

CAS No: 9002-93-1 MSDS

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Identification of the substance/mixture and of the company/undertaking **Product identifier** 1.1. Product form : Substance • CAS No : 9002-93-1 Product code : 6396A Chemical structure `о∤н H₃C H₃C-H₃C H₃C CH₃ Synonyms : t-Octylphenoxypolyethoxyethanol / 4-(1,1,3,3-Tetramethylbutyl)phenyl-polyethylene glycol / Polyethylene glycol tert-octylphenyl ether 1.2. Relevant identified uses of the substance or mixture and uses advised against **Relevant identified uses** 1.2.1. Use of the substance/mixture : Laboratory chemicals, Manufacture of substances 1.2.2. **Uses advised against**

No additional information available

1.3. Details of the supplier of the safety data sheet

SPAN LAB UNIT NO. 14, SKY INDUSTRIAL ESTATE, WALIV, VASAI (E) 401208 Mumbai - INDIA PH: +91 9820509929 info@spanlab.in www.spanlab.in

SECTION 2: Hazards identification

Classification of the substance or mixture 2.1.

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, H314 Category 1B Acute toxicity (oral), H302 Category 4 Hazardous to the aquatic H400 environment — Acute Hazard, Category 1

Full text of classification categories and H statements : see section 16

Safety Data Sheet

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

Xn; R22 C; R34 Xi; R41 N; R50 Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects No additional information available

2.2. Label elements		
Labelling according to Regulation (E	C) No. 1272/2008 [CLP]	
Hazard pictograms (CLP)	HS05 GHS07 GHS09	
Signal word (CLP)	: Danger	
Hazard statements (CLP)	: H302 - Harmful if swallowed H314 - Causes severe skin burns and eye damage H400 - Very toxic to aquatic life	
Precautionary statements (CLP)	: P273 - Avoid release to the environment P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing	

2.3. Other hazards

This substance/mixture meets the PBT criteria of REACH regulation, annex XIII This substance/mixture meets the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients 3.1. Substance			
Name CAS No	: TRITON X-100 MOLECULAR BIOLOGY GRADE : 9002-93-1		
Full text of R- and H-phrases: see section 16			
3.2. Mixture			
Not applicable			
Not applicable			

4.1. Description of first aid measures

First-aid measures after inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

Safety Data Sheet

Dalety Data Sheet	
First-aid measures after skin contact	: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
First-aid measures after ingestion	: Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.
4.2. Most important symptoms and	d effects, both acute and delayed
Symptoms/injuries	: Causes severe skin burns and eye damage.
Symptoms/injuries after ingestion	: Harmful if swallowed.
4.3. Indication of any immediate m	nedical attention and special treatment needed
Treat symptomatically.	
SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).
Unsuitable extinguishing media	: Do not use a heavy water stream.
5.2. Special hazards arising from t	he substance or mixture
No additional information available	
5.3. Advice for firefighters	
Protection during firefighting	: Do not attempt to take action without suitable protective equipment.
SECTION 6: Accidental release measu	res
6.1. Personal precautions, protect	ive equipment and emergency procedures
6.1.1. For non-emergency personne	I construction of the second
Emergency procedures	: Evacuate unnecessary personnel.
6.1.2. For emergency responders	
Protective equipment	: Use personal protective equipment as required.
Emergency procedures	: Stop release.
6.2. Environmental precautions	
Toxic to aquatic life with long lasting effect	xts.
6.3. Methods and material for cont	tainment and cleaning up
Methods for cleaning up	: Collect spillage. On land, sweep or shovel into suitable containers. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.
6.4. Reference to other sections	
No additional information available	
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	: Do not breathe dust/fume/gas/mist/vapours/spray.
Hygiene measures	: Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Wash contaminated clothing before reuse.
7.2. Conditions for safe storage, ir	
Technical measures	: Comply with applicable regulations.
Storage conditions	: Store in original container. Keep container tightly closed. Store in a dry place. Store in a well-ventilated place.

Safety Data Sheet

7.3.	Specific end use(s)	
No add	litional information available	
SECTION 8: Exposure controls/personal protection		
8.1.	Control parameters	

No additional information available

8.2. Exposure controls	
Hand protection	: protective gloves
Eye protection	: Chemical goggles or face shield
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: Wear respiratory protection
SECTION 9: Physical and chemical prop	erties
9.1. Information on basic physical a	
Physical state	: Liquid
Colour	: Pale yellow.
Odour	: odourless.
Odour threshold	: No data available
рН	: 9.7
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 6 °C
Freezing point	: No data available
Boiling point	: > 200
Flash point	: 251 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	∶ < 1.33 hPa at 20 °C
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density Solubility	: 1.07 g/cm³ : Water: Soluble in water
Log Pow	: No data available
Viscosity, kinematic	: No data available

Safety Data Sheet		
Viscosity, dynamic	: No data available	
Explosive properties	: No data available	
Oxidising properties	: No data available	
Explosive limits	: No data available	
9.2. Other information		
No additional information availab	e	
SECTION 10: Stability and read	tivity	
10.1. Reactivity		
Thermal decomposition generate	s : Corrosive vapours.	
10.2. Chemical stability		
Stable under normal conditions.		
10.3. Possibility of hazardou	is reactions	
No additional information availab	e	
10.4. Conditions to avoid		
Direct sunlight. Overheating. Ope	n flame. Heat.	
10.5. Incompatible materials		
No additional information availab	e	
10.6. Hazardous decomposi	tion products	
No additional information availab	e	
SECTION 11: Toxicological info	rmation	
11.1. Information on toxicol	ogical effects	
Acute toxicity	: Oral: Harmful if swallowed.	

Skin corrosion/irritation	: Causes severe skin burns and eye damage. pH: 9.7
Serious eye damage/irritation	: Serious eye damage, category 1, implicit pH: 9.7
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

Safety Data Sheet

Potential adverse human health effects	: Harmful if swallowed.
and symptoms	

SECTION 12: Ecological information		
12.1. Toxicity		
Ecology - water	: Very toxic to aquatic life.	

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5.	Results of PBT and vPvB assessment	
TRITON X-100 MOLECULAR BIOLOGY GRADE (9002-93-1)		
This substance/mixture meets the PBT criteria of REACH regulation, annex XIII		
This substance/mixture meets the vPvB criteria of REACH regulation, annex XIII		

12.6.	Other adverse	effects
12.0.	Juliel auvelse	enecis

No additional information available

13.1. Waste treatment methods Product/Packaging disposal recommendations : Dispose of contents/container to	SECTION 13: Disposal considerations	
Product/Packaging disposal : Dispose of contents/container to		
	13.1. Waste treatment methods	
		: Dispose of contents/container to

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number	
UN-No. (ADR)	: 3082
UN-No. (IMDG)	: 3082
UN-No.(IATA)	: 3082
UN-No.(ADN)	: 3082
UN-No. (RID)	: 3082
14.2. UN proper shipping name	
Proper Shipping Name (ADR)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (IMDG)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (IATA)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (ADN)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (RID)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Safety Data Sheet

Transport document description (ADR)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III, (E)
Transport document description (IMDG)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III, MARINE POLLUTANT
Transport document description (IATA)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III
Transport document description (ADN)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III
Transport document description (RID)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR)	
Danger labels (ADR)	

9	
9	

:

: 9



IMDG

Transport hazard class(es) (IMDG)	
Danger labels (IMDG)	



ΙΑΤΑ

Transport hazard class(es) (IATA)	
Hazard labels (IATA)	





ADN

Transport hazard class(es) (ADN) Danger labels (ADN)

RID

Transport hazard class(es) (RID) Danger labels (RID)







Safety Data Sheet

14.4. Packing group	
Packing group (ADR)	: 111
Packing group (IMDG)	: 111
Packing group (IATA)	: 111
Packing group (ADN)	: 111
Packing group (RID)	: 111
14.5. Environmental hazards	
Dangerous for the environment	: Yes
Marine pollutant	: Yes
Other information	: No supplementary information available

14.6. Special precautions for user

- Overland transport	
Classification code (ADR)	: M6
Special provision (ADR)	: 274, 335, 601, 375
Limited quantities (ADR)	: 5L
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Special packing provisions (ADR)	: PP1
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T4
Portable tank and bulk container special provisions (ADR)	: TP1, TP29
Tank code (ADR)	: LGBV
Vehicle for tank carriage	: AT
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V12
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV13
Hazard identification number (Kemler No.)	: 90
Orange plates	
Orange plates	90 3082
	3082
Tunnel restriction code (ADR)	3082
	3082
Tunnel restriction code (ADR) EAC code	3082
Tunnel restriction code (ADR) EAC code - Transport by sea	3082 : E : •3Z
Tunnel restriction code (ADR) EAC code - Transport by sea Special provision (IMDG)	3082 : E : •3Z : 274, 335, 969
Tunnel restriction code (ADR) EAC code - Transport by sea Special provision (IMDG) Limited quantities (IMDG)	3082 : E : •3Z : 274, 335, 969 : 5 L
Tunnel restriction code (ADR) EAC code - Transport by sea Special provision (IMDG) Limited quantities (IMDG) Excepted quantities (IMDG)	3082 : E : •3Z : 274, 335, 969 : 5 L : E1
Tunnel restriction code (ADR) EAC code - Transport by sea Special provision (IMDG) Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG)	3082 : E : •3Z : 274, 335, 969 : 5 L : E1 : P001, LP01
Tunnel restriction code (ADR) EAC code - Transport by sea Special provision (IMDG) Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) Packing provisions (IMDG)	3082 : E : •3Z : 274, 335, 969 : 5 L : E1 : P001, LP01 : PP1
Tunnel restriction code (ADR) EAC code - Transport by sea Special provision (IMDG) Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) Packing provisions (IMDG) IBC packing instructions (IMDG)	3082 : E : •3Z : 274, 335, 969 : 5 L : E1 : P001, LP01 : PP1 : IBC03
Tunnel restriction code (ADR) EAC code - Transport by sea Special provision (IMDG) Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) Packing provisions (IMDG) IBC packing instructions (IMDG) Tank instructions (IMDG)	3082 : E : •3Z : 274, 335, 969 : 5 L : E1 : P001, LP01 : PP1 : IBC03 : T4
Tunnel restriction code (ADR) EAC code - Transport by sea Special provision (IMDG) Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) Packing provisions (IMDG) IBC packing instructions (IMDG) Tank instructions (IMDG) Tank special provisions (IMDG)	3082 : E : •3Z : 274, 335, 969 : 5 L : E1 : P001, LP01 : PP1 : IBC03 : T4 : TP2, TP29
Tunnel restriction code (ADR) EAC code - Transport by sea Special provision (IMDG) Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) Packing provisions (IMDG) IBC packing instructions (IMDG) Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire)	3082 : E : •3Z : 274, 335, 969 : 5 L : E1 : P001, LP01 : PP1 : IBC03 : T4 : TP2, TP29 : F-A
Tunnel restriction code (ADR) EAC code - Transport by sea Special provision (IMDG) Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) Packing provisions (IMDG) IBC packing instructions (IMDG) IBC packing instructions (IMDG) Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire) EmS-No. (Spillage)	3082 : E : •3Z : 274, 335, 969 : 5 L : E1 : P001, LP01 : PP1 : IBC03 : T4 : TP2, TP29 : F-A : S-F
Tunnel restriction code (ADR) EAC code - Transport by sea Special provision (IMDG) Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) Packing provisions (IMDG) IBC packing instructions (IMDG) IBC packing instructions (IMDG) Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire) EmS-No. (Spillage) Stowage category (IMDG)	3082 : E : •3Z : 274, 335, 969 : 5 L : E1 : P001, LP01 : PP1 : IBC03 : T4 : TP2, TP29 : F-A : S-F : A
Tunnel restriction code (ADR) EAC code - Transport by sea Special provision (IMDG) Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) Packing provisions (IMDG) IBC packing instructions (IMDG) IBC packing instructions (IMDG) Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire) EmS-No. (Spillage)	3082 : E : •3Z : 274, 335, 969 : 5 L : E1 : P001, LP01 : PP1 : IBC03 : T4 : TP2, TP29 : F-A : S-F

Safety Data Sheet

- Air transport	
PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y964
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 964
PCA max net quantity (IATA)	: 450L
CAO packing instructions (IATA)	: 964
CAO max net quantity (IATA)	: 450L
Special provision (IATA)	: A97, A158, A197
ERG code (IATA)	: 9L
- Inland waterway transport	
Classification code (ADN)	: M6
Special provisions (ADN)	: 274, 335, 375, 601
Limited quantities (ADN)	: 5L
Excepted quantities (ADN)	: E1
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP
Number of blue cones/lights (ADN)	: 0
- Rail transport	
Classification code (RID)	: M6
Special provision (RID)	: 274, 335, 375, 601
Limited quantities (RID)	: 5L
Excepted quantities (RID)	: 5L : E1
Packing instructions (RID)	: P001, IBC03, LP01, R001
Special packing provisions (RID)	: PP1
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container	: T4
instructions (RID)	
Portable tank and bulk container special provisions (RID)	: TP1, TP29
Tank codes for RID tanks (RID)	: LGBV
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W12
Special provisions for carriage – Loading and unloading (RID)	: CW13, CW31
Colis express (express parcels) (RID)	: CE8
Hazard identification number (RID)	: 90

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated [covering well-defined substances and UVCB substances, polymers and homologues] is on the REACH Candidate List

TRITON X-100 MOLECULAR BIOLOGY GRADE is not on the REACH Annex XIV List

15.1.2. National regulations

Germany

AwSV/VwVwS Annex reference	: Water hazard class (WGK) 2, hazardous to water (KBwS-Beschluss; WGK No 8602)
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV	: Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)
1 0	: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

Denmark

Recommendations Danish Regulation	: Young people below the age of 18 years are not allowed to use the product
-----------------------------------	---

15.2. Chemical safety assessment No additional information available

SECTION 16: Other information

Full text of R-, H- and EUH-phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H400	Very toxic to aquatic life
R22	Harmful if swallowed
R34	Causes burns
R41	Risk of serious damage to eyes
R50	Very toxic to aquatic organisms
С	Corrosive
Ν	Dangerous for the environment
Xi	Irritant
Xn	Harmful

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product