



Signal Word: Danger

Hazard Statement(s): H318: Causes serious eye damage.
H412: Harmful to aquatic life with long lasting effects.

Precautionary Statements

Prevention: P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response: P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Immediately call a POISON CENTER/doctor/...

Supplemental label information

Contains: 1,2-benzisothiazol-3(2H)-one mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no.247- 500-7] and 2-methyl-2H-isothi azolin-3-one [EC no. 220-239-6] (3:1)
. May produce an allergic reaction.

2.3 Other hazards

Not fulfilling PBT (persistent/bioaccumulative/toxic) criteria Not fulfilling vPvB (very persistent/very bioaccumulative) criteria

SECTION 3: Composition/information on ingredients

3.2 Mixtures

General information: No data available.

Chemical name	Concentration	CAS-No.	EC No.	REACH Registration No.	M-Factor:	Notes
sodium salts of sulfonated 1,1'-oxybisbenzene tetrapropylene derivative	3 - <5%	119345-04-9		01-2119492361-39-XXXX	No data available.	
Citric acid	1 - <5%	77-92-9	201-069-1	01-2119457026-42-XXXX	No data available.	

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

This substance has workplace exposure limit(s).

Classification

Chemical name	Classification	Notes
sodium salts of sulfonated 1,1'-oxybisbenzene	Eye Dam.: 1: H318 Aquatic Chronic: 2: H411	

tetrapropylene derivative		
Citric acid	Eye Irrit.: 2: H319	

The full text for all H-statements is displayed in section 16.

CLP: Regulation No. 1272/2008.

SECTION 4: First aid measures

4.1 Description of first aid measures

- Inhalation:** Move to fresh air.
- Skin Contact:** Remove contaminated clothing and wash the skin thoroughly with soap and water after work.
- Eye contact:** Rinse immediately with plenty of water.
- Ingestion:** Rinse mouth thoroughly.

4.2 Most important symptoms and effects, both acute and delayed: See section 11 of the SDS for additional information on health hazards.

4.3 Indication of any immediate medical attention and special treatment needed

- Hazards:** See section 11 of the SDS for additional information on health hazards.
- Treatment:** Get medical attention if symptoms occur.

SECTION 5: Firefighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.

5.1 Extinguishing media

Suitable extinguishing media: Extinguish with foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

5.2 Special hazards arising from the substance or mixture: During fire, gases hazardous to health may be formed.

5.3 Advice for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Put on protective equipment before entering danger area.

6.2 Environmental Precautions: Avoid release to the environment. Prevent further leakage or spillage if safe to do so.

6.3 Methods and material for containment and cleaning up: Stop the flow of material, if this is without risk. Absorb with sand or other inert absorbent.

6.4 Reference to other sections: See Section 8 of the SDS for Personal Protective Equipment. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling: Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

7.2 Conditions for safe storage, including any incompatibilities: Store away from incompatible materials.

7.3 Specific end use(s): Reserved for industrial and professional use.

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

None of the components have assigned exposure limits.

DNEL-Values

Critical component	Type	Route of Exposure	Health Warnings	Remarks
Sodium hexametaphosphate	General population	Inhalation	Systemic, long-term; 1.304 mg/m ³	Repeated dose toxicity
	Workers	Inhalation	Systemic, long-term; 5.289 mg/m ³	Repeated dose toxicity
sodium salts of sulfonated 1,1'-oxybisbenzene tetrapropylene derivative	General population	Dermal	Local, long-term; 0.1 mg/cm ²	Skin irritation/corrosion
	Workers	Dermal	Systemic, long-term; 11.7 mg/kg	Repeated dose toxicity
	General population	Dermal	Systemic, long-term; 5 mg/kg	Repeated dose toxicity
	Workers	Dermal	Local, short-term; 0.8 mg/cm ²	Skin irritation/corrosion
	Workers	Dermal	Local, long-term; 0.3 mg/cm ²	Skin irritation/corrosion
	General population	Oral	Systemic, long-term; 5 mg/kg	Repeated dose toxicity
	General population	Dermal	Local, short-term; 0.3 mg/cm ²	Skin irritation/corrosion

PNEC-Values

Critical component	Environmental compartment	PNEC-Values
Sodium hexametaphosphate	Aquatic (intermit. releases)	1 mg/l
	Sewage treatment plant	100 mg/l
	Aquatic (freshwater)	0.1 mg/l
sodium salts of sulfonated 1,1'-oxybisbenzene tetrapropylene derivative	Aquatic (marine water)	0.01 mg/l
	Aquatic (marine water)	0.0013 mg/l
	Aquatic (intermit. releases)	0.0164 mg/l
	Sewage treatment plant	1 mg/l
	Marine sediments	0.135 mg/kg
	Aquatic (freshwater)	0.013 mg/l
	freshwater sediment	1.35 mg/kg
	soil	0.262 mg/kg
Tripotassium citrate	Aquatic (marine water)	0.044 mg/l

	Aquatic (freshwater)	0.44 mg/l
	soil	33.1 mg/kg
	freshwater sediment	34.6 mg/kg
	Sewage treatment plant	1000 mg/l
	Marine sediments	3.46 mg/kg

8.2 Exposure controls

Appropriate Engineering Controls: Provide adequate ventilation.

Individual protection measures, such as personal protective equipment

General information: Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. Follow training instructions when handling this material.

Eye/face protection: Safety goggles. EN 166.

Skin protection

Hand Protection: Protective gloves should be used if there is a risk of direct contact or splash.(EN374) Chemical resistant gloves required for prolonged or repeated contact. Butyl rubber. Glove thickness: > 0.70 mm Break-through time: > 480 min Risk of splashes: Nitrile rubber. Nitrile gloves are recommended, but be aware that the liquid may penetrate the gloves. Frequent change is advisable. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

Other: Safety clothes : long sleeved clothing EN13688

Respiratory Protection: In case of inadequate ventilation use suitable respirator (EN14387). Seek advice from local supervisor.

Hygiene measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

Environmental Controls: Do not empty into drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	Light yellow
Odor:	Nearly odourless
Odor Threshold:	No data available.
pH:	3.6 (25 °C)
Freezing point:	< 0 °C
Boiling Point:	> 100 °C
Flash Point:	No data available.
Evaporation Rate:	Almost no evaporation (20°C).
Flammability (solid, gas):	not applicable
Flammability Limit - Upper (%):	No data available.
Flammability Limit - Lower (%):	No data available.

Vapor pressure:	23.00 hPa (20 °C)
Vapor density (air=1):	No data available.
Density:	No data available.
Relative density:	1.0730 (20 °C)
Solubility(ies)	
Solubility in Water:	completely soluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Autoignition Temperature:	No data available.
Decomposition Temperature:	No data available.
SADT:	No data available.
Viscosity:	No data available.
Explosive properties:	No data available.
Oxidizing properties:	No data available.

9.2 Other information

VOC Content:	EC Directive 1999/13: 0 g/l ~0 % (calculated) EC Directive 2004/42: 0 g/l ~0 % (calculated)
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SECTION 10: Stability and reactivity

10.1 Reactivity:	Material is stable under normal conditions.
10.2 Chemical Stability:	Material is stable under normal conditions.
10.3 Possibility of hazardous reactions:	Not known.
10.4 Conditions to avoid:	Avoid heat or contamination.
10.5 Incompatible Materials:	No data available.
10.6 Hazardous Decomposition Products:	By heating and fire, harmful vapors/gases may be formed.

SECTION 11: Toxicological information

Information on likely routes of exposure

Inhalation:	Inhalation is the primary route of exposure. In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.
Skin Contact:	Moderately irritating to skin with prolonged exposure.
Eye contact:	Eye contact is possible and should be avoided. Causes serious eye damage.
Ingestion:	May be ingested by accident. Ingestion may cause irritation and malaise.

11.1 Information on toxicological effects

Acute toxicity

Oral

Product: Not classified for acute toxicity based on available data.

Specified substance(s)

sodium salts of

LD 50 (Rat): > 5,000 mg/kg Read-across from supporting substance

sulfonated 1,1'-oxybisbenzene tetrapropylene derivative
 Citric acid (structural analogue or surrogate), Supporting study
 LD 50 (Rat): 6,730 mg/kg

Dermal

Product: Not classified for acute toxicity based on available data.

Specified substance(s)
 sodium salts of sulfonated 1,1'-oxybisbenzene tetrapropylene derivative
 LD 50 (Rat) : > 2,000 mg/kg

Citric acid
 LD 50 (Rat) : > 2,000 mg/kg

Inhalation

Product: Not classified for acute toxicity based on available data.

Specified substance(s)
 sodium salts of sulfonated 1,1'-oxybisbenzene tetrapropylene derivative
 No data available.

Citric acid
 No data available.

Repeated dose toxicity

Product: No data available.

Specified substance(s)
 sodium salts of sulfonated 1,1'-oxybisbenzene tetrapropylene derivative
 NOAEL (Rat(Male), Oral, 90 - 91 d): 600 mg/kg
 NOAEL (Rat(Female), Oral, 90 - 91 d): 200 mg/kg

Citric acid
 LOAEL (Rat, Oral, 10 d): 8,000 mg/kg

Skin Corrosion/Irritation:

Product: No data available.

Specified substance(s)
 sodium salts of sulfonated 1,1'-oxybisbenzene tetrapropylene derivative
 No data available.

Citric acid
 No data available.

Serious Eye Damage/Eye Irritation:

Product: Causes serious eye damage.

Specified substance(s)
 sodium salts of sulfonated 1,1'-oxybisbenzene tetrapropylene derivative
 in vivo (Rabbit, 48 hrs): Category 1 EU GHS

Citric acid
 Irritating

Respiratory or Skin

Sensitization:

Product: No data available.

Specified substance(s)

sodium salts of sulfonated 1,1'-oxybisbenzene tetrapropylene derivative	No data available.
Citric acid	No data available.

Germ Cell Mutagenicity

In vitro

Product: No data available.

Specified substance(s)

sodium salts of sulfonated 1,1'-oxybisbenzene tetrapropylene derivative	No data available.
Citric acid	No data available.

In vivo

Product: No data available.

Specified substance(s)

sodium salts of sulfonated 1,1'-oxybisbenzene tetrapropylene derivative	No data available.
Citric acid	No data available.

Carcinogenicity

Product: No data available.

Specified substance(s)

sodium salts of sulfonated 1,1'-oxybisbenzene tetrapropylene derivative	No data available.
Citric acid	No data available.

Reproductive toxicity

Product: No data available.

Specified substance(s)

sodium salts of sulfonated 1,1'-oxybisbenzene tetrapropylene derivative	No data available.
Citric acid	No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specified substance(s)

sodium salts of sulfonated 1,1'-oxybisbenzene tetrapropylene derivative	No data available.
Citric acid	No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Specified substance(s)

sodium salts of sulfonated 1,1'-oxybisbenzene tetrapropylene derivative
 Citric acid

No data available.

No data available.

Aspiration Hazard

Product: No data available.

Specified substance(s)

sodium salts of sulfonated 1,1'-oxybisbenzene tetrapropylene derivative
 Citric acid

No data available.

No data available.

SECTION 12: Ecological information

General information: Contains a substance which causes risk of hazardous effects to the environment.

12.1 Toxicity

Acute toxicity

Fish

Product: No data available.

Specified substance(s)

sodium salts of sulfonated 1,1'-oxybisbenzene tetrapropylene derivative
 Citric acid

LC 50 (Various, 96 h): 6.2 mg/l (static + flow-through) experimental result

LC 50 (Leuciscus idus, 48 h): 760 mg/l (Static) experimental result

Aquatic Invertebrates

Product: No data available.

Specified substance(s)

sodium salts of sulfonated 1,1'-oxybisbenzene tetrapropylene derivative
 Citric acid

LC 50 (48 h): 1.64 mg/l (Static) experimental result

EC 50 (48 h): > 50 mg/l (Static) experimental result

Chronic Toxicity

Fish

Product: No data available.

Specified substance(s)

sodium salts of sulfonated 1,1'-oxybisbenzene tetrapropylene derivative

No data available.

Citric acid No data available.

Aquatic Invertebrates

Product: No data available.

Specified substance(s)

sodium salts of sulfonated 1,1'-oxybisbenzene No data available.

tetrapropylene derivative No data available.

Citric acid No data available.

Toxicity to Aquatic Plants

Product: No data available.

Specified substance(s)

sodium salts of sulfonated 1,1'-oxybisbenzene No data available.

tetrapropylene derivative No data available.

Citric acid No data available.

12.2 Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s)

sodium salts of sulfonated 1,1'-oxybisbenzene No data available.

tetrapropylene derivative No data available.

Citric acid No data available.

BOD/COD Ratio

Product No data available.

Specified substance(s)

sodium salts of sulfonated 1,1'-oxybisbenzene No data available.

tetrapropylene derivative No data available.

Citric acid No data available.

12.3 Bioaccumulative potential

Product: No data available.

Specified substance(s)

sodium salts of sulfonated 1,1'-oxybisbenzene No data available.

tetrapropylene derivative No data available.

Citric acid No data available.

12.4 Mobility in soil:

No data available.

Known or predicted distribution to environmental compartments

sodium salts of sulfonated 1,1'-oxybisbenzene No data available.

tetrapropylene derivative No data available.

Citric acid No data available.

12.5 Results of PBT and vPvB assessment:	Not fulfilling PBT (persistent/bioaccumulative/toxic) criteria Not fulfilling vPvB (very persistent/very bioaccumulative) criteria
sodium salts of sulfonated 1,1'-oxybisbenzene tetrapropylene derivative	No data available.
Citric acid	No data available.
12.6 Other adverse effects:	Harmful to aquatic life with long lasting effects.
12.7 Additional Information:	No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

General information: Disposal considerations (including disposal of contaminated containers or packaging) Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Disposal methods: Environmental regulations, discharge of chemicals and washwater, waste treatment and disposal conditions of chemicals and their packaging may vary from one country to another. The relevant local regulations should be consulted. When this product or its contaminated packaging has to be removed as waste, contact an authorized waste contractor. May be discharged to drain if local regulations permit.

As the packaging can be contaminated with product residus, please observe the warnings of the label even when the container is empty. Do not reuse empty container without proper cleaning. Label precautions also apply to this container when empty.

SECTION 14: Transport information

14.1 UN Number:	Not regulated.
14.2 UN Proper Shipping Name:	Not regulated.
14.3 Transport Hazard Class(es)	Not regulated.
14.4 Packing Group:	Not regulated.
14.5 Environmental Hazards:	Not regulated.
14.6 Special precautions for user:	Not regulated.

14.1 UN Number:	Not regulated.
14.2 UN Proper Shipping Name:	Not regulated.
14.3 Transport Hazard Class(es)	Not regulated.
14.4 Packing Group:	Not regulated.
14.5 Environmental Hazards:	Not regulated.
14.6 Special precautions for user:	Not regulated.

14.1 UN Number:	Not regulated.
14.2 UN Proper Shipping Name:	Not regulated.
14.3 Transport Hazard Class(es)	Not regulated.
14.4 Packing Group:	Not regulated.
14.5 Environmental Hazards:	Not regulated.
14.6 Special precautions for user:	Not regulated.

14.1 UN Number: Not regulated.
 14.2 UN Proper Shipping Name: Not regulated.
 14.3 Transport Hazard Class(es): Not regulated.
 14.4 Packing Group: Not regulated.
 14.5 Environmental Hazards: Not regulated.
 14.6 Special precautions for user: Not regulated.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: not applicable.

SECTION 15: Regulatory information

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

EU Regulations

Regulation (EC) No. 2037/2000 Substances that deplete the ozone layer: none

Regulation (EC) No. 850/2004 on persistent organic pollutants: none

Regulation (EC) No. 689/2008 Import and export of dangerous chemicals: none

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended: none

Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use: none

Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens and mutagens at work.: none

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breast feeding.: none

Directive 96/82/EC (Seveso III): on the control of major accident hazards involving dangerous substances:

Chemical name	CAS-No.	Concentration
2-Methyl-2H-isothiazol-3-one	2682-20-4	0 - <0.1%
1,2-benzisothiazol-3(2H)-one	2634-33-5	0 - <0.1%
mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no.247- 500-7] and 2-methyl-2H-isothi azolin-3-one [EC no. 220-239-6] (3:1)	55965-84-9	0 - <0.1%

EU. Regulation No. 166/2006 PRTR (Pollutant Release and Transfer Registry), Annex II: Pollutants: none

Directive 98/24/EC on the protection of workers from the risks related to chemical agents at work:

Chemical name	CAS-No.	Concentration
2-Methyl-2H-isothiazol-3-one	2682-20-4	0 - <0.1%
1,2-benzisothiazol-3(2H)-one	2634-33-5	0 - <0.1%
mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no.247- 500-7] and 2-methyl-2H-isothi azolin-3-one [EC no. 220-239-6] (3:1)	55965-84-9	0 - <0.1%

15.2 Chemical safety assessment:

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

Revision Information: Not relevant.

References

PBT PBT: persistent, bioaccumulative and toxic substance.
vPvB vPvB: very persistent and very bioaccumulative substance.

Key literature references and sources for data: Safety Data Sheet from the supplier.
ECHA

Wording of the H-statements in section 2 and 3

H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H316	Causes mild skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Training information: No data available.

Classification according to Regulation (EC) No 1272/2008 as amended.

Eye Dam. 1, H318
Aquatic Chronic 3, H412

Issue Date: 28.03.2017

SDS No.:

Disclaimer: This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.