· ***Identification number(s):*** -
· ***Description:***
· ***MW:*** *ca. 624*

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4 First aid measures

· ***4.1. Description of first aid measures***
· ***General information***
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
· ***After inhalation*** *Supply fresh air; consult doctor in case of complaints.*
· ***After skin contact*** *Immediately rinse with water.*
· ***After eye contact*** *Rinse opened eye for several minutes under running water. Then consult doctor.*
· ***After swallowing*** *Drink copious amounts of water and provide fresh air. Call for doctor immediately.*
· ***Information for doctor***
· ***4.2. Most important symptoms and effects, both acute and delayed***
No further relevant information available.
· ***4.3. Indication of any immediate medical attention and special treatment needed***
No further relevant information available.

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5 Firefighting measures

· ***5.1. Extinguishing media***
· ***Suitable extinguishing agents***
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· ***For safety reasons unsuitable extinguishing agents*** *Water with full jet.*
· ***5.2. Special hazards arising from the substance or mixture***
In case of fire, the following can be released:
Carbon monoxide and carbon dioxide
In certain fire conditions, traces of other toxic gases cannot be excluded.
Risk of bursting
· ***5.3. Advice for firefighters***
· ***Protective equipment:*** *Wear self-contained respiratory protective device.*
· ***Additional information*** *Cool endangered receptacles with water spray.*

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6 Accidental release measures

· **6.1. Personal precautions, protective equipment and emergency procedures**
Wear protective clothing.
Product forms slippery surface when combined with water.
· **6.2. Environmental precautions:**
Do not allow to enter sewers/ surface or ground water.
Inform respective authorities in case of seepage into water course or sewage system.
· **6.3. Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
· **6.4. Reference to other sections**
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

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7 Handling and storage

· **Handling**
· **7.1. Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
· **Information about protection against explosions and fires:** No special measures required.

· **7.2. Conditions for safe storage, including any incompatibilities**
· **Storage**
· **Requirements to be met by storerooms and receptacles:** No special requirements.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:** Keep receptacle tightly sealed.
· **7.3. Specific end use(s)** No further relevant information available.

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8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **8.1. Control parameters**
· **Components with limit values that require monitoring at the workplace:** Not required.
· **Additional information:** The lists that were valid during the creation were used as basis.

· **8.2. Exposure controls**
· **Personal protective equipment**
· **General protective and hygienic measures**
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 the eyes.
· **Breathing equipment:**
Short term filter device:
Filter P2.
Filter A/P2.
· **Protection of hands:**
Protective gloves.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

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· ***Penetration time of glove material***
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
· ***For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:***
Nitrile rubber, NBR
PVC gloves
· ***Eye protection:*** *Tightly sealed goggles.*
· ***Body protection:*** *Protective work clothing.*

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9 Physical and chemical properties

· ***9.1. Information on basic physical and chemical properties***	
· ***General Information***	
· ***Appearance:***	
Form:	*Viscous*
Colour:	*Colourless*
· ***Odour:***	*Weak, characteristic*
· ***pH-value (50 g/l) at 20°C:***	*6.0 - 8.0*
· ***Change in condition***	
Melting point/Melting range:	*2°C*
Boiling point/Boiling range:	*> 200°C*
· ***Flash point:***	*> 250°C*
· ***Danger of explosion:***	*Product does not present an explosion hazard.*
· ***Vapour pressure at 20°C:***	*< 0.01 hPa*
· ***Density at 20°C:***	*1.067 g/cm³*
· ***Solubility in / Miscibility with***	
Water at 20°C:	*100 g/l*
· ***9.2. Other information***	*No further relevant information available.*

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10 Stability and reactivity

· ***10.1. Reactivity***
· ***10.2. Chemical stability***
· ***Thermal decomposition / conditions to be avoided:*** *No decomposition if used according to specifications.*
· ***10.3. Possibility of hazardous reactions*** *Reacts with strong acids, strong alcalis and strong oxidizing agents.*
· ***10.4. Conditions to avoid*** *No further relevant information available.*
· ***10.5. Incompatible materials:*** *No further relevant information available.*
· ***10.6. Hazardous decomposition products:***
Carbon monoxide and carbon dioxide
ketones, aldehydes, organic acids

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11 Toxicological information

· ***11.1. Information on toxicological effects***
· ***Acute toxicity:***

· ***LD/LC50 values that are relevant for classification:***		
9036-19-5 Octylphenol-polyethylene glycol ether		
Oral	*LD50*	*707 mg/kg (rat)*
	LC50/96h	*4 - 8.9 mg/l (Fish)*

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· ***Primary irritant effect:***
· ***on the skin:*** *No irritant effect.*
· ***on the eye:*** *Strong irritant with the danger of severe eye injury.*
· ***Sensitization:*** *No sensitizing effects known.*

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12 Ecological information

· ***12.1. Toxicity***

· ***Acquatic toxicity:***	
9036-19-5 Octylphenol-polyethylene glycol ether	
EC50/48h	*18 - 26 mg/l (Daphnia magna)*

· ***12.2. Persistence and degradability*** *No further relevant information available.*
· ***Other information:***
The product is easily biodegradable.
> 60 % in 28 d
· ***Behaviour in environmental systems:***
· ***12.3. Bioaccumulative potential*** *No further relevant information available.*
· ***12.4. Mobility in soil*** *No further relevant information available.*
· ***Ecotoxical effects:***
· ***Remark:*** *Harmful to fish*
· ***Additional ecological information:***
· ***General notes:***
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Harmful to aquatic organisms
· ***12.5. Results of PBT and vPvB assessment***
· ***PBT:*** *PBT - assessment not available.*
· ***vPvB:*** *vPvB - assessment not available.*
· ***12.6. Other adverse effects*** *No further relevant information available.*

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13 Disposal considerations

· ***13.1. Waste treatment methods***
· ***Recommendation***
Must be specially treated adhering to official regulations.
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· ***Uncleaned packagings:***
· ***Recommendation:*** *Disposal must be made according to official regulations.*
· ***Recommended cleansing agent:*** *Water, if necessary with cleansing agents.*

14 Transport information

· ***14.1. UN-Number***	
· ***ADR, ADN, IMDG, IATA***	*Void*
· ***14.2. UN proper shipping name***	
· ***ADR, ADN, IMDG, IATA***	*Void*
· ***14.3. Transport hazard class(es)***	
· ***ADR, ADN, IMDG, IATA***	
· ***Class***	*Void*

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· ***14.4. Packing group*** · ***ADR, IMDG, IATA***	*Void*
· ***14.5. Environmental hazards:*** · ***Marine pollutant:***	*No*
· ***14.6. Special precautions for user***	*Not applicable.*
· ***14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code***	*Not applicable.*
· ***Transport/Additional information:***	*Not dangerous according to the above specifications.*
· ***UN "Model Regulation":***	-

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15 Regulatory information

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

· ***National regulations***

· ***Water hazard class:*** *Water hazard class 2 (Self-assessment): hazardous for water.*
· ***15.2. Chemical safety assessment:*** *A Chemical Safety Assessment has not been carried out.*

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16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· ***Department issuing MSDS:*** *Product safety department*
· ***Contact:*** *+49 6221 13840-35*
· ***Abbreviations and acronyms:***
PBT: persistent, bioaccumulative, toxic substance (REACH)
vPvB: very persistent, very bioaccumulative substance (REACH)
REACH: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
CLP: Regulation on classification, labelling and packaging of substances and mixtures
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
· **** Data compared to the previous version altered.***