SAFETY DATA SHEET

1. PRODUCT

1.1 Product identifiers

Name: Sodium chlorite

CAS-No.: 7758-19-2

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

Identified uses : Laboratory chemicals, Synthesis of substances

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Oxidizing solids (Category 1), H271

Acute toxicity, Oral (Category 3), H301

Acute toxicity, Dermal (Category 2), H310

Skin corrosion (Category 1B), H314

Serious eye damage (Category 1), H318

Specific target organ toxicity - repeated exposure, Oral (Category 2), spleen, H373

Acute aquatic toxicity (Category 1), H400

Chronic aquatic toxicity (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Pictogram	
Signal word	Danger
Hazard statement(s)	H271 May cause fire or explosion; strong oxidizer. H301 Toxic if swallowed. H310 Fatal in contact with skin. H314 Causes severe skin burns and eye damage. H373 May cause damage to organs (spleen) through prolonged or repeated exposure if swallowed. H400 Very toxic to aquatic life. H412 Harmful to aquatic life with long lasting effects.

ChemSrc

Precautionary statement(s)	P210 Keep away from heat. P220 Keep/Store away from clothing/ combustible materials. P221 Take any precaution to avoid mixing with combustibles. P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. P262 Do not get in eyes, on skin, or on clothing. P264 Wash skin 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. P283 Wear fire/ flame resistant/ retardant clothing. P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Rinse mouth. P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P302 + P350 + P310 IF ON SKIN: Gently wash with plenty of soap and water. Immediately call a POISON CENTER or doctor/ physician. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician. P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician. P306 + P360 IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before removing clothes. P314 Get medical advice/ attention if you feel unwell. P362 Take off contaminated clothing and wash before reuse. P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. P371 + P380 + P375 In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion. P391 Collect spillage. P405 Store locked up. P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

No data available

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3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Formula:	$ClNaO_2$
Molecular weight:	90.44 g/mol
CAS-No.:	7758-19-2
EC-No.:	231-836-6

Hazardous components

Component	Classification	Concentration
Sodium chlorite		
	Ox. Sol. 1; Acute Tox. 3; Acute Tox. 2; Skin Corr. 1B; Eye Dam. 1; STOT RE 2; Aquatic Acute 1; Aquatic Chronic 3; H271, H301, H310, H314, H373, H400, H412	<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

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4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.
If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact
Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.
In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.Continue rinsing eyes during transport to hospital.
If swallowed
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. 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

4.2 Indication of any immediate medical attention and special treatment needed

No data available

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5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Dry powder

5.2 Special hazards arising from the substance or mixture

Hydrogen chloride gas, Sodium oxides

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

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6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Do not flush with water.

Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

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7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.

Provide appropriate exhaust ventilation at places where dust is formed.Keep away from sources of ignition - No

smoking.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Never allow product to get in contact with water during storage. Do not store near acids.

Keep in a dry place.

Storage class (TRGS 510): Strongly oxidizing hazardous materials

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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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Hazardous components without workplace control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Hazardous components without workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment

Eye/face protection	Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin protection	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Full contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M) Splash contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.
Body Protection	Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection	Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Control of environmental exposure	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Form: powder Colour: white
Odour	No data available
Odour Threshold	No data available
pH	10.0 - 11.0 at 100 g/l at 20 °C (68 °F)
Melting point/freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	Not applicable
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	Lower explosion limit: 7 %(V)
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Water solubility	545 g/l at 20 °C (68 °F) - OECD Test Guideline 105
Partition coefficient: n-octanol/water	log Pow: < -2.7
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	The substance or mixture is classified as oxidizing with the category 1.

9.2 Other safety information

No data available

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10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Strong reducing agents, Powdered metals, Phosphorus, Sulphur compounds, Zinc, Ammonia, Organic materials, acids, Amines

10.6 Hazardous decomposition products

Other decomposition products - No data available

In the event of fire: see section 5

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11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity
LD50 Oral - Rat - 284 mg/kg (OECD Test Guideline 401) Inhalation: No data available LD50 Dermal - Rabbit - male and female - 134 mg/kg No data available

Skin corrosion/irritation
No data available
Serious eye damage/eye irritation
Eyes - Rabbit Result: Risk of serious damage to eyes.
Respiratory or skin sensitisation
Maximisation Test (GPMT) - Guinea pig Result: negative (OECD Test Guideline 406)
Germ cell mutagenicity
No data available No data available
Carcinogenicity
This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification. IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Sodium chlorite) NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity
No toxicity to reproduction Reproductive toxicity - Rat - males - Oral No toxicity to reproduction Developmental Toxicity - Rabbit - Oral
Specific target organ toxicity -single exposure
No data available
Specific target organ toxicity -repeated exposure
Oral - May cause damage to organs through prolonged or repeated exposure. - spleen Oral - spleen, Gastro-intestinal system
Aspiration hazard
No data available
Additional Information
Repeated dose toxicity Rat - male and female - Oral - NOAEL : 10 mg/kg - LOAEL : 25 mg/kg RTECS: VZ4800000

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish	flow-through test LC50 - Cyprinodon variegatus (sheepshead minnow) - 105 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - < 1 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	static test EC50 - Pseudokirchneriella subcapitata (green algae) - 1 mg/l - 96 h
Toxicity to bacteria	No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Very toxic to aquatic life.

Avoid release to the environment.

No data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.
Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

UN number: 1496 Class: 5.1 Packing group: II

Proper shipping name: Sodium chlorite

Reportable Quantity (RQ):

Poison Inhalation Hazard: No

IMDG

UN number: 1496 Class: 5.1 Packing group: II EMS-No: F-H, S-Q

Proper shipping name: SODIUM CHLORITE

Marine pollutant:yes

IATA

UN number: 1496 Class: 5.1 Packing group: II

Proper shipping name: Sodium chlorite

15. REGULATORY INFORMATION

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De

Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Reactivity Hazard, Acute Health Hazard

Massachusetts Right To Know Components

Component	CAS-No.	Revision Date
Sodium chlorite	7758-19-2	1993-04-24

Pennsylvania Right To Know Components

Component	CAS-No.	Revision Date
Sodium chlorite	7758-19-2	1993-04-24

New Jersey Right To Know Components

Component	CAS-No.	Revision Date
Sodium chlorite	7758-19-2	1993-04-24

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

Acute Tox. Acute toxicity

Aquatic Acute Acute aquatic toxicity

Aquatic Chronic Chronic aquatic toxicity

Eye Dam. Serious eye damage

H271 May cause fire or explosion; strong oxidizer.

H301 Toxic if swallowed.

H310 Fatal in contact with skin.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H373 May cause damage to organs (2ORA) through prolonged or repeated exposure if swallowed.

H400 Very toxic to aquatic life.

H412 Harmful to aquatic life with long lasting effects.

Ox. Sol. Oxidizing solids

Skin Corr. Skin corrosion

HMIS Rating

Health hazard: 3

Chronic Health Hazard:

Flammability: 0

Physical Hazard 3

NFPA Rating

Health hazard: 3

Fire Hazard: 0

Reactivity Hazard: 2

Special hazard.I: OX