SAFETY DATA SHEET

CHLORIDE OF LIME

Section: 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	CHLORIDE OF LIME
Other means of identification	:	Not applicable.
Recommended use	:	Sanitizer
Restrictions on use	:	Reserved for industrial and professional use.
Product dilution information	:	Product is sold ready to use.
Company	:	Ecolab New Zealand 2 Daniel Place Te Rapa, Hamilton New Zealand +64 7 958 2319
Emergency telephone number	:	0800 243 622 (0800 CHEMCALL)
Issuing date	:	04.05.2017

Section: 2. HAZARDS IDENTIFICATION

HSNO Hazard classification

Oxidizing liquids or solids	:	5.1.1 C
Corrosive to Metals	:	8.1 A
Acute toxicity (Oral)	:	6.1 D
Acute toxicity (Inhalation)	:	6.1 D
Skin corrosion	:	8.2 C
Serious eye damage	:	8.3 A
Aquatic toxicity (Acute or Chronic)	:	9.1 A
Ecotoxic to soil environment	:	9.2 A
Ecotoxic to terrestrial vertebrates	:	9.3 C

GHS Label element

Hazard pictograms :

Signal Word : Danger

Hazard Statements : May intensify fire; oxidiser.
May be corrosive to metals.
Harmful if swallowed.
Harmful if inhaled.
Causes severe skin burns and eye damage.
Very toxic to aquatic life.
Very toxic to the soil environment.
Harmful to terrestrial vertebrates.

Precautionary Statements : **Prevention:**
Keep away from heat. Keep/Store away from clothing and other combustible materials. Take any precaution to avoid mixing with

combustibles. Keep only in original container. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/ protective clothing/ eye protection/ face protection. Avoid release to the environment.

Response:

In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. Specific treatment (see supplemental first aid instructions on this label). Wash contaminated clothing before reuse. Absorb spillage to prevent material damage. Collect spillage.

Storage:

Store in corrosive resistant container with a resistant inner liner. Store locked up.

Disposal:

Dispose of contents/ container to an approved waste disposal plant.

Other hazards : Mixing this product with acid or ammonia releases chlorine gas.

Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture

Chemical Name	CAS-No.	Concentration: (%)
Sodium Carbonate	497-19-8	60 - 100
calcium hypochlorite	7778-54-3	10 - 30
calcium chlorate	10137-74-3	1 - 5

Section: 4. FIRST AID MEASURES

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

If swallowed : Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

If inhaled : Remove to fresh air. Treat symptomatically. Get medical attention.

Protection of first-aiders : If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Notes to physician : Treat symptomatically.

Most important symptoms and effects, both acute and delayed : See Section 11 for more detailed information on health effects and symptoms.

Section: 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	:	None known.
Specific hazards during firefighting	:	Oxidizer. Contact with other material may cause fire. Exposure to decomposition products may be a hazard to health.
Hazardous combustion products	:	Decomposition products may include the following materials: Carbon oxides Halogenated compounds metal oxides
Special protective equipment for firefighters	:	Use personal protective equipment.
Specific extinguishing methods	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.
Hazchem Code	:	1X

Section: 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.
Environmental precautions	:	Do not allow contact with soil, surface or ground water.
Methods and materials for containment and cleaning up	:	Sweep up and shovel into suitable containers for disposal.

Emergency Management Trigger Levels

The following triger level applies:

Emergency Plan	:	1,000 kg
Signage	:	250 kg

Section: 7. HANDLING AND STORAGE

Advice on safe handling	:	Do not ingest. Do not breathe dust/fume/gas/mist/vapours/spray. Use only with adequate ventilation. Wash hands thoroughly after handling. Do not get in eyes, on skin, or on clothing. Mixing this product with acid or ammonia releases chlorine gas.
Conditions for safe storage	:	Keep in a cool, well-ventilated place. Keep away from reducing agents. Keep away from combustible material. Keep out of reach of

children. Keep container tightly closed. Store in suitable labeled containers.

Storage temperature : 30 °C to 0 °C

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

Personal protective equipment

Eye protection : Safety goggles
Face-shield

Hand protection : Wear the following personal protective equipment:
Standard glove type.
Impervious gloves
Neoprene gloves
Nitrile
Natural rubber
PVC
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin protection : Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Refer to AS/NZS 1715 and AS/NZS 1716 for selection, use and maintenance of respiratory protective equipment as applicable.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	powder
Colour	:	white
Odour	:	odourless
pH	:	11.0 - 13.0, (1 %)
Flash point	:	Not applicable.
Odour Threshold	:	no data available
Melting point/freezing point	:	no data available
Initial boiling point and	:	no data available

boiling range		
Evaporation rate	:	no data available
Flammability (solid, gas)	:	no data available
Upper explosion limit	:	no data available
Lower explosion limit	:	no data available
Vapour pressure	:	no data available
Relative vapour density	:	no data available
Relative density	:	0.99 - 1.01
Water solubility	:	partly soluble
Solubility in other solvents	:	no data available
Partition coefficient: n-octanol/water	:	no data available
Auto-ignition temperature	:	no data available
Thermal decomposition	:	no data available
Viscosity, kinematic	:	no data available
Explosive properties	:	no data available
Oxidizing properties	:	no data available
Molecular weight	:	no data available
VOC	:	no data available

Section: 10. STABILITY AND REACTIVITY

Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	Mixing this product with acid or ammonia releases chlorine gas.
Conditions to avoid	:	None known.
Incompatible materials	:	Metals Organic materials Acids
Hazardous decomposition products	:	Decomposition products may include the following materials: Carbon oxides Halogenated compounds metal oxides

Section: 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure	:	Inhalation, Eye contact, Skin contact

Potential Health Effects

Eyes	:	Causes serious eye damage.
Skin	:	Causes severe skin burns.
Ingestion	:	Harmful if swallowed. Causes digestive tract burns.

Inhalation	:	Harmful if inhaled. May cause nose, throat, and lung irritation.
Chronic Exposure	:	Health injuries are not known or expected under normal use.

Experience with human exposure

Eye contact	:	Redness, Pain, Corrosion
Skin contact	:	Redness, Pain, Corrosion
Ingestion	:	Corrosion, Abdominal pain
Inhalation	:	Respiratory irritation, Cough

Toxicity

Product

Acute oral toxicity	:	Acute toxicity estimate : 1,759 mg/kg
Acute inhalation toxicity	:	4 h Acute toxicity estimate : 2.5 mg/l
Acute dermal toxicity	:	no data available
Skin corrosion/irritation	:	no data available
Serious eye damage/eye irritation	:	no data available
Respiratory or skin sensitization	:	no data available
Carcinogenicity	:	no data available
Reproductive effects	:	no data available
Germ cell mutagenicity	:	no data available
Teratogenicity	:	no data available
STOT - single exposure	:	no data available
STOT - repeated exposure	:	no data available
Aspiration toxicity	:	no data available

Components

Acute dermal toxicity	:	calcium hypochlorite LD50 rabbit: > 2,000 mg/kg

Section: 12. ECOLOGICAL INFORMATION

Ecotoxicity

Environmental Effects	:	Very toxic to aquatic life.

Product

Toxicity to fish	:	no data available
Toxicity to daphnia and other aquatic invertebrates	:	no data available
Toxicity to algae	:	no data available

Components

Toxicity to fish	:	Sodium Carbonate 96 h LC50 Lepomis macrochirus (Bluegill sunfish): 300 mg/l calcium hypochlorite 96 h LC50 Fish: 0.19 mg/l

Components

Toxicity to daphnia and other aquatic invertebrates	:	Sodium Carbonate 48 h EC50 Ceriodaphnia (water flea): 213.5 mg/l

Persistence and degradability

Not applicable - inorganic

Bioaccumulative potential

no data available

Mobility in soil

no data available

Other adverse effects

no data available

Section: 13. DISPOSAL CONSIDERATIONS

Disposal methods	:	Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility. The product should not be allowed to enter drains, water courses or the soil.
Disposal considerations	:	Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Dispose of in accordance with local, state, and federal regulations.

Section: 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (NZ_DG)

UN number	:	2208
Description of the goods	:	CALCIUM HYPOCHLORITE MIXTURE, DRY
Class	:	5.1
Packing group	:	III
Hazchem Code	:	1X
Environmentally hazardous	:	Yes

Sea transport (IMDG/IMO)

UN number	:	2208
Description of the goods	:	CALCIUM HYPOCHLORITE MIXTURE, DRY
Class	:	5.1
Packing group	:	III

Marine pollutant : Yes

Special precautions for user : None

Section: 15. REGULATORY INFORMATION

HSNO Approval Number : HSR002591

HSNO Group Standard : Cleaning Products (Oxidising [5.1.1], Corrosive) Group Standard 2006.

The components of this product are reported in the following inventories:

United States TSCA Inventory :
On TSCA Inventory

Canadian Domestic Substances List (DSL) :
All components of this product are on the Canadian DSL.

Australia. Industrial Chemical (Notification and Assessment) Act :
not determined

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand :
On the inventory, or in compliance with the inventory

Japan. ENCS - Existing and New Chemical Substances Inventory :
On the inventory, or in compliance with the inventory

Korea. Korean Existing Chemicals Inventory (KECI) :
On the inventory, or in compliance with the inventory

Philippines Inventory of Chemicals and Chemical Substances (PICCS) :
On the inventory, or in compliance with the inventory

China Inventory of Existing Chemical Substances :
not determined

Taiwan Chemical Substance Inventory :
not determined

Section: 16. OTHER INFORMATION

Issuing date : 04.05.2017
Version : 1.0
Prepared by : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.