



## Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

### **Product identifier:**

**Identification as on the label/Trade name:** Sodium Chlorite 25% Solution

**EAN:** 8720254298955

### **Relevant identification uses of the substance and uses advised against:**

**Identified uses:** Water treatment, paper and board production, bleach, bleach bath stabilizer, laboratories, discharge, washing and cleaning products.

**Uses advised against:** No other uses are advised.

### **Details of the supplier of the Safety Data Sheet:**

Laboratoriumdiscounter

Zandvoortstraat 75

1976BN IJmuiden

info@laboratoriumdiscounter.nl

+31-255-700-210

### **Emergency telephone numbers:**

24-hour Emergency Contact:

National Poison Information Centre: +31-30-274-8888

## Section 2: Hazards Identification

### **Classification of the substances or mixture:**

**The mixture is classified according to:** Regulation EC 1272/2008 [EU-GHS/CLP]

#### **Hazard classes/Hazard categories:**

Acute Toxicity, Oral (Category 4)

Acute Toxicity, Dermal (Category 3)

Skin Corrosive (Category 1B)

STOT RE, Spleen (Category 2)

Aquatic Acute (Category 1)

#### **Hazard Statement:**

H302

H311

H314

H373

H400

### **Label elements:**

#### **Hazard pictograms:**



**Signal Words:** Danger.

#### **Hazard Statements:**

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.



H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

**Precautionary Statements:**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash ... thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin 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/doctor.

P361 + P364 Take off immediately all contaminated clothing and wash it before reuse.

P391 Collect spillage.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Section 3: Composition/Information on Ingredients**

**Substance/Mixture:** Mixture.

**Ingredients:**

Substance name (IUPAC/EC)	CAS-No.	Concentration % by weight	SCLs, M-Factors, Acute Toxicity Estimates (ATE)	Classification
	EC-No.			EC1272/2008
Sodium chlorite	7758-19-2	25%	-	Ox. Sol. 1 H271
	231-836-6			Acute Tox. 3 H301
				Acute Tox. 2 H310
				Skin Corr. 1B H314
				STOT RE 2 H373
				Aquatic Acute 1 H400

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

**Section 4: First-Aid Measures****Description of first aid measures:**

**Skin contact:** Wash the area affected with plenty of water for at least 15 minutes, removing soiled clothing and shoes. Seek immediate medical attention.

**Eye contact:** Wash eyes with plenty of water for at least 30 minutes. Seek immediate medical attention.

**Ingestion:** Do not induce vomit. If conscious, give water on demand and seek immediate medical attention. If unconscious, maintain the patient at rest and warm, and seek immediate medical attention.



**Inhalation:** In the event of formation of chlorine dioxide, move the patient to a well-ventilated place, lying flat and at rest. If the affected person stops breathing, give artificial respiration. If breathing with difficulty, give oxygen. Always seek medical help.

**Special measures to be available in the workplace:** Safety showers and eye-wash.

**Most important symptoms and effects, both acute and delayed:**

Toxic in contact with skin. Causes severe skin burns and eye damage.

**Indication of any immediate medical attention and special treatment needed:** Treat symptomatically.

## Section 5: Fire-Fighting Measures

**Extinguisher media:**

**Suitable extinguishing media:** A lot of water. Form curtains of water to absorb the gases that are generated in the combustion. Keep containers and deposits cool, spraying them with water if exposed to the fire. If feasible, remove the combustible agent. Remove the containers from the area of fire, if this does not entail risk.

**Extinguishing media which must not be used:** CO<sub>2</sub> powder (powdered dry ice), foam or fire blanket.

**Special exposure hazards arising from the substance:** The product is not flammable or explosive. If it reaches 175 °C it decomposes to chlorine and chlorate. Subsequent decomposition of the chlorate produces oxygen which may give rise to the explosion or bursting of closed containers.

**Special protective equipment for fire-fighters:** Self-contained breathing equipment. Individual protective equipment (gloves and suitable clothing). Seek emplacement with your back against the wind.

## Section 6: Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures:**

Avoid contact with the eyes, skin and clothing. Do not act without appropriate protective equipment.

**Environmental precautions:** Recover the whole product that is possible in a clean dry plastic or metallic container. Following product recovery, flush area with water. Notify the proper authorities.

**Methods for containment and cleaning up:**

Contain spill using noncombustible material such as vermiculite, sand or earth. Take the absorbent products to a safe storage for treatment by expert personnel in handling the product or an authorised waste manager.

## Section 7: Handling and Storage

**Precautions for safe handling:**

Do not smoke, eat or drink when handling the product. Avoid the formation of sparks. Maintain storage and work areas totally clean, devoid of any trace of foreign or incompatible products. Before handling the product, make sure that the containers, vessels and tanks to be used are clean, dry and appropriate for the intended use. Do not return the product (nor samples) to containers or tanks (risk of decomposition). Avoid mixing with incompatible products (acids, acid materials, combustible materials, oils, greases, etc.). Containers shall be properly closed and appropriately labelled. Avoid dust formation during handling. Avoid contact with the skin, eyes and clothing. Always use the recommended protective clothing.

**Conditions for safe storage, including incompatibilities:**

Recommended materials: For materials in contact with the product use: polyester, PVC, stainless steel, polyester or coated steel.

Incompatible materials: Wood, rubber, aluminium, copper and alloys.

Storage conditions: Keep in a dry place away from heat sources.

Special conditions: Keep the product separated from flammables, combustibles, acids and organics. Avoid direct sunlight.

Applicable regulations: COUNCIL DIRECTIVE 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances.

**Section 8: Exposure Controls and Personal Protection****Control parameters:****Occupational exposure limits:**

CAS No.	Ingredient	Type	Value
7758-19-2	Sodium chlorite	VLA-ED	0.1 ppm 0.28 mg/m <sup>3</sup>
		VLA-EC-	0.3 ppm (INSHT) (as ClO <sub>2</sub> )
		TLV-TWA	0.1 ppm 0.28 mg/m <sup>3</sup>
		STEL-C	0.3 ppm (ACGIH) (as ClO <sub>2</sub> )
		TLV-TWA - Total dust	10 mg/m <sup>3</sup>
		Respirable dust	3 mg/m <sup>3</sup> (ACGIH 2005)

**Exposure controls:**

**Appropriate engineering controls:** If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Individual protection measures, such as personal protective equipment:**

**Respiratory protection:** In the event of emission of sodium chlorite powder, use mask with a dust filter (EN 143 P2 or P3) In the event of formation of chlorine dioxide use breathing protection mask with filter for inorganic gases B (Chlorine) for low concentrations (EN 136), for higher concentrations use self-contained breathing equipment (EN137).

**Hand protection:** Gloves for chemical hazards, PVC type (do not use leather or natural rubber) (EN 374).

**Eye protection:** Wear chemical safety goggles (EN 166). If the face is at risk as well as the eyes, a protective shield must also be worn (EN 166).

**Skin protection:** Anti-acid suit. Do not use cotton, leather or natural rubber.

**Environmental exposure controls:** Keeps dust abatement run-off water from reaching drains and/or surface waters. Avoid the emission of dust to the atmosphere.

**Section 9: Physical and Chemical Properties****Information on basic physical and chemical properties:**

**Appearance (form):** Liquid.

**Colour:** Colourless.

**Odour:** Slight.

**Odour threshold:** No data available.



**pH (concentration):** 12 – 13  
**Melting point/range (°C):** -3 °C  
**Boiling point/range (°C):** 100 °C  
**Flash point (°C):** No data available.  
**Evaporation rate:** No data available.  
**Flammability (solid, gas):** Non-flammable.  
**Upper/lower flammability/explosive limits:** No data available.  
**Vapour pressure:** 20 hPa @ 20 °C  
**Vapour density:** No data available.  
**Relative density:** 1.20 – 1.25  
**Water solubility (g/L):** Soluble.  
**n-Octanol/Water partition coefficient:** No data available.  
**Auto-ignition temperature:** No data available.  
**Viscosity, dynamic:** No data available.

## Section 10: Stability and Reactivity

**Reactivity:** No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability:** The product is stable.

**Conditions to avoid:** Heating, sun light.

**Materials to avoid:** Acids, acid substances (aluminum sulphate, aluminum chloride, ferric chloride.), wood, cellulose, grease, cotton.

**Hazardous decomposition products:** The product decomposes into chlorine dioxide and oxygen under heating and direct sun-light, with risk of bursting of containers. In contact with acid materials (Acids, aluminium polychloride, aluminum sulphate, ferric chloride, etc.) chlorine dioxide is formed, with risk of explosion. Violent exothermic reaction, development of heat with reducing materials (sodium sulphite). Potentially explosive reaction with combustible materials (wood, cellulose, grease, cotton...)

## Section 11: Toxicological Information

### Information on toxicological effects:

#### **Acute toxicity:**

Harmful if swallowed.

Oral route: Adverse effect observed LD50 284 mg/kg bw

Toxic in contact with skin.

Dermal route: Adverse effect observed LD50 134 mg/kg bw

**Skin corrosion/irritation:** Causes severe skin burns and eye damage.

**Serious eye damage/irritation:** No data available.

**Respiratory or skin sensitization:** No data available.

**Germ cell mutagenicity:** No data available.

**Carcinogenicity:** No data available.

**Reproductive toxicity:** No data available.

**STOT-single exposure:** No data available.

#### **STOT-repeated exposure:**

May cause damage to organs through prolonged or repeated exposure.

Oral route - systemic effects: Adverse effect observed NOAEL 10 mg/kg bw/day (subchronic, rat)

**Aspiration hazard:** No data available.



## Section 12: Ecological Information

**Toxicity:** Very toxic to aquatic life.

Toxicity to aquatic algae and cyanobacteria: EC50 for freshwater algae 1 mg/L

Toxicity to microorganisms: EC50 for microorganisms 100 mg/L

**Persistence and degradability:** No data available.

**Bioaccumulative potential:** No data available.

**Mobility in soil:** No data available.

**Results of PBT& vPvB assessment:** No data available.

## Section 13: Disposal Considerations

**Waste treatment methods:** Disposal of the product, contaminated packaging and waste. Spent containers shall be rinsed to remove all remaining product. Dilute the product with abundant water, avoiding the presence of solids which it may ignite (clothing, paper, wood, etc). Take into account considerations stated in previous sections regarding incompatibilities. Consult applicable European Community, National and local provisions relative to the appropriate elimination of this material and empty containers thereof.

## Section 14: Transport Information

### Land transport (ADR/RID)

**UN number:** 1908

**Proper shipping name and description:** CHLORITE SOLUTION

**Class:** 8

**Packaging group:** II

**Labels:** 8

### Marine transport (IMDG)

**UN number:** 1908

**Proper shipping name and description:** CHLORITE SOLUTION

**Class:** 8

**Packaging group:** II

**Labels:** 8

**Marine pollutant:** No

### Air transport ICAO/IATA

**UN number:** 1908

**Proper shipping name and description:** CHLORITE SOLUTION

**Class:** 8

**Packaging group:** II

**Labels:** 8



## Section 15: Regulatory Information

### EU regulations:

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended**

Not listed.

**Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry**

Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA**

Not listed.

### Authorisations:

**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended**

Not listed.

### Restrictions on use:

**Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use**

Not regulated.

**Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens and mutagens at work**

Not regulated.

**Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding.**

Not regulated.

### Other EU regulations:

**Directive 2012/18/EU on major accident hazards involving dangerous substances**

Not listed.

**Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.**

Always applicable.

**Directive 94/33/EC on the protection of young people at work**

Not regulated



**Other regulations:** The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

**National regulations:** Follow national regulation for work with chemical agents.

**Chemical safety assessment:** No Chemical Safety Assessment has been carried out.

## Section 16: Other Information

**Indication of changes:** GHS aligned.

**Relevant classification and H statements (number and full text):**

H271 May cause fire or explosion; strong oxidiser.

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H310 Fatal in contact with skin.

H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

**Training instructions:** Use as instructed.

**Further information:** This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

**Notice to readers:** Employers should use this information only as a supplement to other information gathered by them and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees.

This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.