

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

1.1. Product identifier

Product form : Tablets / Chips 34g
 Name : Klorman Hypochlor Sanitab Chips
 Product code :

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

Use of the substance/mixture : Water Treatment

1.3. Details of the supplier of the safety data sheet

Control Chemicals Pty (Ltd)

1.4. Emergency telephone number

Emergency number : +27 (0)83 229 6777

Country	Organization/Company	Address	Emergency number
South Africa	Control Chemicals Pty Ltd	70, 13 th Road, Kew Johannesburg	+27 (0)83 229 6777
South Africa	Poison Information Center	Cape Town	0861-555-777 poisonsinformation@uct.ac.za

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Ox. Sol. 2 H272
 Acute Tox.4 (Oral) H302
 Skin Corr. 1B H314

Full text of H-phrases: see section 16

2.2. Label

elements GHS-US

labeling

Hazard pictograms (GHS-US) :



GHS03

GHS05

GHS07

Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H272 - May intensify fire;
 oxidizer H302 - Harmful if
 swallowed
 H314 - Causes severe skin burns and eye damage

Precautionary statements (GHS-US)
 smoking :

P210 - Keep away from open flames, heat. - No
 P221 - Take any precaution to avoid mixing with
 combustible materials
 P260 - Do not breathe fume, dust
 P264 - Wash hands thoroughly after handling
 P270 - Do not eat, drink or smoke when using this
 product P301+P312 - If swallowed: Call a doctor if
 you feel unwell
 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/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
 P501 - Dispose of contents/container to hazardous or special waste collection point,
 in accordance with local, regional, national and/or international regulation

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2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
calcium hypochlorite	(CAS No) 7778-54-3	85-95	Ox. Sol. 2, H272 Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Aquatic Acute 1, H400

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.
First-aid measures after skin contact	: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a poison center or doctor/physician.
First-aid measures after eye contact	: 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.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell. Immediately call a poison center or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries	: Causes severe skin burns and eye damage.
Symptoms/injuries after ingestion	: Swallowing a small quantity of this material will result in serious health hazard.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water only.
Unsuitable extinguishing media	: Dry extinguishers containing ammonium compounds.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: May intensify fire; oxidizer.
Explosion hazard	: Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
Reactivity	: Reacts with (some) acids: release of toxic and corrosive gases/vapours (chlorine). Thermal decomposition generates : Corrosive vapors.

5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment. Fight fire remotely due to the risk of explosion.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

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6.1. Personal precautions, protective equipment and emergency procedures

General measures : No open flames. No smoking.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Hazardous waste due to potential risk of explosion.

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Take any precaution to avoid mixing with combustible materials. Do not breathe dust.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. Wash Skin thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Comply with applicable regulations.

Storage conditions : Keep container closed when not in use. Keep in fireproof place. Keep only in the original container in a cool, well ventilated place away from : Direct sunlight, Heat-ignition.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight. Heat sources. Combustible materials.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Klorman Hypochlor Sanitab	
ACGIH	Not applicable
OSHA	Not applicable
calcium hypochlorite (7778-54-3)	
ACGIH	Not applicable
OSHA	Not applicable

8.2. Exposure controls

Appropriate engineering controls : Provide adequate general and local exhaust ventilation.

Personal protective equipment : Protective clothing. Protective goggles. Gloves.



Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or faceshield.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is

Other information : recommended.
: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Pellets/Tablets
Color	: white
Odor	: chlorine
Odor threshold	: No data available
pH	: 10,6 - 11,5
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: May cause fire or explosion; strong oxidizer. May intensify fire; oxidizer.
Vapor pressure	: No data available
Relative density	: No data available
Relative vapor density at 20 °C	: No data available
Specific gravity / density	: 2,35 g/cm ³
Solubility	: Soluble in water. Reacts with water. Water: Solubility in water of component(s) of the mixture : • calcium hypochlorite: 21 g/100ml
Log Pow	: No data available
Log Kow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts with (some) acids: release of toxic and corrosive gases/vapours (chlorine). Thermal decomposition generates : Corrosive vapors.

10.2. Chemical stability

May intensify fire; oxidizer.

10.3. Possibility of hazardous reactions

Contact with acids liberates toxic gas.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Heat. Sparks. Overheating. Open flame.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Fume. Carbon monoxide. Carbon dioxide. Thermal decomposition generates : Corrosive vapors. Chlorine.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed.

Klorman Calcium Hypochlorite (Tablets and Refills)	
ATE US (oral)	1287,879 mg/kg body weight
calcium hypochlorite (7778-54-3)	
LD50 oral rat	850 mg/kg (Rat)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit)
ATE US (oral)	850,000 mg/kg body weight

Skin corrosion/irritation : Causes severe skin burns and eye damage.
pH: 10,6 - 11,5

Serious eye damage/irritation : Not classified
pH: 10,6 - 11,5

Respiratory or skin sensitization : Not classified
(Based on available data, the classification criteria are not met)

Germ cell mutagenicity : Not classified
(Based on available data, the classification criteria are not met)

Carcinogenicity : Not classified
(Based on available data, the classification criteria are not met)

calcium hypochlorite (7778-54-3)	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified
(Based on available data, the classification criteria are not met)

Specific target organ toxicity (single exposure) : Not classified
(Based on available data, the classification criteria are not met)

Specific target organ toxicity (repeated exposure) : Not classified
(Based on available data, the classification criteria are not met)

Aspiration hazard : Not classified
(Based on available data, the classification criteria are not met)

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met. Harmful if swallowed.

Symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

SECTION 12: Ecological information

12.1. Toxicity

calcium hypochlorite (7778-54-3)	
EC50 Daphnia 1	1 - 10 mg/l (EC50; 48 h)
LC50 fish 2	0,13 - 0,2 mg/l (LC50; 96 h; Salmo gairdneri)

12.2. Persistence and degradability

Klorman Calcium Hypochlorite (Tablets and Refills)	
Persistence and degradability	Not established.
calcium hypochlorite (7778-54-3)	
Persistence and degradability	Biodegradability: Not applicable.
Biochemical oxygen demand (BOD)	Not Applicable
Chemical oxygen demand (COD)	Not Applicable

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ThOD	Not Applicable
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12.3. Bioaccumulative potential

Klorman Calcium Hypochlorite (Tablets and Refills)

Bioaccumulative potential	Not established.
calcium hypochlorite (7778-54-3)	
BCF fish 1	100 (BCF)
Log Pow	-2,46 (Estimated value)
Bioaccumulative potential	Bioaccumulation: Not applicable.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
 Additional information : Hazardous waste due to potential risk of explosion.
 Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN1748 Calcium hypochlorite mixtures dry (with more than 39 percent available chlorine (8.8 percent available oxygen)), 5.1, III

UN-No.(DOT) : UN1748

Proper Shipping Name (DOT) : Calcium hypochlorite mixtures dry
with more than 39 percent available chlorine (8.8 percent available oxygen)

Transport hazard class(es) (DOT) : 5.1 - Class 5.1 - Oxidizer 49 CFR 173.128

Hazard labels (DOT) : 5.1 - Oxidizer



Packing group (DOT) : III - Minor Danger

DOT Packaging Non Bulk (49 CFR 173.xxx) : 213

DOT Packaging Bulk (49 CFR 173.xxx) : 240

DOT Special Provisions (49 CFR 172.102) : 165 - These substances are susceptible to exothermic decomposition at elevated temperatures. Decomposition can be initiated by heat, moisture or by impurities (e.g., powdered metals (iron, manganese, cobalt, magnesium)). During the course of transportation, these substances must be shaded from direct sunlight and all sources of heat and be placed in adequately ventilated areas.
 171 - This entry may only be used when the material is transported in non-friable tablet form or for granular or powdered mixtures that have been shown to meet the PG III criteria in 173.127.
 A7 - Steel packaging must be corrosion-resistant or have protection against corrosion.
 A9 - For combination packaging, if plastic bags are used, they must be packed in tightly closed metal receptacles before packing in outer packaging.
 IB8 - Authorized IBCs: Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2); Fiberboard (11G); Wooden (11C, 11D and 11F); Flexible (13H1, 13H2, 13H3, 13H4, 13H5, 13L1, 13L2, 13L3, 13L4, 13M1 or 13M2).
 IP4 - Flexible, fiberboard or wooden IBCs must be sift-proof and water-resistant or be fitted with a sift-proof and water-resistant liner.
 IP13 - Transportation by vessel in IBCs is prohibited.
 N34 - Aluminum construction materials are not authorized for any part of a packaging which is

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normally in contact with the hazardous material.

W9 - When offered for transportation by water, the following Specification packaging are not authorized unless approved by the Associate Administrator: woven plastic bags, plastic film bags, textile bags, paper bags, IBCs and bulk packaging.

DOT Packaging Exceptions (49 CFR 173.xxx) : 152

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 25kg

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 100kg

DOT Vessel Stowage Location : D - The material must be stowed "on deck only" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers or one passenger per each 3 m of overall vessel length, but the material is prohibited on passenger vessels in which the limiting number of passengers is exceeded.

DOT Vessel Stowage Other : 4 - Stow "Separated from" liquid organic materials, 25 - Shade from radiant heat, 52 - Stow "separated from" acids, 56 - Stow "separated from" ammonium compounds, 58 - Stow "separated from" cyanides, 69 - Stow "separated from" hydrogen peroxide

Additional information

Other information : No supplementary information available.

ADR

No additional information available

Transport by sea

UN-No. (IMDG) : 1748
Proper Shipping Name (IMDG) : CALCIUM HYPOCHLORITE MIXTURE, DRY
Class (IMDG) : 5.1 - Oxidizer
Packing group (IMDG) : III - substances presenting low danger

Air transport

UN-No. (IATA) : 1748
Proper Shipping Name (IATA) : Calcium hypochlorite mixture, dry
Class (IATA) : 5.1 - Oxidizing Substances
Packing group (IATA) : III - Minor Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

No additional information available

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Ox. Sol. 2 H272
Acute Tox. 4 (Oral) H302
Skin Corr. 1B H314
Aquatic Acute 1 H400
Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

O; R8
Xn; R22
C; R34
N; R50
Full text of R-phrases: see section 16

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National regulations

No additional information available

15.3. US State regulations

No additional information available

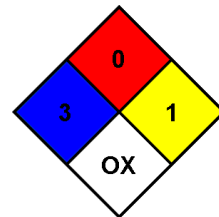
SECTION 16: Other information

Revision date : 08/03/2015
 Other information : Non-hazardous excipients 10% - 12%.

Full text of H-phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Ox. Sol. 2	Oxidizing solids Category 2
Skin Corr. 1B	Skin corrosion/irritation Category 1B
H272	May intensify fire; oxidizer
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H400	Very toxic to aquatic life

NFPA health hazard : 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.
 NFPA fire hazard : 0 - Materials that will not burn.
 NFPA reactivity : 1 - Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but not violently.
 NFPA specific hazard : OX - This denotes an oxidizer, a chemical which can greatly increase the rate of combustion/fire.



HMIS III Rating
 Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given
 Flammability : 0 Minimal Hazard - Materials that will not burn
 Physical : 1 Slight Hazard - Materials that are normally stable but can become unstable (self-react) at high temperatures and pressures. Materials may react non-violently with water or undergo hazardous polymerization in the absence of inhibitors.
 Personal Protection : C
 C - Safety glasses, Gloves, Synthetic apron

SDS US (GHS HazCom 2012)

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.