Sodium Chlorite 31%

Safety Data Sheet

according to the Hazardous Substances and New Organisms Act (1996)

Issue date: 08/08/2019 Revision date 09-07-2020 Supersedes 08-08-2019 Version: 2.0

SECTION 1: Identification of the hazardous chemical and of the supplier

1.1 Product identifier

Product name : Sodium Chlorite 31%

Product form : Mixture

Product code : 308508

1.2 Other means of identification

Other means of identification : Chemical characterization
Aqueous solution

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

Recommended use : Industrial chemical
Bleaching agents
Disinfectant

1.4 Supplier's details

Supplier
Azelis New Zealand Ltd.
24-26 Poland Road
Wairau Valley, North Shore, 0627
New Zealand
T +64 (9) 444 4650
sds@azelis.com

1.5. Emergency phone number

Emergency number : 0800 CHEMCALL (0800 243 622) | CHEMCALL INTERNATIONAL (24HR) +64 4 9179888

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

9.2A	Ecotoxicity to the soil environment A
9.3B	Ecotoxicity to terrestrial vertebrates B
6.1C	Acute toxicity (dermal), Category 3
6.1C	Acute toxicity (inhalation:dust,mist) Category 3
8.2B	Skin corrosion/irritation, Category 1B
8.3A	Serious eye damage/eye irritation, Category 1
6.8A	Reproductive toxicity, Category 1A
6.9B	Specific target organ toxicity — Single exposure, Category 2
9.1A	Hazardous to the aquatic environment — Acute Hazard, Category 1

2.2. Label elements

GHS NZ labelling

Hazard pictograms (GHS NZ) :



GHS05 GHS06 GHS08 GHS09

Signal word (GHS NZ) : Danger

Contains : Sodium chlorite (25 – 35 %)

Hazard statements (GHS NZ) : H311+H331 - Toxic in contact with skin or if inhaled
H314 - Causes severe skin burns and eye damage.
H360 - May damage fertility or the unborn child.
H371 - May cause damage to organs.
H400 - Very toxic to aquatic life.
H421 - Very toxic to the soil environment
H432 - Toxic to terrestrial vertebrates

Prevention : P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P260 - Do not breathe fume, gas, mist, spray, vapours.
P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P280 - Wear eye protection, face protection.

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

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.
P308+P313 - IF exposed or concerned: Get medical advice/attention.
P309+P311 - IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
P310 - Immediately call a POISON CENTER/doctor.
P312 - Call a POISON CENTER/doctor if you feel unwell.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P322 - Specific measures (see supplemental first aid instruction on this label).
P363 - Wash contaminated clothing before reuse.
P391 - Collect spillage.

Storage : P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.

Disposal : P501 - Dispose of contents/container to an approved waste disposal plant.

2.3. Other hazards not contributing to the classification

No additional information available

SECTION 3: Composition and information of the ingredients of the hazardous chemical

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to GHS NZ
Sodium chlorite	(CAS-No.) 7758-19-2	25 – 35	9.2A: Ecotoxicity to the soil environment A, H421 9.3B: Ecotoxicity to terrestrial vertebrates B, H432 6.1C: Acute Tox. 3 (Dermal), H311 6.1C: Acute Tox. 3 (Inhalation:vapour), H331 8.2B: Skin Corr. 1B, H314 8.3A: Eye Dam. 1, H318 6.8A: Repr. 1A, H360 6.9B: STOT SE 2, H371 9.1A: Aquatic Acute 1, H400

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

First-aid measures after skin contact : Wash immediately with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

4.2. Most important symptoms and effects, both 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 any immediate medical attention and special treatment needed

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

Unsuitable extinguishing media : high volume water jet.

5.2. Special hazards arising from the substance or mixture

Explosion hazard : Vapours may form explosive mixture with air. Contact with acids, organic materials, reducing agents or chlorine donors will produce chlorine dioxide gas and heat. The lower explosive limit for chlorine dioxide is 10%. Flush area with large amounts of air to keep the chlorine dioxide concentration below 10%.

Reactivity in case of fire Toxic fumes may be released,chlorine,Chlorine dioxide,Sodium oxide

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	:	Collect contaminated fire extinguishing water seperately.This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Protection during firefighting	:	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
EAC code	:	2X - 2X

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No additional information available

6.1.1. For non-emergency personnel

Protective equipment	:	Wear recommended personal protective equipment.
Emergency procedures	:	Ensure adequate ventilation. Only qualified personnel equipped with suitable protective equipment may intervene. Avoid contact with skin, eyes and clothing. Do not breathe gas, fumes, vapour or spray. Spills of this product present a serious slipping hazard. Keep upwind. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Alert Emergency Services and tell them location and nature of hazard.

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. Do not allow to enter drains or water courses. Avoid sub-soil penetration. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment	:	Collect spillage. Contain the spilled material by bunding. Move containers from spill area. Clean the affected area.
Methods for cleaning up	:	Remove leaking containers to a detached area. Bund spill area and recover. Spill materials may be absorbed using clay, soil or non-flammable commercial absorbents. Flush spill area with large amounts of water. If allowed to dry, dried material can ignite in contact with combustible materials so do not allow spills to dry up. Containerize and label all spill materials properly. Small spills that have been diluted with water can be neutralized with sodium sulphite or sodium bisulphite solutions. Keep collected material damp and put into drums. Dispose in a safe manner in accordance with local/national regulations.
Methods and Equipment for Containment and Cleaning up	:	Do not allow product to dry out,Dried material can ignite upon contact with combustibles

SECTION 7: Handling and storage, including how the chemical may be safely used

7.1. Precautions for safe handling

Precautions for safe handling	:	Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Avoid: creation of vapour or mist. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Certified handler is required for this product.
Hygiene measures	:	Handle in accordance with good industrial hygiene and safety procedures. Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash hands, forearms and face thoroughly after handling. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	:	Store in a well-ventilated place. Keep container tightly closed and dry. Keep cool. Store locked up. Protect from heat and direct sunlight. Protect from freezing. UV-radiation. Protect from moisture and air.
Incompatible materials	:	Do not contaminate with acids, reducing agents, combustible materials, oxidizing materials, hypochlorite, organic solvents and compounds, garbage, dirt, organic matter, household products, chemicals, soap products, paint products, vinegar, beverages, oils, pine oil, dirty rags, sulfur-containing rubber, or any other foreign matter.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

Exposure limit values for the other components

No additional information available

8.2. Monitoring

No additional information available

8.3. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

8.4. Individual protection measures, such as personal protective equipment (PPE)

Hand protection : Protective gloves. Butyl rubber gloves. neoprene gloves

Eye protection : tightly fitting safety goggles

Skin and body protection : Wear suitable protective clothing. Polyvinylchloride (PVC). apron. Boots. Full overalls

Respiratory protection : [In case of inadequate ventilation] wear respiratory protection. Use a respirator with a vapour cartridge. Full face piece respirator (organic vapours)

Personal protective equipment symbol(s)



Environmental exposure controls : Avoid release to the environment.

Consumer exposure controls : Handle in accordance with good industrial hygiene and safety procedures. Always wash hands after handling the product. Avoid contact with skin, eyes and clothing. Do not drink, eat or smoke in the workplace. Do not inhale vapour, aerosols, mist. Observe the usual precautions for handling chemicals. Take off contaminated clothing and wash it before reuse. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

SECTION 9: Physical and chemical properties

Physical state	:	Liquid
Appearance	:	clear.
Molecular mass	:	90.45 g/mol
Colour	:	Slight yellow or green
Odour	:	slight,Chlorine like
Odour threshold	:	No data available
pH	:	12 – 13
Evaporation rate	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point / Freezing point	:	Freezing point : -9 °C
Boiling point	:	106 °C
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Flammability (solid, gas)	:	Not applicable
Vapour pressure	:	Vapour pressure : 21 torr at 20ºC
Relative density	:	No data available
Density	:	No data available
Solubility	:	Water : completely miscible
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Explosive limits	:	No data available
Minimum ignition energy	:	No data available

SECTION 10: Stability and reactivity

Reactivity	:	Corrosive Liquid.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	Explosive and toxic chlorine dioxide gas will be generated on contact with acids or other incompatible materials.

Conditions to avoid	:	Avoid creation of vapour or mist. Do not allow to dry out. Overheating. Freezing. Direct sunlight. Moisture. Keep away from ignition sources (including static discharges). Do not allow evapouration to dryness. Avoid temperatures below 10°C.
Incompatible materials	:	Acids. reducing agents. Oxidising agents. Hypochlorite solutions. Organic materials.
Hazardous decomposition products	:	When heated to decomposition, emits toxic fumes. chlorine. Chlorine dioxide. Sodium oxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Toxic in contact with skin.
Acute toxicity (inhalation)	:	Toxic if inhaled.

Sodium Chlorite 31%	
LD50 oral rat	1136 mg/kg 25% solution
LD50 dermal rabbit	134 mg/kg bodyweight Sodium chlorite (80%)
ATE NZ (dust, mist)	0.5 mg/l/4h

Skin corrosion/irritation	:	Causes severe skin burns. pH: 12 – 13
Serious eye damage/irritation	:	Causes serious eye damage.
Respiratory or skin sensitisation	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	May damage fertility or the unborn child.
STOT-single exposure	:	May cause damage to organs.
STOT-repeated exposure	:	Not classified
Aspiration hazard	:	Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	:	Very toxic to aquatic life.
Hazardous to the aquatic environment, short-term (acute)	:	Very toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic)	:	Not classified
Soil toxicity	:	Very toxic to the soil environment.
Terrestrial vertebrate toxicity	:	Toxic to terrestrial vertebrates.
Terrestrial invertebrate toxicity	:	Not classified

Sodium Chlorite 31%	
LC50 fish 1	75 mg/l 96h,Cyprinodon variegatus (Sheepshead minnow),flow-through.
EC50 Daphnia 1	0.0146 mg/l 48h,Daphnia magna,static
EC50 other aquatic organisms 1	0.06 mM Algae toxicity
LD50 dermal rabbit	134 mg/kg bodyweight Sodium chlorite (80%)
LD50 oral rat	1136 mg/kg 25% solution
Additional ecotoxicological information	Bacteria toxicity EC50: 438.63 mg/l,8h Soil toxicity EC50: 2.2mg/l Activated sludge, domestic

12.2. Persistence and degradability

Sodium Chlorite 31%	
Persistence and degradability	Readily biodegradable.

12.3. Bioaccumulative potential

Sodium Chlorite 31%	
Bioaccumulative potential	Not potentially bioaccumulable.

12.4. Mobility in soil

Sodium Chlorite 31%	
Mobility in soil	No additional information available

12.5. Other adverse effects

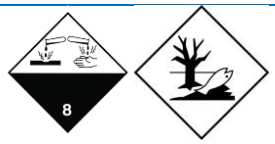
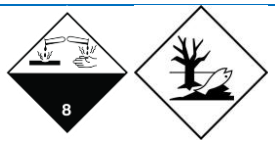
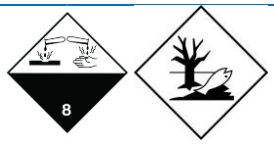
Ozone	:	Not classified
Other adverse effects	:	No additional information available

SECTION 13: Disposal considerations

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Recycle the material as far as possible.

SECTION 14: Transport information

IMDG	IATA	UNRTDG (NZS 5433:2012)
14.1. UN number		
1908	1908	1908
14.2. Proper Shipping Name		
CHLORITE SOLUTION	Chlorite solution	CHLORITE SOLUTION
14.3. Transport hazard class(es)		
8	8	8
		
14.4. Packing group		
II	II	II
14.5. Environmental hazards		
Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes
No supplementary information available		

14.6. Special precautions for user

Special transport precautions : Product does not require tracking.

UN RTDG (NZS 5433:2012)

Limited quantities (UN RTDG) : 1L

Excepted quantities (UN RTDG) : E2

Packing instruction (UN RTDG) : P001, IBC02

Portable tank and bulk container special instructions (UN RTDG) : T7

Portable tank and bulk container special provisions (UN RTDG) : TP2, TP24

IMDG

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

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 Annex II of MARPOL 73/78 and the IBC Code

Not applicable

14.8. Hazchem or Emergency Action Code

EAC code : 2X.

SECTION 15: Regulatory information

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

NZIoC (New Zealand Inventory of Chemicals) : All hazardous components are listed on the New Zealand Inventory of Chemicals.

Hazardous Substances and New Organisms Act

Group standard : Additives, process chemicals and raw materials

Sodium chlorite (7758-19-2)

Hazardous Substances and New Organisms Act

HSNO Approval Number : HSR006464

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

SDS Major/Minor : None
Issue date : 08-08-2019
Revision date : 09/07/2020
Supersedes : 08/08/2019

Indication of changes:

Section	Changed item	Change	Comments
	Group standard	Added	
	Supersedes	Added	
	Revision date	Added	
1	Other means of identification	Added	
1	Product code	Modified	
1	Name	Modified	
2.1	GHS NZ classification	Modified	
2.2	Hazard pictograms (GHS NZ)	Modified	
2.2	Precautionary statements (GHS NZ)	Modified	
2.2	Hazard statements (GHS NZ)	Modified	
4.1	First-aid measures after eye contact	Modified	
4.1	First-aid measures after skin contact	Modified	
5.1	Suitable extinguishing media	Modified	
5.2	Explosion hazard	Modified	
5.2	Reactivity in case of fire	Modified	
6.1	General measures	Added	
6.1	Emergency procedures	Modified	
6.3	Methods for cleaning up	Modified	
8.2	Skin and body protection	Modified	
8.2	Consumer exposure controls	Added	
10	Possibility of hazardous reactions	Modified	
10	Conditions to avoid	Modified	
11	ATE NZ (oral)	Added	
11	ATE NZ (Gases)	Added	
11	ATE NZ (Dermal)	Modified	
11	LD50 oral rat	Added	
11	LD50 dermal rat	Added	
12.1	Additional ecotoxicological information	Added	
12.1	LC50 fish 1	Added	
12.1	EC50 other aquatic organisms 1	Added	
12.1	EC50 Daphnia 1	Added	

Full text of H-statements:

6.1C: Acute Tox. 3 (Dermal)	6.1C: Acute toxicity (dermal), Category 3
6.1C: Acute Tox. 3 (Inhalation:dust,mist)	6.1C: Acute toxicity (inhalation:dust,mist) Category 3
6.1C: Acute Tox. 3 (Inhalation:vapour)	6.1C: Acute toxicity (inhalation:vapour) Category 3
6.8A: Repr. 1A	6.8A: Reproductive toxicity, Category 1A
6.9B: STOT SE 2	6.9B: Specific target organ toxicity — Single exposure, Category 2
8.2B: Skin Corr. 1B	8.2B: Skin corrosion/irritation, Category 1B
8.3A: Eye Dam. 1	8.3A: Serious eye damage/eye irritation, Category 1
9.1A: Aquatic Acute 1	9.1A: Hazardous to the aquatic environment — Acute Hazard, Category 1
9.2A: Ecotoxicity to the soil environment A	9.2A: Ecotoxicity to the soil environment A
9.3B: Ecotoxicity to terrestrial vertebrates B	9.3B: Ecotoxicity to terrestrial vertebrates B
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H360	May damage fertility or the unborn child.
H371	May cause damage to organs.
H400	Very toxic to aquatic life.
H421	Very toxic to the soil environment
H432	Toxic to terrestrial vertebrates

SDS New Zealand Revised 10052019

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.