

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

### 1.1 Product identifier

- Trade name: **CHLORODES CIP SV**
- 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
- Product category PC35 Washing and cleaning products (including solvent based 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](mailto:info@tensio.be)
- Further information obtainable from: Product Safety Departement: [SDS@tensio.be](mailto:SDS@tensio.be)
- 1.4 Emergency telephone number: +44 700 393 7989

## SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008



GHS05 corrosion

Met. Corr.1            H290 May be corrosive to metals.  
Skin Corr. 1A        H314 Causes severe skin burns and eye damage.



GHS09 environment

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 CLP regulation.
- Hazard pictograms GHS05, GHS09
- Signal word Danger
- Hazard-determining components of labelling:  
sodium hydroxide  
potassium hydroxide  
sodium hypochlorite, solution
- Hazard statements  
H290 May be corrosive to metals.  
H314 Causes severe skin burns and eye damage.  
H410 Very toxic to aquatic life with long lasting effects.
- Precautionary statements  
P260                    Do not breathe dust/fume/gas/mist/vapours/spray.  
P273                    Avoid release to the environment.  
P280                    Wear protective gloves/protective clothing/eye protection/face protection.

(Contd. on page 2)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 18.12.2018

Version number 5

Revision: 18.12.2018

**Trade name: CHLORODES CIP SV**

(Contd. of page 1)

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.**

- **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.

### SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**

- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 1310-73-2 EINECS: 215-185-5 Reg.nr.: 01-2119457892-27-XXXX	sodium hydroxide ⚠ Skin Corr. 1A, H314; ⚠ Acute Tox. 4, H302	≥5-<10%
CAS: 1310-58-3 EINECS: 215-181-3 Reg.nr.: 01-2119487136-33-XXXX	potassium hydroxide ⚠ Skin Corr. 1A, H314; ⚠ Acute Tox. 4, H302	≥2.5-<5%
CAS: 7681-52-9 EINECS: 231-668-3 Reg.nr.: 01-2119488154-34-XXXX	sodium hypochlorite, solution ⚠ Skin Corr. 1B, H314; ⚠ Aquatic Acute 1, H400 (M=10); ⚠ Acute Tox. 4, H302	≥1-<2.5%

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

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**

- **General information:**

**IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**IF ON SKIN (or hair):** Take off immediately all contaminated clothing. Rinse skin with water [or shower].

Immediately call a POISON CENTER/doctor.

Immediately remove any clothing soiled by the product.

- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.

- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

- **After eye contact:**

Rinse opened eye for several minutes under running water. Then consult a doctor.

- **After swallowing:**

Drink plenty of water and provide fresh air. Call for a doctor immediately.

Do not induce vomiting; call for medical help 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.

(Contd. on page 3)

**Trade name: CHLORODES CIP SV**

(Contd. of page 2)

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

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture**  
Formation of toxic gases is possible during heating or in case of fire.  
During heating or in case of fire poisonous gases are produced.
- **5.3 Advice for firefighters**
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Mouth respiratory protective device.

### SECTION 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 item 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.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
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 foodstuffs.  
Store away from ammonium salts and separated from acids.  
Do not store together with acids.
- **Further information about storage conditions:**  
Store in a cool place.

(Contd. on page 4)

**Trade name: CHLORODES CIP SV**

(Contd. of page 3)

- Store in the dark.
- Protect from contamination.
- Do not seal receptacle gas tight.
- Protect from heat and direct sunlight.
- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

**CAS: 1310-73-2 sodium hydroxide (≥5–<10%)**

WEL (Great Britain) | Short-term value: 2 mg/m<sup>3</sup>

**CAS: 1310-58-3 potassium hydroxide (≥2.5–<5%)**

WEL (Great Britain) | Short-term value: 2 mg/m<sup>3</sup>

· **Additional information:** The lists valid during the making were used as basis.

#### · 8.2 Exposure controls

##### · **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 and skin.

##### · **Respiratory protection:**

Use suitable respiratory protective device only when aerosol or mist is formed.  
Filter B

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.

##### · **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

##### · **Material of gloves**

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.4 mm

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**

For the mixture of chemicals mentioned in header 3 the penetration time has to be at least 480 minutes (Permeation according to EN 374 Part 3: Level 1).

<http://industrialcatalogue.ansell.eu/en/chemicalagents>

(Contd. on page 5)

**Trade name: CHLORODES CIP SV**

(Contd. of page 4)

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

· **Body protection:** Alkaline resistant protective clothing

### SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

· <b>Form:</b>	Fluid
· <b>Colour:</b>	Yellow
· <b>Odour:</b>	Chlorine-like
· <b>Odour threshold:</b>	Not determined.

· **pH-value at 20 °C:** 12.3 (OECD 122)

· **Change in condition**

· <b>Melting point/freezing point:</b>	Undetermined.
· <b>Initial boiling point and boiling range:</b>	100 °C

· **Flash point:** Not applicable.

· **Flammability (solid, gas):** Not applicable.

· **Decomposition temperature (SADT):** Not determined.

· **Auto-ignition temperature:** Product is not selfigniting.

· **Explosive properties:** Product does not present an explosion hazard.

· **Explosion limits:**

· <b>Lower:</b>	Not determined.
· <b>Upper:</b>	Not determined.

· **Vapour pressure at 20 °C:** 23 hPa

· **Density at 20 °C:** 1.156 g/cm<sup>3</sup> (REACH A.3.)

· **Relative density** Not determined.

· **Vapour density** Not determined.

· **Evaporation rate** Not determined.

· **Solubility in / Miscibility with water:**

Fully miscible.

· **Partition coefficient: n-octanol/water:** Not determined.

· **Viscosity:**

· <b>Dynamic:</b>	Not determined.
· <b>Kinematic at 40 °C:</b>	1.2 mm <sup>2</sup> /s (OECD 114)

· **9.2 Other information** No further relevant information available.

# Safety data sheet

## according to 1907/2006/EC, Article 31

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Version number 5

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Trade name: CHLORODES CIP SV

(Contd. of page 5)

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**  
Stable under the handling and storage conditions recommended in Chapter 7.
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**  
Under handling and storage conditions recommended in chapter 7: no dangerous reaction known.
- **10.4 Conditions to avoid**  
Avoid reducing agents.  
Avoid ammonium salts.  
Keep away from acids.  
High temperatures and direct sunlight
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**  
Under recommended handling and storage conditions in chapter 7, no known hazardous decomposition products. See Chapter 5 for combustion products.

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
  - **Acute toxicity** Based on available data, the classification criteria are not met.
- |  |      |                   |
|--|------|-------------------|
| · <b>LD/LC50 values relevant for classification:</b> |      |                   |
| <b>CAS: 1310-73-2 sodium hydroxide</b>               |      |                   |
| Oral   | LD50 | 2,000 mg/kg (rat) |
| <b>CAS: 1310-58-3 potassium hydroxide</b>            |      |                   |
| Oral   | LD50 | 273 mg/kg (rat)   |
- **Primary irritant effect:**
  - **Skin corrosion/irritation**  
Causes severe skin burns and eye damage.
  - **Serious eye damage/irritation**  
Causes severe skin burns and eye damage.
  - **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
  - **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
  - **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
  - **Carcinogenicity** Based on available data, the classification criteria are not met.
  - **Reproductive toxicity** Based on available data, the classification criteria are not met.
  - **STOT-single exposure** Based on available data, the classification criteria are not met.
  - **STOT-repeated exposure** Based on available data, the classification criteria are not met.
  - **Aspiration hazard** Based on available data, the classification criteria are not met.

### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.

(Contd. on page 7)

# Safety data sheet

## according to 1907/2006/EC, Article 31

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**Trade name: CHLORODES CIP SV**

(Contd. of page 6)

- **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.

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.

- **12.5 Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**

- **Recommendation**

Dispose of the product and / or its packaging as hazardous waste.

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.

### SECTION 14: Transport information

- **ADR, IMDG, IATA**

UN1719

- **14.2 UN proper shipping name**

- **ADR**

UN1719 CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE, POTASSIUM HYDROXIDE), ENVIRONMENTALLY HAZARDOUS

- **IMDG**

CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE, POTASSIUM HYDROXIDE), MARINE POLLUTANT

- **IATA**

CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE, POTASSIUM HYDROXIDE)

- **Class**

8 Corrosive substances.

- **Label**

8

- **ADR, IMDG, IATA**

II

- **14.5 Environmental hazards:**

Product contains environmentally hazardous substances: sodium hypochlorite, solution

- **Marine pollutant:**

Yes

Symbol (fish and tree)

- **Special marking (ADR):**

Symbol (fish and tree)

(Contd. on page 8)

# Safety data sheet

## according to 1907/2006/EC, Article 31

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Version number 5

Revision: 18.12.2018

Trade name: CHLORODES CIP SV

(Contd. of page 7)

<ul style="list-style-type: none"> <li>· <b>14.6 Special precautions for user</b></li> <li>· <b>Danger code (Kemler):</b></li> <li>· <b>EMS Number:</b></li> <li>· <b>Segregation groups</b></li> <li>· <b>Stowage Category</b></li> <li>· <b>Segregation Code</b></li> </ul>	<p>Warning: Corrosive substances.</p> <p>80</p> <p>F-A, S-B</p> <p>Alkalis</p> <p>A</p> <p>SG22 Stow "away from" ammonium salts</p> <p>SG35 Stow "separated from" acids.</p>
<ul style="list-style-type: none"> <li>· <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b></li> <li>· <b>Limited quantities (LQ)</b></li> <li>· <b>Excepted quantities (EQ)</b></li>   <li>· <b>Transport category</b></li> <li>· <b>Tunnel restriction code</b></li> <li>· <b>Limited quantities (LQ)</b></li> <li>· <b>Excepted quantities (EQ)</b></li> </ul>	<p>Not applicable.</p> <p>1L</p> <p>Code: E2</p> <p>Maximum net quantity per inner packaging: 30 ml</p> <p>Maximum net quantity per outer packaging: 500 ml</p> <p>2</p> <p>E</p> <p>1L</p> <p>Code: E2</p> <p>Maximum net quantity per inner packaging: 30 ml</p> <p>Maximum net quantity per outer packaging: 500 ml</p>
<ul style="list-style-type: none"> <li>· <b>UN "Model Regulation":</b></li> </ul>	<p>UN 1719 CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE, POTASSIUM HYDROXIDE), 8, II, ENVIRONMENTALLY HAZARDOUS</p>

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms** GHS05, GHS09
- **Signal word** Danger
- **Hazard-determining components of labelling:**  
sodium hydroxide  
potassium hydroxide  
sodium hypochlorite, solution
- **Hazard statements**  
H290 May be corrosive to metals.  
H314 Causes severe skin burns and eye damage.  
H410 Very toxic to aquatic life with long lasting effects.
- **Precautionary statements**  
P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/eye protection/face 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.

(Contd. on page 9)



**Trade name: CHLORODES CIP SV**

(Contd. of page 8)

- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I**  
None of the components are listed.  
None of the ingredients is listed.
- **Seveso category E1 Hazardous to the Aquatic Environment**
- **Qualifying quantity (tonnes) for the application of lower-tier requirements 100 t**
- **Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t**
- **REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3**
- **15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.**

### SECTION 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.  
H400 Very toxic to aquatic life.
- **Contact:**  
Wim Lampaert  
MSc Chemistry
- **Abbreviations and acronyms:**  
ADR: Accord européen sur le transport 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)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
Met. Corr. 1: Corrosive to metals – Category 1  
Acute Tox. 4: Acute toxicity – Category 4  
Skin Corr. 1A: Skin corrosion/irritation – Category 1A  
Skin Corr. 1B: Skin corrosion/irritation – Category 1B  
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.**