

WATERCO

water, the liquid of life

SAFETY DATA SHEET

AQUA~HEALTH BLACK SPOT GRANULAR ALGAECIDE

Infosafe No.: MTC7D
Issued Date: 14/04/2016
Issued by: WATERCO LIMITED

1. IDENTIFICATION

GHS Product Identifier

AQUA~HEALTH BLACK SPOT GRANULAR ALGAECIDE

Product Code

34420

Company Name

WATERCO LIMITED

Address

36 South Street Rydalmere
NSW 2116 Australia

Telephone/Fax Number

Tel: 61 2 9898 8600

Emergency phone number

Australia 1800 638 556 land line for transport by air and sea +61 438 465960/ New Zealand 0800 154 666 land line for transport by air and sea +64 962 390 85

Recommended use of the chemical and restrictions on use

Bleaching, sanitising, pool chemical.

Other Names

Name	Product Code
TICA, TRICHLORISOCYANURIC ACID, Symclosene	

2. HAZARD IDENTIFICATION

GHS classification of the substance/mixture

Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Acute Toxicity - Oral: Category 4

Eye Damage/Irritation: Category 2A

Hazardous to the Aquatic Environment - Acute Hazard: Category 1

Hazardous to the Aquatic Environment - Long-Term Hazard: Category 1

Oxidizing Solids: Category 2

Skin Corrosion/Irritation: Category 2

STOT Single Exposure: Category 3 (respiratory tract irritation)

Signal Word (s)

DANGER

Hazard Statement (s)

AUH031 Contact with acids liberates toxic gas.
 H272 May intensify fire; oxidiser.
 H302 Harmful if swallowed.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H335 May cause respiratory irritation.
 H410 Very toxic to aquatic life with long lasting effects.

Pictogram (s)

Flame over circle, Exclamation mark, Environment

**Precautionary statement – Prevention**

P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
 P220 Keep/Store away from clothing//combustible materials.
 P221 Take any precaution to avoid mixing with combustibles
 P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 P264 Wash contaminated skin 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 protective gloves/protective clothing/eye protection/face protection.

Precautionary statement – Response

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
 P302+P352 IF ON SKIN: Wash with plenty of soap and 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.
 P312 Call a POISON CENTER or doctor/physician if you feel unwell.
 P330 Rinse mouth.
 P332+P313 If skin irritation occurs: Get medical advice/attention.
 P337+P313 If eye irritation persists: Get medical advice/attention.
 P362 Take off contaminated clothing and wash before reuse.
 P370+P378 In case of fire: Use water spray (large quantities) for extinction.
 P391 Collect spillage.

Precautionary statement – Storage

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

Precautionary statement – Disposal

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

3. COMPOSITION/INFORMATION ON INGREDIENTS**Ingredients**

Name	CAS	Proportion
Trichloroisocyanuric acid (90% available chlorine)	87-90-1	>99-100 %

4. FIRST-AID MEASURES

First Aid Measures

Take a copy of this MSDS to medical advisers if signs or symptoms of overexposure occur and medical attention is required.

Inhalation

If inhaled, remove affected person from contaminated area. Apply artificial respiration if not breathing. Seek medical attention.

Ingestion

Do not induce vomiting. Wash out mouth thoroughly with water. Seek immediate medical attention.

Skin

Remove all contaminated clothing immediately. Wash affected area thoroughly with soap and water. Wash contaminated clothing before reuse or discard. Seek medical attention.

Eye contact

If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing for several minutes until all contaminants are washed out completely. Seek medical attention.

First Aid Facilities

Eyewash, safety shower and normal washroom facilities.

Advice to Doctor

Treat symptomatically.

Other Information

For advice in an emergency, contact a Poisons Information Centre (Phone Australia 131 126) or a doctor at once.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Not combustible, however, if material is involved in a fire use: Water spray (large quantities).

Hazards from Combustion Products

Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including carbon dioxide, carbon monoxide, chlorine and oxides of nitrogen.

Specific Hazards Arising From The Chemical

Oxidising. Contact with combustible material may cause fire. Non-combustible, but may support the combustion of other materials.

Hazchem Code

1W

Decomposition Temperature

225°C

Precautions in connection with Fire

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. In case of fire the product may be violently or explosively reactive. Use water spray to disperse vapours. This product should be prevented from entering drains and watercourses.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures

Clear area of all unprotected personnel. Evacuate personnel from downwind areas. Shut off all possible sources of ignition. Avoid breathing in vapours or dust. Work up wind or increase ventilation. Wear protective equipment to prevent skin and eye contact and inhalation of vapours/dusts. For large spills notify the Emergency Services.

Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. DO NOT return spilled material to original container. Air-supplied masks are recommended to avoid inhalation of toxic material. If appropriate: DO NOT add small amounts of water to trichloroisocyanuric acid. Collect and transfer to large volume of water - do NOT use a metal container.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Keep out of reach of children. Avoid skin and eye contact and breathing in dust. Avoid handling which leads to dust formation.

Conditions for safe storage, including any incompatibilities

The product is a dangerous good (Class 5.1 Oxidising Agent) and should be stored in accordance with the Australian Dangerous Good Code and Dangerous Goods legislation. Store in a cool, dry, well ventilated place. Store away from sources of heat or ignition. Store away from foodstuffs.

Keep away from children and animals. Store away from incompatible materials described in Section 10. Keep dry - reacts with water, may lead to drum rupture. Calcium hypochlorite (dry or hydrated) and its mixtures are incompatible with, and must be stored away from, dichloroisocyanuric acid, ammonium nitrate, trichloroisocyanuric acid, or any chloroisocyanurate, strong acids, aluminium, iron, lead, magnesium, and zinc. Ensure pallets are clean and free of oil. Keep containers closed when not in use - check regularly for spills.

For information on the design of the storeroom reference should be made to Australian Standard AS 4326 The storage and handling of oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit values

No exposure standards have been established for this material. However, the available exposure limits for ingredients are listed below:

Chlorine

TWA: 1 ppm, 3 mg/m³

Notes: Peak Limitation

Dust not otherwise specified

TWA: 10 mg/m³

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.

STEL (Short Term Exposure Limit): The average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

Peak Limitation: A ceiling concentration which should not be exceeded over a measurement period which should be as short as possible but not exceeding 15 minutes.

Biological Limit Values

No biological limits allocated.

Appropriate Engineering Controls

This substance is hazardous and should be used with a local exhaust ventilation system, drawing solid/dust away from workers' breathing zone. If the engineering controls are not sufficient to maintain concentrations of particulates below the exposure standards, suitable respiratory protection must be worn.

Respiratory Protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable dust/particulate filter should be used. Reference should be made to Australian/New Zealand Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

Eye Protection

Safety glasses with side shields, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform to relevant regulations. Eye protection devices should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.

Hand Protection

Wear gloves of impervious material. Final choice of appropriate gloves will vary according to individual circumstances. i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations.

Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

Body Protection

Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form

Solid - Powder

Appearance

Crystalline Powder , Granular , Tablets

Colour

White

Odour

Chlorine

Decomposition Temperature

225°C

Melting Point

Not available

Boiling Point

Not available

Solubility in Water

Sparingly soluble in water (12g/L (25°C))

Specific Gravity

2.07 (20°C)

pH

2.8 (1% aqueous solution)

Vapour Pressure

Not available

Vapour Density (Air=1)

Not available

Evaporation Rate

Not available

Odour Threshold

Not available

Viscosity

Not applicable

Partition Coefficient: n-octanol/water

Not available

Flash Point

Not applicable

Auto-Ignition Temperature

Not applicable

Explosion Limit - Upper

Not applicable

Explosion Limit - Lower

Not applicable

Other Information

Molecular formula: C3Cl3N3O3

10. STABILITY AND REACTIVITY

Reactivity

Contact with acids liberates toxic gas.

Chemical Stability

Stable if stored and handled under recommended conditions.

Conditions to Avoid

Avoid contact with combustible substances. Avoid contact with other chemicals. Avoid contact with foodstuffs. Avoid exposure to heat, sources of ignition, and open flame. Avoid exposure to moisture.

Incompatible materials

Incompatible with combustible materials, acids, water, alkalis, calcium hypochlorite (dry or hydrated), nitrogen compounds, sodium hypochlorite, reducing agents, ammonium compounds and oils and greases. Incompatible with heat and hot surfaces. Calcium hypochlorite (dry or hydrated) and its mixtures are incompatible with dichloroisocyanuric acid, ammonium nitrate, trichloroisocyanuric acid, or any chloroisocyanurate, acids, aluminium, iron, lead, magnesium, and zinc.

Hazardous Decomposition Products

Chlorine. Oxides of carbon. Oxides of nitrogen.

Possibility of hazardous reactions

Oxidising agent. Supports combustion of other materials and increases intensity of a fire. Heating can cause expansion or decomposition of the material, which can lead to the containers exploding. On contact with nitrogen compounds, fumes of nitrogen trichloride can be formed, which are very explosive.

Hazardous Polymerization

Not available

11. TOXICOLOGICAL INFORMATION

Toxicology Information

The available toxicity data for material given below.

Acute Toxicity - Oral

LD50 (Rat): 406 mg/kg

Ingestion

Harmful if swallowed. Ingestion of this product may cause irritation to the mouth, throat, oesophagus and stomach with symptoms of nausea, abdominal discomfort, vomiting and diarrhoea.

Inhalation

May cause respiratory irritation. Inhalation of product dust can cause irritation of the nose, throat and respiratory system.

Skin

Causes skin irritation. Skin contact will cause redness, itching and swelling. Repeated exposure may cause skin dryness and cracking and may lead to dermatitis.

Moderate irritant (rabbit). Std Draize test. 500 mg/24 hr

Eye

Causes eye irritation. On eye contact this product will cause tearing, stinging, blurred vision, and redness.

Severe irritant (rabbit). (Standard Draize test) 500mg/24H

Respiratory sensitisation

Not expected to be a respiratory sensitiser.

Skin Sensitisation

Not expected to be a skin sensitiser.

Germ cell mutagenicity

Not considered to be a mutagenic hazard.

Carcinogenicity

Not considered to be a carcinogenic hazard.

Reproductive Toxicity

Not considered to be toxic to reproduction.

STOT-single exposure

May cause respiratory irritation.

STOT-repeated exposure

Not expected to cause toxicity to a specific target organ.

Aspiration Hazard

Not expected to be an aspiration hazard.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects.

Persistence and degradability

Not available

Mobility

Not available

Bioaccumulative Potential

Not available

Other Adverse Effects

Not available

Environmental Protection

Do not discharge this material into waterways, drains and sewers.

13. DISPOSAL CONSIDERATIONS

Disposal considerations

Dispose of waste according to applicable local and national regulations. Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes including emptied containers are controlled wastes and should be disposed of in accordance with all applicable local and national regulations.

14. TRANSPORT INFORMATION

Transport Information

Road and Rail:

This material is classified as Dangerous Goods Division 5.1 (Oxidising Substances)

Dangerous Goods are incompatible in a placard load with any of the following:

- Class 1: Explosives
- Division 2.1: Flammable Gases
- Division 2.3: Toxic Gases
- Class 3: Flammable Liquids
- Division 4.1: Flammable Solids
- Division 4.2: Spontaneously combustible substances
- Division 4.3: Dangerous when wet Substances
- Some Division 5.1 Oxidising substances (Refer Table 9.2)
- Division 5.2: Organic peroxides
- Class 6: Toxic or Infectious Substances. If the Class 6 substance is a fire risk substance
- Class 7: Radioactive materials unless specifically exempted
- Class 8: Corrosive substances
- Class 9: Miscellaneous substances. (when the class 9 substance is a fire risk substance)
- Fire risk substances
- Combustible liquids

Marine Transport (IMO/IMDG):

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

UN No.: 2468

Proper Shipping Name: TRICHLOROISOCYANURIC ACID, DRY - MARINE POLLUTANT

Class: 5.1

Packaging Group: II

EMS No.: F-A, S-Q

Special Provision: -

Air Transport (ICAO/IATA):

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

UN No.: 2468

Proper Shipping Name: Trichloroisocyanuric acid, dry

Class: 5.1

Packaging Group: II

Label: Oxidizer

Packaging Instructions (passenger & cargo): 558

Packaging Instructions (cargo only): 562

Special provisions: -

U.N. Number

2468

UN proper shipping name

TRICHLOROISOCYANURIC ACID, DRY

Transport hazard class(es)

5.1

Packing Group

II

Hazchem Code

1W

Special Precautions for User

Not available

EPG Number

5A1

IERG Number

31

IMDG Marine pollutant

Yes

Transport in Bulk

Not available

15. REGULATORY INFORMATION

Regulatory information

Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia

Classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Poisons Schedule

S6

16. OTHER INFORMATION

Date of preparation or last revision of SDS

SDS Reviewed: April 2016 Supersedes: December 2010

References

Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.

Standard for the Uniform Scheduling of Medicines and Poisons.

Australian Code for the Transport of Dangerous Goods by Road & Rail.

Model Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.

Workplace exposure standards for airborne contaminants, Safe work Australia.

American Conference of Industrial Hygienists (ACGIH).

Globally Harmonised System of classification and labelling of chemicals.

Contact Person/Point

Emergency contact:

Australia 1800 638 556 landline +61 438 465 960

New Zealand 0800 154 666 landline +64 962 390 85

END OF SDS

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