SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

Version 7.23
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GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

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

1.1 Product identifiers

Product name	:	ROProtect C
Product Number	:	ZWCL01F50
Catalogue No.	:	638198
Brand	:	Millipore
UFI	:	WYTY-65K4-5994-UJ1C
REACH No.	:	This product is a mixture. REACH Registration Number see section 3.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses	:	PT 2: Disinfectants not intended for direct application to humans or animals
Uses advised against	:	This product is not intended for consumer use.

1.3 Details of the supplier of the safety data sheet

Company	:	Merck Life Science S.A.S 80 Rue de Luzais F-38297 SAINT QUENTIN FALLAVIER CEDEX
Telephone	:	+33 (0)1 85 16 94 34
E-mail address	:	servicetechnique@merckgroup.com

1.4 Emergency telephone number

Emergency Phone #	:	+33 (0)9 75 18 14 07 (CHEMTREC) +33 (0)1 45 42 59 59 (I.N.R.S.)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Self-reactive substances and mixtures, Type C	H242: Heating may cause a fire.
Serious eye damage, Category 1	H318: Causes serious eye damage.
Specific target organ toxicity -	H335: May cause respiratory irritation.

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single exposure, Category 3, Respiratory system	
Short-term (acute) aquatic hazard, Category 1	H400: Very toxic to aquatic life.
Long-term (chronic) aquatic hazard, Category 1	H410: Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Danger

Hazard statements :

H242	Heating may cause a fire.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H410	Very toxic to aquatic life with long lasting effects.

Supplemental Hazard Statements :

EUH031	Contact with acids liberates toxic gas.
EUH044	Risk of explosion if heated under confinement.

Precautionary statements :

Prevention:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P235	Keep cool.
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.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

Hazardous components which must be listed on the label:

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troclosene sodium, dihydrate
adipic acid

Reduced Labelling (<= 125 ml)

Hazard pictograms :



Signal word	Danger
Hazard Statements	
H318	Causes serious eye damage.
Precautionary Statements	
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Supplemental Hazard information (EU)	
EUH031	Contact with acids liberates toxic gas.
EUH044	Risk of explosion if heated under confinement.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
troclosene sodium, dihydrate	51580-86-0 220-767-7 613-030-01-7 01-2119489371-33-XXXX	Acute Tox. 4; H302 Skin Corr. 1A; H314 Eye Dam. 1; H318	>= 70 - < 90

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		STOT SE 3; H335 (Respiratory system) Aquatic Acute 1; H400 Aquatic Chronic 1; H410 EUH031, EUH044 specific concentration limit STOT SE 3; H335 >= 10 % EUH031 >= 10 % Acute toxicity estimate Acute oral toxicity: 1.823 mg/kg	
adipic acid	124-04-9 204-673-3 607-144-00-9 *	Eye Dam. 1; H318	>= 3 - < 10

*A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, or the annual tonnage does not require a registration.

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Show this safety data sheet to the doctor in attendance.

If inhaled : After inhalation: fresh air.

In case of skin contact : In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

In case of eye contact : After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

If swallowed : After swallowing: immediately make victim drink

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water (two glasses at most).
Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	:	Water Foam Carbon dioxide (CO2) Dry powder
Unsuitable extinguishing media	:	For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire fighting	:	Combustible. Avoid shock and friction. Fire may cause evolution of: Hydrogen chloride gas nitrous gases nitrogen oxides Risk of dust explosion. Development of hazardous combustion gases or vapours possible in the event of fire.
Hazardous combustion products	:	Carbon oxides Nitrogen oxides (NOx) Hydrogen chloride gas Sodium oxides

5.3 Advice for firefighters

Special protective equipment for fire-fighters	:	In the event of fire, wear self-contained breathing apparatus.
Further information	:	Remove container from danger zone and cool with water. Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Advice for non-emergency personnel:
Avoid inhalation of dusts.
Avoid substance contact.
Ensure adequate ventilation.
Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

6.2 Environmental precautions

Environmental precautions : Do not let product enter drains.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10).
Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on protection against fire and explosion : Keep away from open flames, hot surfaces and sources of ignition.

Hygiene measures : Change contaminated clothing. Wash hands after working with substance.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Further information on storage conditions : Tightly closed and away from sources of ignition and heat. Observe national regulations.

Advice on common storage : Do not store near acids.

Storage class (TRGS 510) : 4.1A, Other explosive hazardous materials

Further information on storage stability : Recommended storage temperature see product label.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006

Substance name	End Use	Exposure routes	Potential health effects	Value
adipic acid	Worker DNEL, acute	Inhalation	Systemic effects	264 mg/m3
	Worker DNEL, acute	Dermal	Systemic effects	38 mg/kg
	Worker DNEL, acute	Inhalation	Local effects	5 mg/m3
	Worker DNEL, longterm	Inhalation	Systemic effects	264 mg/m3
	Worker DNEL, longterm	Dermal	Systemic effects	38 mg/kg
	Worker DNEL, longterm	Inhalation	Local effects	5 mg/m3
	Consumer DNEL, acute	Inhalation	Systemic effects	65 mg/m3
	Consumer DNEL, acute	Dermal	Systemic effects	19 mg/kg
	Consumer DNEL, acute	Oral	Systemic effects	19 mg/kg
	Consumer DNEL, longterm	Inhalation	Systemic effects	65 mg/m3
	Consumer DNEL, longterm	Dermal	Systemic effects	19 mg/kg
	Consumer DNEL, longterm	Oral	Systemic effects	19 mg/kg

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006

Substance name	Environmental Compartment	Value
adipic acid	Fresh water	0,126 mg/l
	Fresh water sediment	0,484 mg/kg
	Marine water	0,0126 mg/l
	Marine sediment	0,0484 mg/kg
	Aquatic intermittent release	0,46 mg/l
	Sewage treatment plant	59,1 mg/l
	Soil	0,0228 mg/kg

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8.2 Exposure controls

Personal protective equipment

Eye/face protection : Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Tightly fitting safety goggles

Hand protection

Material	:	Nitrile rubber
Break through time	:	480 min
Glove thickness	:	0,11 mm
Protective index	:	Full contact
Manufacturer	:	KCL 741 Dermatril® L

Material	:	Nitrile rubber
Break through time	:	480 min
Glove thickness	:	0,11 mm
Protective index	:	Splash contact
Manufacturer	:	KCL 741 Dermatril® L

Remarks : This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Skin and body protection : protective clothing

Respiratory protection : required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: : Filter type P2

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Environmental exposure controls

Advice : Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : solid

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Form	:	pellets
Color	:	white
Odor	:	characteristic, of chlorine
Odor Threshold	:	0,08 ppm
Melting point	:	240 - 250 °C
Boiling point	:	No data available
Flammability	:	No data available
Upper explosion limit / Upper flammability limit	:	Not applicable
Lower explosion limit / Lower flammability limit	:	Not applicable
Flash point	:	Not applicable
Autoignition temperature	:	250 °C
Decomposition temperature	:	76 °C Type C
pH	:	5,8 - 6,3
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Flow time	:	No data available
Solubility(ies) Water solubility	:	500 g/l (25 °C)
Partition coefficient: n-	:	No data available

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octanol/water

Vapor pressure	:	No data available
Relative density	:	1,8960
Density	:	1,4 - 1,9 g/cm3 (20 °C)
Relative vapour density	:	No data available

9.2 Other information

Explosives	:	Risk of explosion if heated under confinement. Method: Regulation (EC) No. 440/2008, Annex, A.14
Oxidizing properties	:	No data available
Burning rate	:	No data available
Self-ignition	:	The substance or mixture is not classified as self heating.
Evaporation rate	:	No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

sensitive to shock
Risk of explosion if heated under confinement.
The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

10.3 Possibility of hazardous reactions

Hazardous reactions : Risk of ignition or formation of inflammable gases or vapours with:
combustible substances
Organic Substances
A risk of explosion and/or of toxic gas formation exists with the following substances:
Ammonia
urea
ammonium compounds
Bases
Acids
Violent reactions possible with:

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Aluminium
Alkaline earth metals
organic nitro compounds
Fluorine
Alkali metals
nonmetallic oxides
conc. sulfuric acid
Generates dangerous gases or fumes in contact with:
Acids

10.4 Conditions to avoid

Conditions to avoid : Avoid shock and friction.

no information available

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture

Acute toxicity
Acute toxicity estimate Oral - > 2.000 mg/kg
(Calculation method)
Symptoms: Possible symptoms:, mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract
Dermal: No data available

Skin corrosion/irritation
Skin - In vitro study
Result: No skin irritation
(OECD Test Guideline 439)

Serious eye damage/eye irritation
Eyes - In vitro study
(OECD Test Guideline 437)
Remarks: Mixture causes serious eye damage.
Remarks: Mixture causes serious eye damage.

Respiratory or skin sensitization
No data available

Germ cell mutagenicity
No data available

Carcinogenicity
No data available

Reproductive toxicity
No data available

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Specific target organ toxicity - single exposure
No data available

Specific target organ toxicity - repeated exposure
No data available

Aspiration hazard
No data available

11.2 Additional Information

Endocrine disrupting properties

Product:

Assessment	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

No data available

Components

troclosene sodium, dihydrate

Acute toxicity
LD50 Oral - Rat - male and female - 1.823 mg/kg
(US-EPA)
Acute toxicity estimate Oral - 1.823 mg/kg
(Calculation method)
LC50 Inhalation - Rat - male and female - 4 h - 0,27 - 1,17 mg/l - dust/mist
(OECD Test Guideline 403)
Remarks: The value is given in analogy to the following substances:
Dichloroisocyanuric acid sodium salt
Inhalation: Irritating to respiratory system.
LD50 Dermal - Rat - male and female - > 5.000 mg/kg
(US-EPA)
Remarks: (ECHA)

Skin corrosion/irritation
Skin - Rabbit
Result: Causes severe burns. - 24 h
(US-EPA)
Remarks: (ECHA)

Serious eye damage/eye irritation
Eyes - Bovine cornea
Result: Causes serious eye damage.
(OECD Test Guideline 437)
Remarks: Causes serious eye damage.

Respiratory or skin sensitization
Maximisation Test - Guinea pig

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Result: negative
(OECD Test Guideline 406)

Germ cell mutagenicity
Test Type: Ames test
Test system: Escherichia coli/Salmonella typhimurium
Result: negative
Test Type: sister chromatid exchange assay
Test system: Chinese hamster ovary cells
Result: negative
Test Type: In vitro mammalian cell gene mutation test
Test system: mouse lymphoma cells
Result: negative
Method: OECD Test Guideline 475
Species: Rat - male - Bone marrow
Result: negative

Carcinogenicity
Animal testing did not show any carcinogenic effects.

Reproductive toxicity
No data available

Specific target organ toxicity - single exposure
May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

Aspiration hazard
No data available

adipic acid

Acute toxicity
LD50 Oral - Rat - male and female - 5.560 mg/kg
(OECD Test Guideline 401)
LC50 Inhalation - Rat - male and female - 4 h - > 7,7 mg/l - dust/mist
(OECD Test Guideline 403)
LD50 Dermal - Rabbit - male and female - > 7.940 mg/kg
Remarks: (40% solution)
(External MSDS)

Skin corrosion/irritation
Skin - Rabbit
Result: slight irritation - 24 h
(OECD Test Guideline 404)

Serious eye damage/eye irritation
Eyes - Rabbit
Result: Causes serious eye damage. - 24 h
(OECD Test Guideline 405)

Respiratory or skin sensitization
Maximisation Test - Guinea pig
Result: negative
Remarks: (ECHA)

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Germ cell mutagenicity
Test Type: In vitro mammalian cell gene mutation test
Test system: Chinese hamster lung cells
Result: negative
Test Type: Ames test
Test system: Escherichia coli/Salmonella typhimurium
Result: negative
Test Type: Chromosome aberration test in vitro
Test system: human diploid fibroblasts
Result: negative
Remarks: (ECHA)
Species: Rat - male - Bone marrow
Result: negative
Remarks: (ECHA)

Carcinogenicity
No data available

Reproductive toxicity
No data available

Specific target organ toxicity - single exposure
No data available

Specific target organ toxicity - repeated exposure

Aspiration hazard
No data available

SECTION 12: Ecological information

12.1 Toxicity

Components:

troclosene sodium, dihydrate:

Toxicity to fish	:	LC50 (Lepomis macrochirus (Bluegill sunfish)): 0,23 mg/l Exposure time: 96 h Test Type: static test GLP: yes Remarks: (ECHA) Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2) NOEC (Lepomis macrochirus (Bluegill sunfish)): 0,13 mg/l Exposure time: 96 h Test Type: static test GLP: yes Remarks: (ECHA) Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)
Toxicity to daphnia and other aquatic	:	EC50 (Daphnia magna (Water flea)): 0,17 mg/l Exposure time: 48 h

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invertebrates		Test Type: static test Analytical monitoring: no GLP: yes Remarks: (ECHA) Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2) NOEC (Daphnia magna (Water flea)): < 0,13 mg/l Exposure time: 48 h Test Type: static test Analytical monitoring: no GLP: yes Remarks: (ECHA) Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)
Toxicity to algae/aquatic plants	:	ErC50 (Skeletonema costatum): > 100 mg/l End point: Growth inhibition Exposure time: 72 h Test Type: static test Analytical monitoring: yes Method: ISO 10253 GLP: yes Remarks: (ECHA)
Toxicity to microorganisms	:	EC50 (activated sludge): > 4.500 mg/l Exposure time: 3 h Method: OECD Test Guideline 209 GLP: yes
Toxicity to fish (Chronic toxicity)	:	NOEC: 1.000 mg/l Exposure time: 28 d Species: Oncorhynchus mykiss (rainbow trout) Test Type: semi-static test Analytical monitoring: yes Method: OECD Test Guideline 215 GLP: yes Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	EC50: 2.600 mg/l End point: Immobilization Exposure time: 21 d Species: Daphnia magna (Water flea) Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 211 GLP: yes Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Ecotoxicology Assessment

Acute aquatic toxicity	:	Very toxic to aquatic life.

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Chronic aquatic toxicity	:	Very toxic to aquatic life with long lasting effects.

adipic acid:

Toxicity to daphnia and other aquatic invertebrates	:	LC50 (Daphnia magna (Water flea)): 46 mg/l End point: Immobilization Exposure time: 48 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	ErC50 (Pseudokirchneriella subcapitata (green algae)): 64,5 mg/l Exposure time: 72 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 201 NOEC (Pseudokirchneriella subcapitata (green algae)): 40,6 mg/l Exposure time: 72 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 201
Toxicity to microorganisms	:	EC50 (activated sludge): > 100 mg/l Exposure time: 3 h Test Type: static test Method: OECD Test Guideline 209 GLP: yes
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 6,3 mg/l End point: reproduction rate Exposure time: 21 d Species: Daphnia magna (Water flea) Test Type: flow-through test Analytical monitoring: yes Method: OECD Test Guideline 211

12.2 Persistence and degradability

Components:

troclosene sodium, dihydrate:

Biodegradability	:	Test Type: aerobic Inoculum: activated sludge Result: Readily biodegradable. Biodegradation: 100 % Exposure time: 8 h Remarks: (ECHA)

adipic acid:

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Biodegradability	:	Test Type: aerobic Inoculum: Sewage sludge Concentration: 2 mg/l Result: Readily biodegradable. Biodegradation: 83 % Exposure time: 30 d Method: OECD Test Guideline 301D
ThOD	:	1.423 mg/g Remarks: (IUCLID)
BOD/ThOD	:	36 % Remarks: (Lit.)

12.3 Bioaccumulative potential

Components:

adipic acid:

Partition coefficient: n-octanol/water	:	log Pow: 0,093 (25 °C) pH: 3,3 Method: OECD Test Guideline 107 Remarks: Bioaccumulation is not expected.

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment	:	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Components:

adipic acid:

Assessment	:	Substance does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

12.6 Endocrine disrupting properties

Product:

Assessment	:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

No data available

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12.7 Other adverse effects

Product:

Additional ecological information : Discharge into the environment must be avoided.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

SECTION 14: Transport information

14.1 UN number or ID number

ADR : UN 3224

IMDG : UN 3224

IATA : UN 3224

14.2 UN proper shipping name

ADR : SELF-REACTIVE SOLID TYPE C (troclosene sodium, dihydrate)

IMDG : SELF-REACTIVE SOLID TYPE C (troclosene sodium, dihydrate)

IATA : Self-reactive solid type C (troclosene sodium, dihydrate)

14.3 Transport hazard class(es)

	Class	Subsidiary risks
ADR	4.1	
IMDG	4.1	
IATA	4.1	HEAT

14.4 Packing group

ADR

Packing group : Not assigned by regulation
Classification Code : SR1
Labels : 4.1
Tunnel restriction code : (D)

IMDG

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Packing group	:	Not assigned by regulation
Labels	:	4.1
EmS Code	:	F-J, S-G

IATA (Cargo)

Packing instruction (cargo aircraft)	:	459
Packing group	:	Not assigned by regulation
Labels	:	Division 4.1 - Flammable solids, Handling Label - Keep Away From Heat

IATA_P (Passenger)

Packing instruction (passenger aircraft)	:	459
Packing group	:	Not assigned by regulation
Labels	:	Division 4.1 - Flammable solids, Handling Label - Keep Away From Heat

14.5 Environmental hazards

ADR

Environmentally hazardous	:	yes

IMDG

Marine pollutant	:	yes

14.6 Special precautions for user

Remarks	:	Special competent authority approval required!

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	:	Conditions of restriction for the following entries should be considered: Number on list 75: If you intend to use this product as tattoo ink, please contact your vendor.
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	:	Not applicable
Regulation (EU) No 2024/590 on substances that deplete the ozone layer	:	Not applicable
Regulation (EU) 2019/1021 on persistent organic	:	Not applicable

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pollutants (recast)

REACH - List of substances subject to authorisation (Annex XIV)	:	Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.	P6b	SELF-REACTIVE SUBSTANCES AND MIXTURES and ORGANIC PEROXIDES
	E1	ENVIRONMENTAL HAZARDS

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Full text of H-Statements

EUH031	:	Contact with acids liberates toxic gas.
EUH044	:	Risk of explosion if heated under confinement.
H302	:	Harmful if swallowed.
H314	:	Causes severe skin burns and eye damage.
H318	:	Causes serious eye damage.
H335	:	May cause respiratory irritation.
H400	:	Very toxic to aquatic life.
EUH031	:	Contact with acids liberates toxic gas.
EUH044	:	Risk of explosion if heated under confinement.
EUH031	:	Contact with acids liberates toxic gas.
H335	:	May cause respiratory irritation.

Full text of other abbreviations

Acute Tox.	:	Acute toxicity
Aquatic Acute	:	Short-term (acute) aquatic hazard
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Eye Dam.	:	Serious eye damage
Skin Corr.	:	Skin corrosion
STOT SE	:	Specific target organ toxicity - single exposure
STOT SE	:	Specific target organ toxicity - single exposure

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; 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; GHS - Globally Harmonised System; GLP - Good Laboratory Practice; IARC -

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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 Organisation; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardisation; 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; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organisation 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; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Other information : Classification procedure:

Skin irritation
-
Calculation method

Serious eye damage/eye irritation
-
Calculation method

Acute aquatic toxicity
-
Calculation method

Chronic aquatic toxicity
-
Calculation method

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and

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Classification of the mixture:		**Classification procedure:**
Self-react. C	H242	Based on product data or assessment
Eye Dam. 1	H318	Calculation method
STOT SE 3	H335	Calculation method
Aquatic Acute 1	H400	Calculation method
Aquatic Chronic 1	H410	Calculation method

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