		Page: 1
SAFETY DATA SHEET		Revision Date: 07.10.2022
		Print Date: 17.10.2022
		SDS Number: R1600558
HTH SHOCK IT		Version: 1.0
222360		

Conforms to EU Regulation 1907/2006/EC as amended.

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

1.1 Product identifier

Trade name : HTH SHOCK IT

Substance name : calcium hypochlorite

Substance No.

EC-No. : 231-908-7

CAS-No. : 7778-54-3

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

Use of the Substance/Mixture : Swimming Pool Sanitizer

<p>1.3 Details of the supplier of the safety data sheet Innovative Water Care SA Holding (Pty) Ltd NCP Factory Site, 9 Hytor Street, Chloorkop 1624 Kempton Park South Africa</p> <p>E-mail address of person responsible for the SDS: EHSProductSafetyTeam@solenis.com</p> <p>Product Information Contact your local Solenis representative</p>	<p>1.4 Emergency telephone number Europe: NCEC +44 (0)1235 239 670, Africa, and Middle East: NCEC +44 (0)1235 239 671 , or contact your local emergency telephone number at 112</p>
---	---

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)


Oxidizing solids, Category 2 H272: May intensify fire; oxidizer.

Acute toxicity, Category 4 H302: Harmful if swallowed.

Skin corrosion, Sub-category 1B H314: Causes severe skin burns and eye damage.

Serious eye damage, Category 1 H318: Causes serious eye damage.

Short-term (acute) aquatic hazard, H400: Very toxic to aquatic life.

		Page: 2
SAFETY DATA SHEET		Revision Date: 07.10.2022
		Print Date: 17.10.2022
		SDS Number: R1600558
HTH SHOCK IT		Version: 1.0
222360		

Category 1

2.2 Label elements

Classification (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Danger

Hazard statements :
 H272 May intensify fire; oxidizer.
 H302 Harmful if swallowed.
 H314 Causes severe skin burns and eye damage.
 H400 Very toxic to aquatic life.

Supplemental Hazard Statements :
 EUH031 Contact with acids liberates toxic gas.
 EUH071 Corrosive to the respiratory tract.

Precautionary statements :
 P101 If medical advice is needed, have product container or label at hand.
 P102 Keep out of reach of children.
 P103 Read carefully and follow all instructions.

Prevention:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P220 Keep away from clothing and other combustible materials.
 P260 Do not breathe dust.
 P264 Wash hands thoroughly after handling.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:


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.
 P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
 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/ doctor.
 P370 + P378 In case of fire: Use water spray to extinguish.
 P391 Collect spillage.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste

		Page: 3
SAFETY DATA SHEET		Revision Date: 07.10.2022
		Print Date: 17.10.2022
		SDS Number: R1600558
HTH SHOCK IT		Version: 1.0
222360		

disposal plant.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances

Substance name : calcium hypochlorite
CAS-No. : 7778-54-3
EC-No. : 231-908-7

Components

Chemical name	CAS-No. EC-No.	Concentration (% w/w)
calcium hypochlorite	7778-54-3 231-908-7	>= 90 - <= 100

SECTION 4: First aid measures

4.1 Description of first aid measures


General advice : Move out of dangerous area.
Consult a physician.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

If inhaled : Move to fresh air.
Keep patient warm and at rest.
If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.

In case of skin contact : If on skin, rinse well with water.
Wash contaminated clothing before re-use.
If on clothes, remove clothes.

In case of eye contact : In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Continue rinsing eyes during transport to hospital.
Remove contact lenses.
Protect unharmed eye.

If swallowed : Get medical attention immediately.
Do NOT induce vomiting.
Rinse mouth with water.

		Page: 4
SAFETY DATA SHEET		Revision Date: 07.10.2022
		Print Date: 17.10.2022
		SDS Number: R1600558
HTH SHOCK IT		Version: 1.0
222360		

Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:
stomach or intestinal upset (nausea, vomiting, diarrhea)
irritation (nose, throat, airways)
lung edema (fluid buildup in the lung tissue)
- Risks : Harmful if swallowed.
Causes serious eye damage.
Corrosive to the respiratory tract.
Causes severe burns.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : Probable mucosal damage may contraindicate the use of gastric lavage.

SECTION 5: Firefighting measures

5.1 Extinguishing media


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

5.2 Special hazards arising from the substance or mixture

- Specific hazards during firefighting : May intensify fire, oxidizer.
Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Chlorine

5.3 Advice for firefighters

- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
- Further information : Use water to cool containers exposed to fire.

	Page: 5
SAFETY DATA SHEET	Revision Date: 07.10.2022
	Print Date: 17.10.2022
	SDS Number: R1600558
HTH SHOCK IT 222360	Version: 1.0

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
 Ensure adequate ventilation.
 Avoid dust formation.
 Avoid breathing dust.
 Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
 Comply with all applicable federal, state, and local regulations.

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.
 Prevent further leakage or spillage if safe to do so.
 If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Sweep up and shovel using a clean broom or shovel.
 Shovel material into clean dry containers.
 All spills of this product should be treated as contaminated.
 Contaminated product may initiate a chemical reaction that may spontaneously ignite any combustible material present, resulting in a fire.
 Avoid getting spilled product wet.
 Do not seal disposal containers tightly. Immediately remove all product in disposal containers to an isolated area outdoors.

6.4 Reference to other sections


For further information see Section 8 and Section 13 of the safety data sheet.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid dust formation.
 Provide sufficient air exchange and/or exhaust in work rooms.
 Do not breathe vapours/dust.
 Do not smoke.
 Container hazardous when empty.
 Avoid exposure - obtain special instructions before use.
 Avoid contact with skin and eyes.
 Smoking, eating and drinking should be prohibited in the application area.
 For personal protection see section 8.
 Dispose of rinse water in accordance with local and national regulations.

Advice on protection against : Keep away from combustible material. Provide appropriate

		Page: 6
SAFETY DATA SHEET		Revision Date: 07.10.2022
		Print Date: 17.10.2022
		SDS Number: R1600558
HTH SHOCK IT		Version: 1.0
222360		

fire and explosion

exhaust ventilation at places where dust is formed.

Hygiene measures

: Avoid breathing dust. Wash hands before breaks and at the end of workday. When using do not eat or drink. Ensure that eyewash stations and safety showers are close to the workstation location. When using do not smoke.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

: Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. No smoking. Electrical installations / working materials must comply with the technological safety standards.

Store in original container.

Further information on storage stability

: Do not store next to a heat source, in direct sunlight, or elevated temperatures. Do not store where the daily average temperature exceeds prescribed storage temperature for 7 consecutive days. Prevent ingress of humidity and moisture into container or package. Keep containers tightly closed.

Maximum average daily temperature as recommended (where the average daily temperature may be obtained by averaging the minimum and maximum temperatures for each day). Storage above this temperature may result in rapid decomposition, evolution of chlorine gas and heat sufficient to ignite combustible products.

Recommended storage temperature

: ≤ 35 °C

7.3 Specific end use(s)

Specific use(s)

: No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters


Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Engineering measures

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Provide appropriate exhaust ventilation at places where dust is formed.

		Page: 7
SAFETY DATA SHEET		Revision Date: 07.10.2022
		Print Date: 17.10.2022
		SDS Number: R1600558
HTH SHOCK IT		Version: 1.0
222360		


Personal protective equipment

- Eye protection : Wear chemical splash goggles and face shield to protect eyes and skin from airborne dust.
Maintain eye wash station in immediate work area.
- Hand protection
- Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.
- Skin and body protection : Wear as appropriate:
Chemical resistant apron
Safety shoes
Dust impervious protective suit
Flame-resistant clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Wear resistant gloves (consult your safety equipment supplier).
Discard gloves that show tears, pinholes, or signs of wear.
- Respiratory protection : In the case of dust or aerosol formation use respirator with an approved filter.
Dust safety masks are recommended when the dust concentration is more than 10 mg/m³.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance : granules
- Colour : white
- Odour : chlorine-like
- Odour Threshold : No data available
- pH : 10,5 - 11,5
Concentration: 1 %
- Melting point/range : 177 °C
Decomposition: yes
- Boiling point/boiling range : No data available
- Flash point : No data available
- Evaporation rate : No data available
- Flammability (solid, gas) :

		Page: 8
SAFETY DATA SHEET		Revision Date: 07.10.2022
		Print Date: 17.10.2022
		SDS Number: R1600558
HTH SHOCK IT		Version: 1.0
222360		

	: No data available
Upper explosion limit / Upper flammability limit	: No data available
Lower explosion limit / Lower flammability limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Relative density	: No data available
Density	: 0,94 - 0,96 g/ml
Solubility(ies)	
Water solubility	: ca. 180 g/l
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Decomposition temperature	: No data available
Viscosity	
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Oxidizing properties	: The substance or mixture is classified as oxidizing with the category 2.

9.2 Other information

Self-ignition	: No data available
---------------	---------------------

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.


10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Product will not undergo hazardous polymerization.

10.4 Conditions to avoid

		Page: 9
SAFETY DATA SHEET		Revision Date: 07.10.2022
		Print Date: 17.10.2022
		SDS Number: R1600558
HTH SHOCK IT		Version: 1.0
222360		

Conditions to avoid : Keep away from heat, flame, sparks and other ignition sources.

excessive heat

10.5 Incompatible materials

Materials to avoid : Do not allow product to come in contact with other materials, including e.g. other pool treatment products, acids, organic materials, nitrogen-containing compounds, dry powder fire extinguishers (containing mono-ammonium phosphate), oxidizers, all corrosive liquids, flammable or combustible materials, etc. A chemical reaction with such substances can cause a fire.

If product is exposed to small amounts of water, it can react violently to produce heat and toxic gases and spatter.

10.6 Hazardous decomposition products

Hazardous decomposition products : Chlorine

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Harmful if swallowed.

Components:

calcium hypochlorite:

Acute oral toxicity : LD50 (Rat): 850 mg/kg

Acute inhalation toxicity : Assessment: Corrosive to the respiratory tract.

Acute dermal toxicity : LD50 (Rabbit): > 2 g/kg

Skin corrosion/irritation

Causes severe burns.


Product:

Remarks : Causes severe skin burns and eye damage.

Components:

calcium hypochlorite:

Result : Corrosive after 3 minutes to 1 hour of exposure

		Page: 10
SAFETY DATA SHEET		Revision Date: 07.10.2022
		Print Date: 17.10.2022
		SDS Number: R1600558
HTH SHOCK IT		Version: 1.0
222360		

Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Remarks : May cause irreversible eye damage.

Components:

calcium hypochlorite:

Result : Corrosive to eyes

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Corrosive to the respiratory tract.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Further information

Product:

Remarks : No data available


SECTION 12: Ecological information

12.1 Toxicity

Components:

calcium hypochlorite:

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 0,049 - 0,16 mg/l
Exposure time: 96 h

		Page: 11
SAFETY DATA SHEET		Revision Date: 07.10.2022
		Print Date: 17.10.2022
		SDS Number: R1600558
HTH SHOCK IT		Version: 1.0
222360		

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0,067 mg/l
Exposure time: 48 h

M-Factor (Acute aquatic toxicity) : 10

12.2 Persistence and degradability

Components:

calcium hypochlorite:

Biodegradability : Result: The methods for determining biodegradability are not applicable to inorganic substances.

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: The bioaccumulation potential cannot be determined.

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

12.6 Other adverse effects

Product:


Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.

Dispose of in accordance with local regulations.

	Page: 12
SAFETY DATA SHEET	Revision Date: 07.10.2022
	Print Date: 17.10.2022
	SDS Number: R1600558
HTH SHOCK IT 222360	Version: 1.0

Contaminated packaging : Empty remaining contents.
 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.
 Do not burn, or use a cutting torch on, the empty drum.

SECTION 14: Transport information

14.1 UN number or ID number

ADR: UN1748

ADN: UN1748

RID: UN1748

IMDG-Code: UN1748

IATA-DGR: UN1748

14.2 UN proper shipping name

ADR: CALCIUM HYPOCHLORITE, DRY
ADN: CALCIUM HYPOCHLORITE, DRY
RID: CALCIUM HYPOCHLORITE, DRY
IMDG-Code: CALCIUM HYPOCHLORITE, DRY
IATA-DGR: Calcium hypochlorite, dry

14.3 Transport hazard class(es)


ADR: 5.1
ADN: 5.1
RID: 5.1
IMDG-Code: 5.1
IATA-DGR: 5.1

14.4 Packing group

ADR: II
ADN: II
RID: II
IMDG-Code: II
IATA-DGR: II

14.5 Environmental hazards

ADR: Environmentally hazardous
ADN: Not applicable

		Page: 13
SAFETY DATA SHEET		Revision Date: 07.10.2022
		Print Date: 17.10.2022
		SDS Number: R1600558
HTH SHOCK IT		Version: 1.0
222360		

RID: Environmentally hazardous

IMDG-Code: Marine pollutant

IATA-DGR: Not applicable

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : Not applicable

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable


Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EU) 2019/1021 on persistent organic pollutants (recast) : Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. P8 OXIDIZING LIQUIDS AND SOLIDS

E1 ENVIRONMENTAL HAZARDS

		Page: 14
SAFETY DATA SHEET		Revision Date: 07.10.2022
		Print Date: 17.10.2022
		SDS Number: R1600558
HTH SHOCK IT		Version: 1.0
222360		

Other regulations:

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

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

TCSI	:	On the inventory, or in compliance with the inventory
TSCA	:	All substances listed as active on the TSCA inventory
AIIC	:	On the inventory, or in compliance with the inventory
DSL	:	All components of this product are on the Canadian DSL
ENCS	:	On the inventory, or in compliance with the inventory
KECI	:	On the inventory, or in compliance with the inventory
PICCS	:	On the inventory, or in compliance with the inventory
IECSC	:	On the inventory, or in compliance with the inventory

15.2 Chemical safety assessment

No data available


SECTION 16: Other information

Further information

Revision Date: 07.10.2022

Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50

	Page: 15
SAFETY DATA SHEET	Revision Date: 07.10.2022
	Print Date: 17.10.2022
	SDS Number: R1600558
HTH SHOCK IT 222360	Version: 1.0

- Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECl - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Sources of key data used to compile the Safety Data Sheet

Key literature references and sources of data

SOLENIS Internal data

SOLENIS internal data including own and sponsored test reports

The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

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. This SDS has been prepared by the Solenis Environmental Health and Safety Department.

ZA / EN