



First print date: February 2014

Version: 06

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier:

Identification as on the label/Trade name: HTH® Floater+

Additional information: Product Code: IQ1; SPF

Relevant identification uses of the substance and uses advised against:

Identified uses: Swimming pool sanitation.

Uses advised against: Anything other than swimming pools.

Details of the supplier of the Safety Data Sheet:

Innovative Water Care SA Holding (Pty) Ltd.

(Reg. No. 2018/623823/07)

P O Box 150, Kempton Park, 1620

Situated At: NCP Chlookop Factory Site

Hytor Street

Chlookop

Kempton Park, 1619

Emergency telephone numbers:

Poisons Information Centre: 0861 555 777 (24 hours)

+27 11 976 2115 (office hours only)

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substances or mixture:

The mixture is classified according to:

SANS 10234:2008

Hazard classes/Hazard categories

Oxidising Solid (Category 2)

Acute Toxicity Oral (Category 4)

Skin Corrosion (Category 1B)

Serious Eye Damage (Category 1)

Acute Toxicity Inhalation (Category 4)

Hazard statement

H272

H302

H314

H318

H331

Safety Data Sheet (SDS) HTH FLOATER +

According to SANS 10234/UN GHS 7th edition

Revision Date: 31 Mar 2020

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Specific Target Organ Toxicity single exposure (Category 3)	H335
Aquatic Acute (Category 1)	H400
Aquatic Chronic (Category 1)	H410

For full text of H-Statements see section 16

The most important adverse effects:

The most important adverse physiochemical effects: Oxidising solid.

The most important adverse human health effects: Toxic if inhaled, causes skin burns and serious eye damage.

Label elements:

Hazard pictograms:



Signal Words: DANGER

Hazard Statements: H272 May intensify fire; oxidiser. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H331 Toxic if inhaled. H335 May cause respiratory irritation. H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements: P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P220 Keep/Store away from clothing/ combustible materials. P260 Do not breathe dust or fumes. P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. 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. P271 Use only outdoors or in a well-ventilated area. P273 Avoid release to the environment. P280 Wear eye protection. P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. P302 +P352 IF ON SKIN: Wash with plenty of water. P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position 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. Immediately call a POISON CENTER or doctor/ physician. P310 Immediately call a POISON CENTER or doctor/ physician. P330 Rinse mouth. P337 +P313 If eye irritation persists: Get medical advice/ attention. P361 +P364 Take off immediately all contaminated clothing and wash it before reuse. P370+P378 In case of fire: Use dry sodium carbonate for extinction. P391 Collect spillage. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. P501 Dispose of contents/container in accordance with local/regional regulations.

Special labelling of certain mixtures: None known.

Other hazards: None known.



SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Substance

Ingredients:

Substance name (IUPAC)	CAS-No.	Concentration % by weight	Classification EC1272/2008
	EC-No.		
Trichloroisocyanuric acid	87-90-1	75 – 85%	Oxidizing Solid (Category 2) H272. Acute Toxicity oral (Category 4) H302. Skin Corrosion (Category 1B) H314. Serious Eye Damage (Category 1) H318. Acute Toxicity inhalation (Category 3) H331. STOT SE (Category 3) H335. Aquatic Acute (Category 1) H400. Aquatic Chronic (Category 1) H410.
Aluminium sulphate hydrate	16828-12-9	10 – 20%	Serious Eye Damage (Category 1) H318.
	233-135-0		
Sodium dichloroisocyanurate acid anhydrous 60%	2893-78-9	10 – 20%	Oxidizing Solid (Category 2) H272. Acute Toxicity oral (Category 4) H302. Eye Irritation (Category 2A) H319. STOT SE (Category 3) H335. Aquatic Acute (Category 1) H400. Aquatic Chronic (Category 1) H410.
	220-767-7		

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available listed in Section 8.

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4. FIRST AID MEASURES

Description of first aid measures:

General Advice: Call the Poison Information Centre or doctor for treatment advice. Have the product container or label with you when calling a poison control centre or doctor, or going for treatment.

In case of inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Call a Poison Control Centre or doctor for further treatment advice.

In case of skin contact: If on skin or clothing, take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call Poison Control Centre or doctor for treatment advice.



In case of eye contact: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after initial 5 minutes, then continue rinsing eye. Do not rub eyes, mechanical irritation. Call a poison control centre or doctor for treatment advice.

In case of ingestion: Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do NOT induce vomiting unless told to do so by poison control centre or doctor. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed:

Inhalation: Toxic by inhalation (dust). This product in the form of solid tablets is not an inhalation hazard. However, if dust is created and inhaled, inhalation of this material in dust or vapour form is irritating to the nose, mouth, throat and lungs. It may also cause burns to the respiratory tract with the production of lung edema which can result in shortness of breath, wheezing, choking, chest pain, and impairment of lung function. Chronic (repeated) inhalation exposure may result in permanent lung damage.

Ingestion: Harmful if swallowed. Irritation and/or burns can occur to the entire gastrointestinal tract, including the stomach and intestines, characterized by nausea, vomiting, diarrhoea, abdominal pain, bleeding and/or tissue ulceration. Ingestion causes severe damage to the gastrointestinal tract with the potential to cause perforation.

Skin Contact: DRY MATERIAL CAUSES MODERATE SKIN IRRITATION. WET MATERIAL CAUSES SKIN BURNS.

Dermal exposure to dry material causes moderate skin irritation characterized by redness and swelling. Dermal exposure to wet material can cause severe irritation and/or burns characterized by redness, swelling and scab formation. Prolonged skin exposure may cause permanent damage.

Repeated skin exposure may cause tissue destruction due to the corrosive nature of the product.

Eye Contact: Severe irritation and/or burns can occur following eye exposure.

Acute Target Organ: This product is irritant to all tissues contacted upon inhalation, may cause irritation to mucous membranes and respiratory tract. The dry material is irritating to the skin. However, when wet, it will produce burns to the skin.

Indication of any immediate medical attention and special treatment needed:

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

SECTION 5. FIREFIGHTING MEASURES

Extinguisher media:

Suitable extinguisher media: Use water spray or fog only.

Unsuitable extinguishing media: Do not use dry chemical extinguishers containing ammonia compounds.

Special hazards arising from the mixture:



During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Closed containers may explode (due to build-up of steam pressure) when exposed to extreme heat. Flammable limits at normal atmospheric temperature and pressure (Percent volume in air): Will decompose at 225°C with release of Nitrogen trichloride, chlorine, nitrous oxides, cyanates, carbon monoxide, sulphur oxides and carbon dioxide.

Advice for fire-fighters:

Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire.

Use water to cool containers exposed to fire. On small fires, use water spray or fog. On large fires, use heavy deluge or fog streams. Flooding amounts of water may be required before extinguishment can be accomplished. Do not use dry extinguishers containing ammonium compounds.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Response to large quantity spill (45 kg or greater) or when dusting or decomposition gas exposure could occur requires the use of a positive pressure full face supplied air respirator or self-contained breathing apparatus (SCBA), chemical resistant gloves, coveralls and boots. In case of fire, this personal protective equipment should be used in addition to normal fire fighter equipment. Compatible materials for response to this material are: neoprene. Protection concerns must also address the following: if this material becomes damp/wet or contaminated in a container, the formation of nitrogen trichloride gas may occur and an explosive condition may exist.

For non-emergency personnel: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Avoid inhalation, and contact with skin. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

For emergency responders: Remove all sources of ignition. Keep water away from spilled material. Refer to Methods for containment and cleaning up.

Environmental precautions:

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

Methods for containment and cleaning up:

Air release: Vapours may be suppressed by the use of water fog.

Water release: This material is heavier than water. This material is soluble in water. Stop water flow or divert water flow around spill if possible and safe to do so. Begin monitoring for available chlorine and pH immediately.



Land release: Do not contaminate spill material with any organic materials, ammonia, salts or urea. Clean up all spill material with clean dry dedicated equipment and place in a clean dry container. Additional Spill Information: Hazardous concentrations in air may be found in local spill area and immediately downwind

Reference to other sections:

See section 7 for information on safe handling.

See section 8 for information on personal protection equipment.

See section 13 for information on disposal.

Additional information:

None known.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling:

Protective measures: Observe directions on label and instructions for use. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

Advice on general occupational hygiene: Do not smoke. Do not eat drink or smoke when handling this product.

Conditions for safe storage, including incompatibilities:

Storage: Store in a cool dry well ventilated location, away from sources of ignition or other incompatible conditions and chemicals. Keep containers(s) closed. Avoid creating dust

Shelf Life Limitations: Indefinite. Available chlorine loss can be as little as 0.1% per year at ambient temperatures.

Incompatible Materials for Storage: Organic materials, reducing agents, nitrogen containing materials, oxidisers, acids, bases, incompatible materials for packaging (paper, cardboard)

Specific end uses:

Use only as directed. Do not store at temperatures above 60 °C (140 deg. F).

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:

Occupational exposure limits:

Aluminium sulphate OEL RL-TWA 2 mg/m³ aluminium salt soluble.

Biological exposure indices (BEI): No data available.



Additional exposure limits under the conditions of use: No data available.

Exposure control:

Appropriate engineering controls: Avoid inhalation. Use in well ventilated areas. Mechanical extraction ventilation is recommended. Maintain dust levels below the recommended exposure standard.

General Protective Measures: An eye wash and safety shower should be provided in the immediate work area.

Individual protection measures, such as personal protective equipment:

Eye/face protection: Use safety glasses. If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

Hand protection: Use chemical resistant gloves. Examples of preferred glove barrier materials include: Butyl rubber, Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, polyvinyl alcohol, Polyvinyl chloride.

Body protection: Not necessary under normal use.

Respiratory protection: Use an approved air-purifying respirator. Respiratory protection should be worn if the exposure limits are possible. Air purifying respirators should not be used in oxygen deficient atmospheres or if exposure limits exceed ten (10) times the published limit.

Environmental exposure controls: None required.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance (form): Tablet.

Colour: White.

Odour: Chlorine-like bleach odour.

Odour threshold: Not known.

pH: 2.7-3.2.

Melting point/range (°C): 225-230°C (437-466°F), decomposition.

Boiling point/range (°C): Not known.

Flash point (°C): Not known.

Evaporation rate: Not known.

Flammability (solid, gas): Not known.

Ignition temperature (°C): Not known.



Upper/lower flammability/explosive limits: Not known.

Vapour pressure (20°C): Not known.

Vapour density: Not known.

Relative density: >1 (20° C).

Water solubility (g/l) at 25°C: Moderate (1.2 g/100 ml)

n-Octanol/ Water partition coefficient: Not known.

Auto-ignition temperature: Not known.

Decomposition temperature: 225 °C

Viscosity, dynamic (mPa s): Not known.

Physical hazards:

Oxidiser.

Other information:

Volatiles by volume @ 21°C (70°F): Not applicable.

Fat solubility (solvent-oil to be specified): Not known.

Bulk density: Not known.

Dissociation constant in water (p Ka): Not known.

Oxidation-reduction potential: Not known.

SECTION 10. STABILITY AND REACTIVITY

Reactivity:

May be unstable at temperatures above 225 °C Unstable under conditions of heat and moisture. Not sensitive to mechanical shock. Not sensitive to static discharge. Product will not undergo hazardous polymerization. Product is an oxidiser.

Chemical stability:

Stable under recommended conditions of storage. Product will not undergo hazardous polymerization.

Possibility of hazardous reactions:

Hazardous polymerization is not expected to occur.

Conditions to avoid:



Sparks, open flames, other ignition sources and elevated temperatures. Contact with small amounts of water may result in an exothermic reaction with the liberation of toxic fumes. Damp or slightly wet product will evolve nitrogen trichloride.

Incompatible materials:

Organic materials, oils, grease, sawdust, reducing agents, nitrogen containing compounds, other oxidizers, acids, bases, dry fire extinguishers containing ammonium compounds.

Hazardous decomposition products:

Nitrogen trichloride, chlorine, nitrous oxides, cyanates, carbon monoxide, carbon dioxide, sulphur oxides. May be unstable at temperatures above 225 °C

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicokinetics, metabolism and distribution:

Non-human toxicological data: No data available.

Method: No data available.

Dosage: No data available.

Routes of administration: No data available.

Results: No data available.

Absorption: No data available.

Distribution: No data available.

Metabolism: No data available.

Excretion: No data available.

Information on toxicological effects:

Acute toxicity:

Trichloroisocyanuric acid

Acute oral LD₅₀ for rat 490 mg/kg.

Dermal LD₅₀ for rabbit >2000 mg/kg (estimated).

Inhalation LC₅₀ (4 h) nose only for rat 0.54 mg/L, Acute Toxicity Category 3 for dust/mists.

Aluminium sulphate hydrate

Acute oral LD₅₀ for rat > 2000mg/kg.

Dermal LD₅₀ for rabbit >5000 mg/kg

Inhalation LC₅₀ (4 h) nose only for rat > 5mg/L.



Sodium dichloroisocyanurate acid anhydrous

Acute oral LD₅₀ for rat 406 mg/kg.

Chronic toxicity:

There are no known or reported effects from repeated exposure. Toxicological investigation indicates it does not produce significant effects from chronic exposure.

Skin corrosion/irritation: DRY MATERIAL CAUSES MODERATE SKIN IRRITATION, WET MATERIAL CAUSES SKIN BURNS.

Serious eye damage/irritation: Corrosive to eyes.

Respiratory or skin sensitization: Negative skin sensitizer, guinea pig - Buehler Method

Germ cell mutagenicity: This product was determined to be non-mutagenic in the Ames Assay.

Carcinogenicity: This chemical is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA.

Reproductive toxicity: Not known or reported to cause reproductive or developmental toxicity. A similar product has been tested and it did not produce teratogenic or phototoxic effects in laboratory animals.

STOT-single exposure: No data available.

STOT-repeated exposure: No data available.

Aspiration hazard: No data available.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity:

Highly toxic to fish and other aquatic organisms.

Trichloroisocyanuric acid

Birds: Oral LD₅₀ Mallard duck 1 600 mg/kg, LC₅₀ dietary Mallard duck (8 d) >10 000 ppm, dietary Bobwhite quail (8 d) 7 422 ppm.

Fish: LC₅₀ (96 h) for Bluegill 0.30 mg/L, Rainbow trout (*Salmo gairdneri*) 0.32 mg/L.

Daphnia: LC₅₀ (48 h) *Daphnia magna* (water flea) 0.21 mg/L.

Aluminium sulphate hydrate

Fish: LC₅₀ (96 h) for *Danio rerio* > 1.000 mg/L.

Daphnia: EC₅₀ (48 h) for *Daphnia magna* (water flea) >160mg/L.

Algae: EC₅₀ (72 h) for *Pseudokirchneriella subcapitica* (green algae) >41.5mg/L.



Sodium dichloroisocyanurate acid anhydrous

Birds: LC₅₀ for *Colinus virginianus* 730mg/L.

Fish: LC₅₀ (96 h) for *Salmo gairdneri* 0.13mg/L

Daphnia: LC₅₀ (48 h) for *Daphnia magna* 0.28mg/L.

Persistence and degradability:

No data available.

Bioaccumulative potential:

No data available.

Mobility in soil

No data available.

Results of PBT& vPvB assessment:

No data available.

Other adverse effects:

No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods:

As a hazardous solid waste dispose of in accordance with municipal, provincial and national regulations.

Product/ packaging disposal:

CARE MUST BE TAKEN TO PREVENT ENVIRONMENTAL CONTAMINATION FROM THE USE OF THE MATERIAL. THE USER OF THE MATERIAL HAS THE RESPONSIBILITY TO DISPOSE OF UNUSED MATERIAL, RESIDUES AND CONTAINERS IN COMPLIANCE WITH ALL RELEVANT LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS REGARDING TREATMENT, STORAGE AND DISPOSAL FOR HAZARDOUS AND NONHAZARDOUS WASTES.

SECTION 14. TRANSPORT INFORMATION

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN-Number	2468	2468	2468
UN Proper shipping name:	TRICHLOROISOCYANURIC ACID, DRY	TRICHLOROISOCYANURICA CID, DRY	TRICHLOROISOCYANURICACID, DRY



Transport hazard class:	5.1	5.1	5.1
Packaging group:	II	II	II
Marine pollutant:	Yes	Yes	Yes
Special precautions for user:	No information	EmS Number 1: F-A EmS Number 2: S-Q	Packing instruction (cargo aircraft):562 Packing instruction (passenger aircraft):558 Packing instruction (passenger aircraft): Y544
Transport in bulk according to MARPOL 73/78 Annex II and the IBC code	No information	No information	No information

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation for the mixture:

Relevant information regarding authorization: Occupational Health and Safety Act 1993
Regulation for Hazardous Chemical Substances.

Relevant information regarding restrictions: None known.

EU regulations: Regulation EC 1272/2008 [EU-GHS/CLP]

Other National regulations: None.

Chemical Safety Assessment carried out? No.

SECTION 16. OTHER INFORMATION

Indication of changes:

GHS aligned.

2020/03/31 – Company logo changed to Sigura; Details of the supplier of SDS changed to reflect new

entity name.

Relevant classification and H statements (number and full text):

STOT SE 3: Specific Target Organ Toxicity single exposure (Category 3).

Aquatic Acute (Category 1): Hazardous to the Aquatic Environment Acute 1

Aquatic Chronic (Category 1): Hazardous to the Aquatic Environment Chronic 1

H272 May intensify fire; oxidiser. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H319 Causes serious eye irritation. H331 Toxic if inhaled. H335 May cause respiratory irritation. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects.

Training instructions:



Use as instructed.

Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

Notice to readers:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees.

This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.