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

Printing date 25.01.2024 Version number 4.01 (replaces version 4.00) Revision: 25.01.2024

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

· **1.1 Product identifier**

· **Trade name:** **CHLORODES 150**

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

· **Sector of Use** SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

· **Product category** PC8 Biocidal products

· **Application of the substance / the mixture** Biocide

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:** Tensio
Doornpark 36
9120 Beveren
Belgium
Tel.: +32 3 755 48 74
Fax.: +32 3 755 51 55
e-mail: info@tensio.be

· **Further information obtainable from:** Product Safety Departement: SDS@tensio.be

· **1.4 Emergency telephone number:** België / Belgique: Antigifcentrum / Centre Antipoison : +32 70 245 245
Nederland: Nationaal Vergiftigingen Informatie Centrum : +31 30 274 88 88
+44 700 393 7989
Members of the public seeking specific information on poisons should contact:
In England and Wales: NHS 111 - dial 111
In Scotland: NHS 24 - dial 111

*
2 Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**

Acute Tox. 4	H302 Harmful if swallowed.
Skin Corr. 1B	H314 Causes severe skin burns and eye damage.
Eye Dam. 1	H318 Causes serious eye damage.
Aquatic Acute 1	H400 Very toxic to aquatic life.
Aquatic Chronic 1	H410 Very toxic to aquatic life with long lasting effects.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008** The product is classified and labelled according to the GB CLP regulation.

(Contd. on page 2)

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

Printing date 25.01.2024 *Version number 4.01 (replaces version 4.00)* *Revision: 25.01.2024*

Trade name: CHLORODES 150

(Contd. of page 1)

· **Hazard pictograms**

GHS05 GHS07 GHS09

· **Signal word** Danger

· **Hazard statements**
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H410 Very toxic to aquatic life with long lasting effects.

· **Precautionary statements**

P260	Do not breathe dusts or mists.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
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.
P321	Specific treatment (see on this label).
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Additional information:** EUH031 Contact with acids liberates toxic gas.
· **2.3 Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

*
3 Composition/information on ingredients

· **3.1 Substances**
· **CAS No. Description** CAS: 7681-52-9 sodium hypochlorite, solution
· **Identification number(s)**
· **EC number:** 231-668-3
· **Index number:** 017-011-00-1
· **3.2 Mixtures**
· **Description:** sodium hypochlorite solution 170 g/l

(Contd. on page 3)

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

Printing date 25.01.2024 Version number 4.01 (replaces version 4.00) Revision: 25.01.2024

Trade name: CHLORODES 150

(Contd. of page 2)

· **Dangerous components:**		
CAS: 7681-52-9 EINECS: 231-668-3 Reg.nr.: 01-2119488154-34-XXXX	sodium hypochlorite, solution Skin Corr. 1B, H314; Eye Dam. 1, H318; Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=1); Acute Tox. 4, H302, EUH031 Specific concentration limit: EUH031: C ≥ 5 %	≥10–<25%

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

4 First aid measures

· **4.1 Description of first aid measures**

· **General information:** Immediately remove any clothing soiled by the product.
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:** If skin irritation continues, consult a doctor.
Immediately rinse with water.

· **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

· **After swallowing:** Call for a doctor immediately.

· **4.2 Most important symptoms and effects, both acute and delayed**
Skin contact: burns, pain, redness.
Eye contact: lesions, irritations, pain, tearing, redness.
Inhalation: malaise, dizziness
Ingestion: burns, irritation, pain.

· **4.3 Indication of any immediate medical attention and special treatment needed** Treat symptomatically. An eyewash is recommended in the immediate work area.

5 Firefighting measures

· **5.1 Extinguishing media**

· **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.

· **For safety reasons unsuitable extinguishing agents:** Non

· **5.2 Special hazards arising from the substance or mixture** During heating or in case of fire poisonous gases are produced.

(Contd. on page 4)

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

Printing date 25.01.2024 *Version number 4.01 (replaces version 4.00)* *Revision: 25.01.2024*

Trade name: CHLORODES 150

(Contd. of page 3)

· **5.3 Advice for firefighters**
· **Protective equipment:** Mouth respiratory protective device.

*
6 Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures** Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.

· **6.2 Environmental precautions:** Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.

· **6.3 Methods and material for containment and cleaning up:** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralising agent.
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.

· **6.4 Reference to other sections** See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

· **7.1 Precautions for safe handling** Store in cool, dry place in tightly closed receptacles.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.

· **Information about fire - and explosion protection:** Keep respiratory protective device available.

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** Store in a cool location.
· **Information about storage in one common storage facility:** Store away from reducing agents.
Store away from flammable substances.
Do not store together with acids.

· **Further information about storage conditions:** Keep container tightly sealed.

(Contd. on page 5)

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

Printing date 25.01.2024 Version number 4.01 (replaces version 4.00) Revision: 25.01.2024

Trade name: CHLORODES 150

(Contd. of page 4)

· **7.3 Specific end use(s)** No further relevant information available.

*

8 Exposure controls/personal protection

· **8.1 Control parameters**
· **Ingredients with limit values that require monitoring at the workplace:** The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**
· **Appropriate engineering controls** No further data; see section 7.
· **Individual protection measures, such as 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.
Avoid contact with the eyes and skin.
· **Respiratory protection:** In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
· **Hand protection**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· **Material of gloves** Recommended thickness of the material: ≥ 0.19 mm
Nitrile rubber, NBR
Butyl rubber, BR
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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
· **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.

(Contd. on page 6)

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

Printing date 25.01.2024 Version number 4.01 (replaces version 4.00) Revision: 25.01.2024

Trade name: CHLORODES 150

(Contd. of page 5)

· **Eye/face protection**

Tightly sealed goggles

*

9 Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**	
· **General Information**	
· **Physical state**	Fluid
· **Colour:**	Yellow
· **Odour:**	Characteristic
· **Odour threshold:**	Not determined.
· **Melting point/freezing point:**	<-16 °C
· **Boiling point or initial boiling point and boiling range**	Undetermined.
· **Flammability**	Not applicable.
· **Lower and upper explosion limit**	
· **Lower:**	Not determined.
· **Upper:**	Not determined.
· **Flash point:**	Not applicable
· **Decomposition temperature (SADT):**	Not determined.
· **pH at 20 °C**	>12
· **Viscosity:**	
· **Kinematic viscosity**	Not determined.
· **Dynamic at 20 °C:**	3.5 mPas
· **Solubility**	
· **water:**	Fully miscible.
· **Partition coefficient n-octanol/water (log value)**	Not determined.
· **Vapour pressure at 20 °C:**	17 hPa
· **Density and/or relative density**	
· **Density at 20 °C:**	1.22 g/cm³
· **Relative density**	Not determined.
· **Vapour density**	Not determined.
· **9.2 Other information**	
· **Appearance:**	
· **Form:**	Fluid
· **Important information on protection of health and environment, and on safety.**	
· **Ignition temperature:**	Product is not selfigniting.
· **Explosive properties:**	Product does not present an explosion hazard.
· **Change in condition**	
· **Evaporation rate**	Not determined.

(Contd. on page 7)

Tensio Food safety

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

Printing date 25.01.2024 Version number 4.01 (replaces version 4.00) Revision: 25.01.2024

Trade name: CHLORODES 150

(Contd. of page 6)

· **Information with regard to physical hazard classes**	
· **Explosives**	Void
· **Flammable gases**	Void
· **Aerosols**	Void
· **Oxidising gases**	Void
· **Gases under pressure**	Void
· **Flammable liquids**	Void
· **Flammable solids**	Void
· **Self-reactive substances and mixtures**	Void
· **Pyrophoric liquids**	Void
· **Pyrophoric solids**	Void
· **Self-heating substances and mixtures**	Void
· **Substances and mixtures, which emit flammable gases in contact with water**	Void
· **Oxidising liquids**	Void
· **Oxidising solids**	Void
· **Organic peroxides**	Void
· **Corrosive to metals**	Void
· **Desensitised explosives**	Void

10 Stability and reactivity

· **10.1 Reactivity**	No further relevant information available.
· **10.2 Chemical stability**	decomposition from 10 ° c
· **Thermal decomposition / conditions to be avoided:**	No decomposition if used according to specifications.
· **10.3 Possibility of hazardous reactions**	No dangerous reactions known.
· **10.4 Conditions to avoid**	No further relevant information available.
· **10.5 Incompatible materials:**	No further relevant information available.
· **10.6 Hazardous decomposition products:**	No dangerous decomposition products known.

*
11 Toxicological information

· **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

· **Acute toxicity**	Harmful if swallowed.
· **Skin corrosion/irritation**	Causes severe skin burns and eye damage.
· **Serious eye damage/irritation**	Causes serious eye damage.

(Contd. on page 8)

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

Printing date 25.01.2024 *Version number 4.01 (replaces version 4.00)* *Revision: 25.01.2024*

Trade name: CHLORODES 150

(Contd. of page 7)

· **11.2 Information on other hazards**

· **Endocrine disrupting properties**
None of the ingredients is listed.

*

12 Ecological information

· **12.1 Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **12.2 Persistence and degradability** Not persistence
· **12.3 Bioaccumulative potential** not bioaccumalative
· **12.4 Mobility in soil** No further relevant information available.
· **12.5 Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.
· **12.7 Other adverse effects**
· **Remark:** Very toxic for 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.
Must not reach sewage water or drainage ditch undiluted or unneutralised.
Danger to drinking water if even small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
The surfactants ingredients of the product are biodegradable according to the requirements of regulation 648/2004/EC.
Very toxic for aquatic organisms
Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

(Contd. on page 9)

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

Printing date 25.01.2024 Version number 4.01 (replaces version 4.00) Revision: 25.01.2024

Trade name: CHLORODES 150

(Contd. of page 8)

13 Disposal considerations

· **13.1 Waste treatment methods**
· **Recommendation** Must not be disposed together with household garbage. Do not allow product to reach sewage system.

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

*

14 Transport information

· **14.2 UN proper shipping name**
· **ADR** UN1791 HYPOCHLORITE SOLUTION, ENVIRONMENTALLY HAZARDOUS
· **IMDG** HYPOCHLORITE SOLUTION (sodium hypochlorite, solution), MARINE POLLUTANT
· **IATA** HYPOCHLORITE SOLUTION
· **Class** 8 Corrosive substances.
· **Label** 8
· **ADR, IMDG, IATA** II
· **14.5 Environmental hazards:**
· **Marine pollutant:** Yes
Symbol (fish and tree)
· **Special marking (ADR):** Symbol (fish and tree)
· **14.6 Special precautions for user** Warning: Corrosive substances.
· **Hazard identification number (Kemler code):** 80
· **EMS Number:** F-A,S-B
· **Segregation groups** (SGG8) Hypochlorites
· **Stowage Category** B
· **Segregation Code** SG20 Stow "away from" SGG1-acids
· **14.7 Maritime transport in bulk according to IMO instruments** Not applicable.
· **Limited quantities (LQ)** 1L
· **Excepted quantities (EQ)** Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml
· **Transport category** 2
· **Tunnel restriction code** E
· **Limited quantities (LQ)** 1L
· **Excepted quantities (EQ)** Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml

(Contd. on page 10)

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

Printing date 25.01.2024 Version number 4.01 (replaces version 4.00) Revision: 25.01.2024

Trade name: CHLORODES 150

(Contd. of page 9)

· **UN "Model Regulation":** UN 1791 HYPOCHLORITE SOLUTION, 8, II, ENVIRONMENTALLY HAZARDOUS

*

15 Regulatory information

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

· **Poisons Act**

· **Regulated explosives precursors**
None of the ingredients is listed.

· **Regulated poisons**
None of the ingredients is listed.

· **Reportable explosives precursors**
None of the ingredients is listed.

· **Reportable poisons**		
CAS: 7681-52-9	sodium hypochlorite, solution	Listed

· **Labelling according to Regulation (EC) No 1272/2008** The product is classified and labelled according to the GB CLP regulation.

· **Hazard pictograms**

GHS05 GHS07 GHS09

· **Signal word** Danger

· **Hazard statements**
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H410 Very toxic to aquatic life with long lasting effects.

· **Precautionary statements**

P260	Do not breathe dusts or mists.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
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.
P321	Specific treatment (see on this label).
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 11)

Tensio Food safety

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

Printing date 25.01.2024 Version number 4.01 (replaces version 4.00) Revision: 25.01.2024

Trade name: CHLORODES 150

(Contd. of page 10)

· **Directive 2012/18/EU**
· **Named dangerous substances - ANNEX I** None of the ingredients is listed.
· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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.

· **Relevant phrases**
H302 Harmful if swallowed.
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.
EUH031 Contact with acids liberates toxic gas.

· **Contact:** Wim Lampaert
MSc Chemistry

· **Abbreviations and acronyms:**
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
ATE: Acute toxicity estimate values
Acute Tox. 4: Acute toxicity – Category 4
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

· ***** Data compared to the previous version altered.**