

8740024921 Version: 9 / GB Master No. MA-216 Print date: 17.04.2024

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

1.1. Product identifier

Trade name

Tolo Sterisol Super

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

Use of the substance/mixture

Disinfectant

1.3. Details of the supplier of the safety data sheet

Address/Manufacturer

BÜFA Cleaning GmbH & Co. KG

August-Hanken-Str. 30 26125 Oldenburg

Telephone no. +49 441 9317 0 Fax no. +49 441 9317 100

Information provided Department product safety / +49 441 9317 108

by / telephone

E-Mail sds-cleaning@buefa.de

1.4. Emergency telephone number

Poison Information Center Goettingen: +49 551 19240

SECTION 2: Hazards identification ***

2.1. Classification of the substance or mixture

Classification (Regulation (EC) No. 1272/2008)

Met. Corr. 1 H290 Skin Corr. 1B H314 Eye Dam. 1 H318 Aquatic Acute 1 H400 Aquatic Chronic 2 H411

The product is classified and labelled in accordance with Regulation (EC) No 1272/2008

For explanation of abbreviations see section 16.

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

Hazard pictograms ***



Signal word

Danger

Hazard statements

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements ***

P234 Keep only in original packaging.



* Tolo Sterisol Super Date revised: 13.09.2023 # 8740024921 Version: 9 / GB Print date: 17.04.2024 Master No. MA-216 P280 2 Wear protective gloves/ eye/ face protection. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin P303+P361+P353 with water [or shower]. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. 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 or doctor.

Hazardous component(s) to be indicated on label (Regulation (EC) No. 1272/2008)

contains *** sodium hydroxide; Sodium hypochlorite, solution

Sensitising substances

Supplemental information ***

EUH031 Contact with acids liberates toxic gas.

2.3. Other hazards

The product contains no PBT substances. The product contains no vPvB substances. This product does not contain a substance that has endocrine disrupting properties with respect to human. The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms.

SECTION 3: Composition/information on ingredients ***

3.2. Mixtures

Hazardous ingredients ***

Sodium hypochlorite, solution

CAS No. 7681-52-9 EINECS no. 231-668-3

Registration no. 01-2119488154-34-XXXX

Concentration >= 10 < 25 %

Skin Corr. 1B H314
Eye Dam. 1 H318
Aquatic Acute 1 H400
Aquatic Chronic 1 H410

Concentration limits (Regulation (EC) No. 1272/2008)

Aquatic Acute 1 H400 M = 10 Aquatic Chronic 1 H410 M = 1

EUH031 >= 5 %

ATE oral 1.100 mg/kg

Additional remarks:

CLP Regulation (EC) No 1272/2008, Annex VI, Note B

sodium hydroxide

CAS No. 1310-73-2 EINECS no. 215-185-5

Registration no. 01-2119457892-27-XXXX

Concentration >= 0,5 < 1 %

Skin Corr. 1A H314 Met. Corr. 1 H290

Concentration limits (Regulation (EC) No. 1272/2008)

For explanation of abbreviations see section 16.



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SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Ensure supply of fresh air. Summon a doctor immediately.

After skin contact

Wash off immediately with soap and water.

After eye contact

In case of contact with the eyes rinse thoroughly with plenty of water or with an eye-cleaning solution. Seek medical advice immediately.

After ingestion

Do not induce vomiting. Call in a physician immediately and show him the Safety Data Sheet.

4.2. Most important symptoms and effects, both acute and delayed

There is no further relevant information available

4.3. Indication of any immediate medical attention and special treatment needed

There is no further relevant information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide, Dry powder, Water spray jet, Alcohol-resistant foam, Extinguishing measures to suit surroundings

Non suitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of combustion evolution of dangerous gases possible. In the event of fire the following can be released: Chlorine (Cl2)

5.3. Advice for firefighters

Use self-contained breathing apparatus.

Cool endangered containers with water spray jet.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Keep people away and stay on the upwind side. Use breathing apparatus if exposed to vapours/dust/aerosol. Use personal protective clothing. Avoid contact with skin, eyes and clothing.

6.2. Environmental precautions

Do not allow to enter drains or waterways.

6.3. Methods and material for containment and cleaning up

Take up with absorbent material (eg sand, kieselguhr, universal binder). When picked up, treat material as prescribed under Section 13 "Disposal".

6.4. Reference to other sections

Refer to protective measures listed in Sections 7 and 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Provide good ventilation of working area (local exhaust ventilation if necessary).



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Containers in danger should be cooled with water.

7.2. Conditions for safe storage, including any incompatibilities

Keep only in original packaging. Provide ventilation of containers. Provide alkali-resistant floor.

Do not store together with: Acids, Reducing agents

Keep only in the original container in a cool, well ventilated place. Protect from heat and direct sunlight.

7.3. Specific end use(s)

No information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit values

List There is not known any national exposure limit.

8.2. Exposure controls

General protective and hygiene measures

Observe the usual precautions for handling chemicals. Personal protective equipment must comply with the Regulation (EC) No 2016/425 and the resulting CEN standards. The following information on personal protective equipment (PPE) is to be understood as a suggestion. The selection of the necessary PPE must be considered by the employer depending on the activities to be carried out and the local conditions. If it is determined during the on-site risk assessment that there is no danger to the employee, there is no need to wear PPE or the scope of the PPE to be used can be adjusted accordingly.

Respiratory protection

Breathing apparatus in the event of aerosol or mist formation. Short term: filter apparatus, Filter B

Hand protection

Chemical resistant gloves

Appropriate Material nitrile

Material thickness > 0,4 mm Breakthrough time > 480 min

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leaktightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Eye protection

Tightly fitting safety glasses

Body protection

Alkali-resistant protective clothing

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state liquid yellowish Odour Chlorine

Melting point

Remarks not determined

Boiling point

Remarks not determined

Flammability

evaluation not determined

Explosion limits



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Remarks not determined

Flash point

Value > 100 °C

Ignition temperature

Remarks not determined

Thermal decomposition

Remarks Not relevant

pH value

Value appr. 11

Viscosity

Value appr. 10 s

Method DIN 53211 4 mm

Solubility in other solvents

not determined

Octanol/water partition coefficient (log Pow)

Remarks Not relevant

Vapour pressure

Remarks not determined

Density

Value appr. 1,23 kg/l

Temperature 20 °C

Vapour density

Remarks not determined

Particle characteristics

Remarks irrelevant (liquid)

9.2. Other information

Odour threshold

Remarks No data available

Solubility in water

Remarks miscible

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reactions when stored and handled according to prescribed instructions.

10.2. Chemical stability

The product is stable.

10.3. Possibility of hazardous reactions

Reactions with water and acids.

10.4. Conditions to avoid

Protect from heat and direct sunlight.

Thermal decomposition

Remarks Not relevant

10.5. Incompatible materials

Reactions with metals, with evolution of hydrogen. Strong exothermic reaction with acids. Reducing agents

10.6. Hazardous decomposition products

Chlorine



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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity

ATE 9.167 mg/kg
Method calculated value (Regulation (EC) No. 1272/2008)

Based on available data, the classification criteria are not met.

Acute oral toxicity (Components)

Sodium hypochlorite, solution

Acute dermal toxicity

Based on available data, the classification criteria are not met.

Acute dermal toxicity (Components)

Sodium hypochlorite, solution

Acute inhalational toxicity

Based on available data, the classification criteria are not met.

Acute inhalative toxicity (Components)

Sodium hypochlorite, solution

Skin corrosion/irritation

evaluation corrosive The classification criteria are met.

Serious eye damage/irritation

evaluation corrosive The classification criteria are met.

Sensitization

Based on available data, the classification criteria are not met.

Sensitization (Components)

Based on available data, the classification criteria are not met.

Mutagenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity (STOT)

Single exposure

Based on available data, the classification criteria are not met.

Repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2 Information on other hazards

Endocrine disrupting properties with respect to humans

The product does not contain a substance that has endocrine disrupting properties with respect to humans.

SECTION 12: Ecological information

12.1. Toxicity



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Fish toxicity

sodium hydroxide

Reference substance sodium hydroxide

LC50 35 189 to mg/l

96 Duration of exposure h

Sodium hypochlorite, solution

Reference substance sodium hypochlorite, solution... % Cl active **Species** rainbow trout (Oncorhynchus mykiss) LC50 0.06 mg/l

Duration of exposure 96 h

sodium hypochlorite, solution... % Cl active

Oncorhynchus kisutch **Species**

LC50 0.032 mg/l

96 h Duration of exposure

Daphnia toxicity

sodium hydroxide

Reference substance sodium hydroxide **Species** Ceriodaphnia spec

EC50 40,4 mg/l

Duration of exposure 48

Sodium hypochlorite, solution

Reference substance sodium hypochlorite, solution... % Cl active

Species Daphnia magna

EC50 0,141 mg/l

Duration of exposure 48 h

Method **OECD 202**

Algae toxicity

Sodium hypochlorite, solution

Reference substance sodium hypochlorite, solution... % Cl active

Species Pseudokirchneriella subcapitata

EC50 0,04 mg/l

Bacteria toxicity

Sodium hypochlorite, solution

Reference substance sodium hypochlorite, solution... % Cl active

Species activated sludge

EC50 3 mg/l

3 h Duration of exposure

12.2. Persistence and degradability

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Do not discharge product unmonitored into the environment.

12.3. Bioaccumulative potential

For this subsection there is no ecotoxicological data available on the product as such.

Octanol/water partition coefficient (log Pow)

Remarks Not relevant

12.4. Mobility in soil

For this subsection there is no ecotoxicological data available on the product as such.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment

The product contains no PBT substances. The product contains no vPvB substances.

12.6 Endocrine disrupting properties



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Endocrine disrupting properties with respect to the envrionment

The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms.

12.7. Other adverse effects

For this subsection there is no ecotoxicological data available on the product as such.

Behaviour in sewers [waste treatment plants]

The product is an alkaline solution. Neutralization is normally necessary before a waste water is discharged into sewage treatment plants.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations for the product

Allocation of a waste code number, according to the European Waste Catalogue (EWC), should be carried out in agreement with the regional waste disposal company.

Disposal recommendations for packaging

Completely emptied packagings can be given for recycling.

SECTION 14: Transport information



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	Land transport ADR/RID	Marine transport IMDG/GGVSee
14.1. UN number	1791	1791
14.2. UN proper shipping name	HYPOCHLORITE SOLUTION	HYPOCHLORITE SOLUTION
14.3. Transport hazard class(es)	8	8
14.4. Packing group	II	П
Label		8
14.5. Environmental hazards	*	***
	ENVIRONMENTALLY HAZARDOUS	ENVIRONMENTALLY HAZARDOUS
Marine Pollutant		Marine Pollutant
Limited Quantity	11	11
Transport category	2	
Tunnel restriction code	E	
Hazard id. no.	80	
EmS		F-A, S-B

Information for all modes of transport

14.6. Special precautions for user

Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Other information

14.7 Maritime transport in bulk according to IMO instruments

Not relevant

SECTION 15: Regulatory information ***

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

Major-accident categories acc. 2012/18/EU ***

Category E1 Hazardous to the Aquatic Environment

Ingredients (Regulation (EC) No 648/2004)

5 % or over but less than 15 %: ***

chlorine-based bleaching agents



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VOC

VOC (EU) 0 %

Other information ***

The product does not contain substances according to: Candidate List for inclusion in Annex XIV of Regulation (EC) No. 1907/2006 (REACH).

15.2. Chemical safety assessment

For this preparation a chemical safety assessment has not been carried out.

SECTION 16: Other information

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Met. Corr. 1	H290	On basis of test data
Skin Corr. 1B	H314	Calculation method
Eye Dam. 1	H318	Calculation method
Aquatic Acute 1	H400	Calculation method
Aquatic Chronic 2	H411	Calculation method

Hazard statements listed in Chapter 2/3

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
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.

CLP categories listed in Chapter 2/3

Aquatic Acute 1 Hazardous to the aquatic environment, acute, Category 1
Aquatic Chronic 1 Hazardous to the aquatic environment, chronic, Category 1
Aquatic Chronic 2 Hazardous to the aquatic environment, chronic, Category 2

Eye Dam. 1 Serious eye damage, Category 1

Met. Corr. 1 Substance or mixture corrosive to metals, Category 1

Skin Corr. 1A Skin corrosion, Category 1A Skin Corr. 1B Skin corrosion, Category 1B

Abbreviations

ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route

RID: Règlement concernant le transport international ferroviaire de marchandises dangereuses

GGVSee: Gefahrgutverordnung See

IMDG: International Maritime Code for Dangerous Goods

CAS: Chemical Abstracts Service EAK: Europäischer Abfallkatalog

EINECS: European Inventory of Existing Commercial Chemical Substances

VOC: Volatile Organic Compound GefStoffV: Gefahrstoffverordnung

TA Luft: Technische Anleitung zur Reinhaltung der Luft INCI: International Nomenclature of Cosmetic Ingredients

n.a.g.: nicht anders genannt

MAK: Maximale Arbeitsplatz-Konzentration

AGW: Arbeitsplatzgrenzwert BGW: Biologischer Grenzwert

TRGS: Technische Regeln für Gefahrstoffe

OEL: Occupational exposure limit

SUVA: Schweizerische Unfallversicherungsanstalt

WEL: Workplace exposure limit

MAC: Maximale aanvaarde concentratie (Netherlands)

MEL: Maximum exposure limits NOEL: No observable effect level

NOEC: No observable effect concentration



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LD: Lethal dose

LC: Lethal concentration

LLC: Lowest lethal concentration LLC: Lowest lethal concentration

PBT: Persistent, Bioaccumulative and Toxic vPvB: Very persistent and very bioaccumulative

SVHC: Substances of very high concern

DNEL: Derived no effect level
DMEL: Derived minimal effect level
PNEC: Predicted no effect concentration
PEC: Predicted environmental concentration

GHS: Globally Harmonized System of classification and Labelling of Chemicals REACH: Registration, Evaluation, Autohorisation and Restriction of Chemicals

UN: United Nations

EG: Europäische Gemeinschaft

EWG: Europäische Wirtschaftsgemeinschaft

EU: European Union

HSNO: Hazardous Substances and New Organisms Act (New Zealand)

ATE: Acute Toxicity Estimate

STOT: Specific Target Organ Toxicity

IOELV: Indicative Occupational Exposure Limit Values

Supplemental information

Relevant changes compared with the previous version of the safety data sheet are marked with: *** This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.