

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

1.1. GHS product identifier

Product form	: Mixture
Trade name	: Sodium Chlorite 31 %
Substance type	: Mono-constituent
EC-No.	: 231-836-6
CAS-No.	: 7758-19-2
UN-No. (ADR)	: 1908
Product code	: Sodium Chlorite 31 %
Product group	: Raw material

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

No additional information available

1.4. Supplier's details

ImproChem(Pty) Ltd T/A AECI Water
1 Wharhirst Road
Umbogintwini – Kwa Zulu Natal
South Africa
T +27(31) 949 8200

1.5. Emergency phone number

Emergency number : 0800 SPILLS or 0800 774557

SECTION 2: Hazard identification

2.1. GHS classification of the substance/mixture and any national or regional information

Classification according to the United Nations GHS

Acute toxicity (oral), Category 3	H301
Acute toxicity (dermal), Category 2	H310
Acute toxicity (inhalation:dust,mist) Category 2	H330
Skin corrosion/irritation, Category 1	H314
Serious eye damage/eye irritation, Category 1	H318
Specific target organ toxicity – Repeated exposure, Category 2	H373
Hazardous to the aquatic environment – Chronic Hazard, Category 1	H410

Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects : May cause damage to organs through prolonged or repeated exposure,Fatal in contact with skin,Fatal if inhaled,Toxic if swallowed,Causes severe skin burns and eye damage,Causes serious eye damage,Very toxic to aquatic life with long lasting effects,Toxic in contact with skin,Harmful if swallowed.

2.2. GHS label elements, including precautionary statements

Labelling according to the United Nations GHS

Hazard pictograms (GHS ZA)



Signal word (GHS-ZA)

: Danger

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Hazardous ingredients	: SODIUM CHLORITE POWDER
Hazard statements (GHS ZA)	: H301 - Toxic if swallowed H310+H330 - Fatal in contact with skin or if inhaled H314 - Causes severe skin burns and eye damage H373 - May cause damage to organs through prolonged or repeated exposure H410 - Very toxic to aquatic life with long lasting effects
Precautionary statements (GHS ZA)	: P101 - If medical advice is needed, have product container or label at hand. P102 - Keep out of reach of children. P260 - Do not breathe dusts or mists. P262 - Do not get in eyes, on skin, or on clothing. P264 - Wash ... thoroughly after handling. P270 - Do not eat, drink or smoke when using this product.

2.3. Other hazards which do not result in classification or are not covered by the GHS

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to the United Nations GHS
SODIUM CHLORITE POWDER	CAS-No.: 7758-19-2	31	Ox. Liq. 1, H271 Acute Tox. 3 (Oral), H301 Acute Tox. 2 (Dermal), H310 Skin Corr. 1, H314 STOT RE 2, H373 Aquatic Chronic 1, H410

SECTION 4: First aid measures

4.1. Description of necessary first aid measures

First-aid measures general	: Call a physician immediately.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a physician immediately. Call a doctor.
First-aid measures after skin contact	: Take off immediately all contaminated clothing. Call a physician immediately. Rinse skin with water/shower.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Rinse mouth. Call a physician immediately. Do not induce vomiting.

4.2. Most important symptoms/effect, acute and delayed

Symptoms/effects after skin contact	: Burns.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
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Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : Non combustible.
Explosion hazard : If evaporated to dryness, residue may be explosible.
Hazardous decomposition products in case of fire : Hydrogen chloride.

5.3. Special protective actions for fire-fighters

Precautionary measures fire : Evacuate area.
Firefighting instructions : Cool laterally with water containers exposed to flames, even after the fire is extinguished. Do not enter fire area without proper protective equipment, including respiratory protection. Evacuate area.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid contact with skin, eyes and clothing. Do not handle until all safety precautions have been read and understood.

6.1.1. For non-emergency personnel

Emergency procedures : Do not breathe dust/fume/gas/mist/vapours/spray. Only qualified personnel equipped with suitable protective equipment may intervene.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and materials for containment and cleaning up

For containment : Absorb spilled material with sand or earth. Collect spillage.
Methods for cleaning up : Take up liquid spill into absorbent material. Contain and/or absorb spill with inert material (sand), then place in suitable container.
Other information : Dispose of materials or solid residues at an authorized site.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Wear personal protective equipment. Use only outdoors or in a well-ventilated area.
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
Additional hazards when processed : If evaporated to dryness, residue may be explosible.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ensure adequate ventilation, especially in confined areas. Facilities: shower, eye shower.
Storage conditions : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed and dry. Keep in a cool, well-ventilated place away from acids. Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.
Storage area : Keep container in a well-ventilated place.
Incompatible products : combustible materials. cyanides. chlorine.
Incompatible materials : Metals. Light sensitive. Heat sources.

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Heat and ignition sources : Keep away from heat and direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Hand protection : Shoulder-length gloves - EN 388, EN 374, EN 374-3, PVC C400
Eye protection : Spoggles (not safety glasses) - EN166, UVEX, Pyramex Capstone . Face-shield - Pyramex Capstone Shield or Uvex. Safety glasses
Skin and body protection : Full conti-suit/overall (Jacket and pants) - Acid resistant and flame retardant with reflective stripes - SANS 434, EN 471, EN 469, EN 533. Chemical resistant apron
Respiratory protection : [In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s)



8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state : Liquid
Appearance : No data available
Molecular mass : 90.44 g/mol Source: HSDB
Colour : Colourless.
Colourless
Odour : Odourless.
Odour threshold : No data available
pH : 10 – 11 Source: GESTIS
pH solution : No data available
Relative evaporation rate (butylacetate=1) : No data available
Relative evaporation rate (ether=1) : No data available
Melting point : Not applicable
Freezing point : No data available
Boiling point : 100 °C
Flash point : > 93 °C
Auto-ignition temperature : No data available
Decomposition temperature : 180 – 200 °C Source: ECHA
Flammability : Non flammable.
Vapour pressure : 0.00000011 Pa at 25°C Source: ECHA
Vapour pressure at 50°C : No data available
Relative vapour density at 20°C : 0.62
Relative density : 2.5 Source: ICSC
Relative density of saturated gas/air mixture : No data available
Density : 1.06
Relative gas density : No data available
Solubility : Soluble in water.
Water: 39 g/100ml at 17°C Source: ICSC

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Partition coefficient n-octanol/water (Log Pow)	: No data available
Partition coefficient n-octanol/water (Log Kow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available
Lower explosion limit	: No data available
Upper explosion limit	: No data available
Physical state	: Liquid
Appearance	: No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10: Stability and Reactivity

10.1. Reactivity

If evaporated to dryness, residue may be explosive.

10.2. Chemical Stability

Light sensitive.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Heat.

10.5. Incompatible materials

Metals. Combustible materials. cyanides. Organic compounds. Chlorine. Sulphur. ammonium compounds. Phosphorus. Oxidisable materials.

10.6. Hazardous decomposition products

Hydrogen chloride.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Toxic if swallowed.
Acute toxicity (dermal)	: Fatal in contact with skin.
Acute toxicity (inhalation)	: Fatal if inhaled.

Sodium Chlorite 31 % (7758-19-2)	
LD50 oral rat	140 mg/kg Source: NCIS
LD50 dermal rabbit	100 mg/kg Source: ECHA
LC50 Inhalation - Rat (Dust/Mist)	0.23 mg/l Source: ChemIDplus

SODIUM CHLORITE POWDER (7758-19-2)	
LD50 oral rat	284 mg/kg
LD50 dermal rabbit	134 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	0.23 mg/l Source: ChemIDplus

Skin corrosion/irritation	: Causes severe skin burns. pH: 10 – 11 Source: GESTIS
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Sodium Chlorite 31 %

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According to Regulations for Hazardous Chemical Agents, 2021 and United Nations GHS revision 9

Serious eye damage/irritation	: Causes serious eye damage. pH: 10 – 11 Source: GESTIS
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
IARC group	: 3 - Not classifiable
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.

SODIUM CHLORITE POWDER (7758-19-2)

STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Very toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Very toxic to aquatic life with long lasting effects.

Sodium Chlorite 31 % (7758-19-2)

EC50 72h - Algae [1]	21.5 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	5.76 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)

SODIUM CHLORITE POWDER (7758-19-2)

LC50 - Fish [1]	105 mg/l (flow-through test LC50 - Cyprinodon variegatus (sheepshead))
EC50 - Crustacea [1]	< 1 mg/l (Daphnia magna (Water flea))
EC50 72h - Algae [1]	1 mg/l (static test EC50 - Pseudokirchneriella subcapitata (green algae))
EC50 72h - Algae [2]	5.76 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)

12.2. Persistence and degradability

Sodium Chlorite 31 % (7758-19-2)

Persistence and degradability	No additional information available
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12.3. Bioaccumulative potential

Sodium Chlorite 31 % (7758-19-2)

Bioaccumulative potential	No additional information available
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12.4. Mobility in soil

Sodium Chlorite 31 % (7758-19-2)

Mobility in soil	No additional information available
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12.5. Other adverse effects

Ozone	: Not classified
Other adverse effects	: No additional information available

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According to Regulations for Hazardous Chemical Agents, 2021 and United Nations GHS revision 9

SECTION 13: Disposal Considerations

13.1. Disposal methods

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations.

SECTION 14: Transport information

In accordance with SANS / IMDG / IATA

SANS	IMDG	IATA
14.1. UN number		
1908	1908	1908
14.2. UN Proper Shipping Name		
CHLORITE SOLUTION	CHLORITE SOLUTION	Chlorite solution
14.3. Transport hazard class(es)		
8	8	8
		
14.4. Packing group, if applicable		
II	II	II
14.5. Environmental hazards		
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes
No supplementary information available		

14.6. Special precautions for user

SANS

Limited quantities (SANS)	: 1 L
Limited quantities (SANS)	: 1 L
Packagings, large packagings and IBCs Packing instructions (SANS)	: P001, IBC02
Portable tank and bulk containers instructions (SANS)	: T7
Portable tank and bulk container special provisions (SANS)	: TP2, TP24

IMDG

Special provisions (IMDG)	: 274, 352
Limited quantities (IMDG)	: 1 L
Excepted quantities (IMDG)	: E2
Packing instructions (IMDG)	: P001
IBC packing instructions (IMDG)	: IBC02
Tank instructions (IMDG)	: T7
Tank special provisions (IMDG)	: TP2, TP24
EmS-No. (Fire)	: F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage)	: S-B - SPILLAGE SCHEDULE Bravo - CORROSIVE SUBSTANCES
Stowage category (IMDG)	: B
Segregation (IMDG)	: SGG5, SG6, SG8, SG10, SG12, SG20

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Properties and observations (IMDG) : Colourless liquid. In contact with acids, evolves very irritating and corrosive gases. Oxidizing solution. May cause fire in contact with organic materials such as wood, cotton or straw. Mildly corrosive to most metals. Causes burns to skin, eyes and mucous membranes.

IATA

PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y840
PCA limited quantity max net quantity (IATA) : 0.5L
PCA packing instructions (IATA) : 851
PCA max net quantity (IATA) : 1L
CAO packing instructions (IATA) : 855
CAO max net quantity (IATA) : 30L
Special provisions (IATA) : A3, A803
ERG code (IATA) : 8L

14.7. Transport in bulk according to IMO instructions

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

No additional information available

SECTION 16: Other information

Issue date : 11/02/2025
Revision date : 11/02/2028

Data sources : Annex VI. CosIng.
Abbreviations and acronyms : ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE - Acute Toxicity Estimate
BCF - Bioconcentration factor
BLV - Biological limit value
BOD - Biochemical oxygen demand (BOD)
COD - Chemical oxygen demand (COD)
DMEL - Derived Minimal Effect level
DNEL - Derived-No Effect Level
EC-No. - European Community number
EC50 - Median effective concentration
EN - European Standard
IARC - International Agency for Research on Cancer
IATA - International Air Transport Association
IMDG - International Maritime Dangerous Goods
LC50 - Median lethal concentration
LD50 - Median lethal dose
LOAEL - Lowest Observed Adverse Effect Level
NOAEC - No-Observed Adverse Effect Concentration
NOAEL - No-Observed Adverse Effect Level
NOEC - No-Observed Effect Concentration
OECD - Organisation for Economic Co-operation and Development
OEL - Occupational Exposure Limit
PBT - Persistent Bioaccumulative Toxic
PNEC - Predicted No-Effect Concentration
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS - Safety Data Sheet
STP - Sewage treatment plant
ThOD - Theoretical oxygen demand (ThOD)

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TLM - Median Tolerance Limit
VOC - Volatile Organic Compounds
CAS-No. - Chemical Abstract Service number
N.O.S. - Not Otherwise Specified
vPvB - Very Persistent and Very Bioaccumulative
ED - Endocrine disrupting properties

Full text of H-statements:	
H271	May cause fire or explosion; strong oxidiser
H301	Toxic if swallowed
H310	Fatal in contact with skin
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H330	Fatal if inhaled
H373	May cause damage to organs through prolonged or repeated exposure
H410	Very toxic to aquatic life with long lasting effects

Safety Data Sheet (SDS), South Africa (HCA)

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