1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name:	**HY-CLOR BLACK SPOT AND ALGAE REMOVER 1KG**
Shipping Name:	Trichloroisocyanuric Acid Dry Oxidiser
Product Code:	HYCBKS01-1KG
UN Number:	UN2468
Other Names:	TICA, Stablisied Pool Chlorine Tablets, Trichlor
Recommended Use of the Chemical and Restrictions on Use:	Swimming Pool disinfectant and water treatment
Chemical Formula:	N/A
Supplier:	HY-CLOR AUSTRALIA PTY LTD
Street Address:	178 Power Street Glendenning NSW 2761
Telephone Number:	02 8805 2400
After Hours Contact:	0404 859 515
Facsimile:	02 8805 2401
Email Contact:	help@hyclor.com.au
Emergency Telephone:	**13 11 26 (Australia Poisons Information Centre)** **New Zealand 0800 764 766**
	Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information"

2. HAZARDS IDENTIFICATION

Classified as hazardous according to the criteria of the GHS as adopted in Australia. A Dangerous Good according to ADG 7.5.

Poisons Schedule: S5. SIGNAL WORD: DANGER

Hazard Pictograms:

GHS Hazard Statement(s)

Oxidising Solid	Category 2	H272	May Intensify fire: oxidizer
Acute Oral Toxicity	Category 4	H302	Harmful if swallowed
Eye irritation/corrosion	Category 1	H318	Causes serious eye damage
Reproductive toxicity	Category 1	H360	May damage fertility or the unborn child
Specific Target Organ Toxicity, Single Exposure	Category 3	H335	May cause respiratory irritation
Aquatic acute toxicity	Category 1	H400	Very Toxic to the aquatic life
Aquatic chronic toxicity	Category 1	H410	Very toxic to aquatic life with long lasting effects

Precautionary statements	**Prevention**: P210: Keep away from heat. P220: Keep/Store away from clothing, other chemicals, acids and combustible materials such as paper, fabric, sawdust or kerosene. P221: Take any precaution to avoid mixing with combustibles, acids and other chemicals ... P261: Do not breathe dust. P264: Wash face and hands thoroughly after handling. P270 : Do not eat, drink or smoke when using this product. P271: Use only outdoors or in a well-ventilated area. P280: Wear protective gloves/ eye protection/ face protection. P273: Avoid release to the environment. - if this is not the intended use. **Response:** P301 + 312 +P330 + P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician if you feel unwell. P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305 + P310+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 P370+P378: In case of fire: Use water for extinction. P391: Collect spillage. **Storage**: P403 + P233: Store in a well-ventilated place. Keep container tightly closed. P405: Store locked up. **Disposal:** P501: Dispose of contents/container in accordance with local & regional waste disposal legislation

Label Statements:	Keep out of reach of Children Read Label before use If medical advice is needed, have product container or label at hand.

This material is hazardous

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS	Proportion
Trichloroisocyanuric acid	87-90-1	>90%
Inert Ingredients		<10%

4. FIRST AID MEASURES

General Keep Victim warm and quiet. Obtain immediate medical care. Ensure that attending medical personnel are aware of the identity and nature of the product involved, and take precautionary measures to protect themselves.

Ingestion	DO NOT INDUCE VOMITING. Rinse mouth with water and then give plenty of water to drink. Seek medical attention if large amounts ingested. Call Poison Centre 13 11 26
Eye	If in eye(s) wash with large amounts of water for approximately 15 minutes holding eyelid(s) open. Seek medical attention immediately.
Skin	Remove contaminated clothing and wash skin thoroughly decontaminate clothing before re-use or discard. If swelling, redness, blistering or irritation occurs seek medical advice.
Inhalation	Remove the source of contamination or move the victim to fresh air. Ensure airways are clear and have qualified person give oxygen through face mask if breathing is difficult. If victim has stopped breathing begin artificial respiration, or if heart has stopped, cardiopulmonary resuscitation. Seek immediate medical attention.
First Aid Facilities	Eye wash and normal washroom facilities. First Aid Kit.
Advice to Doctor	Treat symptomatically
Medical Conditions that may Be Aggravated by Exposure	Asthma and respiratory and cardiovascular disease.

5. FIRE FIGHTING MEASURES

Hazchem Code	1W
Extinguishers	Use flooding amounts of water from a distance. Take care as contact with water will release toxic chlorine gas. Do not use foam or dry agent.
Fire Fighting Procedures	Wear self-contained breathing apparatus (SCBA) and protective clothing.
Hazardous Decomposition Products	Decomposes on heating emitting toxic fumes of chlorine as well as liberating oxygen.
Other precautions	Not combustible, however (oxidizer) ignites combustible or organic materials when in contact. Emits toxic fumes of chlorine as well as liberating oxygen, therefore dangerous in a fire situation. Keep away from heat, sparks or naked flames. Heating may cause explosion. Contact with acids or strong alkalis may generate heat.

6. ACCIDENTAL RELEASE MEASURES

Spills	Evacuate all unnecessary personnel. Wear protective clothing as specified in the Personnel Protection section of the MSDS. Sweep up material and place into a suitable labelled container. Collect with spark free tools, avoid the creation of dust. Mop up the remaining material and place into the same container. If large quantities of the material enter the waterways contact the Environmental Protection Authority, or your local Waste Management Authority.

7. HANDLING AND STORAGE

Handling	Keep out of the reach of children. Avoid skin and eye contact and inhalation of dust. Wear appropriate protective equipment and clothing. Use in a well ventilated area. Avoid spillage onto floor. Keep containers closed when not in use. Maintain personal hygiene by washing hands prior to eating, drinking, smoking or using toilet.

Storage	Keep out of the reach of children. Store in a cool, dry, well ventilated area, out of direct sunlight. Store in suitable, labelled containers. Avoid any dust build-up by frequent cleaning and suitable construction of storage area. Keep storage separated from work areas. Inspect periodically for deficiencies such as damage or leaks.
Incompatibilities	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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Standards	No ingredients in this product have exposure standards, as outlined in the standard *Exposure Standards for Atmospheric Contaminants in the Occupational Environment* third edition, published by the National Occupational health and Safety Commissions/AGPS,1995. Chlorine Peak Limitation is 3 mg/m3 (1 PPM)
Engineering Measures	Avoid generating and inhaling dusts. Use in a well ventilated area only. Keep containers in a well ventilated area. Local exhaust ventilations system may be required, especially if chlorine gas evolved.

Personal Protection Equipment

Clothing	Suitable protective clothing should be worn e.g. cotton overalls and safety shoes. Glasses, gloves etc.
Skin Protection	Impervious PVC or rubber gloves should be worn.
Eye Protection	Safety glasses with side shields or goggles should be worn.
Respiratory Protection	If dust exists, wear respirator meeting the requirements of AS/NZS 1716.
Personal Hygiene	Ensure a high level of personal hygiene is maintained when using this product. Always wash hands before eating, drinking, smoking or using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Crystalline Powder, Granular, Tablets White, Chlorine Smell
Boiling Point	N/A
Freezing/Melting Point	N/A
Vapour Pressure	N/A
Specific Gravity	N/A
Flash Point	N/A
Upper Flammability Limit	N/A
Lower Flammability Limit	N/A
Solubility in Water	Appreciable
pH	2.8 % (1% solution)

10. STABILITY AND REACTIVITY

Chemical Stability	Rapidly decomposes on exposure to air. May decompose violently if exposed to heat or direct sunlight. 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 Material	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

11. TOXICOLOGICAL INFORMATION

No Hazardous health effects if the product is handled in accordance with this Safety Data Sheet and the product label. Symbols or effects that may arise if the product is mishandled and overexposure occurs are:

Toxicology Information:	Oral LD 50 (rat) = 406mg/kg
Acute Effects	
Swallowed	Harmful if swallowed. Ingestion may cause nausea, vomiting, shock and coma. Corrosive. Will cause severe damage to the mucous membranes, including irritation and/or burns to the entire gastrointestinal tract. This is characterised by nausea, vomiting, diarrhoea, abdominal pain, bleeding and/or tissue ulceration. May also cause circulatory collapse, cyanosis, shock, confusion, delirium and swelling of the throat or tongue resulting in obstruction of the airway.
Skin	Harmful in contact with skin. Corrosive to skin – causes burns. Dermal exposure can cause severe irritation and/or burns characterised by redness, swelling and scab formation. Skin contact may also cause eruptions and eczema.
Eye	Causes burns and is a severe eye irritant. Contact may cause impairment of vision or corneal damage.
Inhaled	The powder is an irritant to the mucous membranes and respiratory tract. Inhalation of dust will result in respiratory irritation. Inhalation may result in headaches, dizziness and possible nausea. 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. Inhalation of high concentrations can result in permanent lung damage.
Long Term Effects	Prolonged skin exposure may cause destruction of the dermis with impairment of the skin at site of contact to regenerate.

12. ECOLOGICAL INFORMATION

Ecotoxicity	Highly toxic to aquatic life. Avoid contaminating waterways.

13. DISPOSAL CONSIDERATIONS

Disposal Methods and Containers	Dispose of according to relevant local, state and federal government regulations.
Special Precautions for Landfill	Contact a specialist disposal company for landfill.

14. TRANSPORT INFORMATION

UN Number	2468
Land Transport	ADG
UN Proper Shipping Name	Trichloroisocyanuric Acid Dry Oxidiser
Dangerous Goods Class	5.1 Oxidising Substance
Packing Group	II
Hazchem Code	1W
Special Precaution to User	This material is classified as a Class 5.1 Dangerous Good according to the Australian Code for the Transport of Dangerous Goods. Class 5.1 oxidising agents shall not be loaded or packed in the same vehicle or freight as

Class 1	Explosives
Class 2.1	Flammable Gases
Class 2.3	Toxic Gases
Class 3	Flammable Liquids
Class 4.1	Flammable Solids
Class 4.2	Spontaneously Combustible Substances
Class 4.3	Dangerous when Wet Substances
Class 5.2	Organic Peroxides
Class 6	Toxic Substances (where the toxic substances are fire risk substances)
Class 7	Radioactive Substances
Class 8	Corrosive Substances (Certain Exemptions Apply)
Class 9	Miscellaneous Dangerous Goods (where the miscellaneous dangerous goods are fire risk substances or Combustible Liquids).

15. REGULATORY INFORMATION

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.
Poison Schedule: S5
This material is hazardous according to Safe Work Australia; HAZARDOUS SUBSTANCE.

16. OTHER INFORMATION

ADG	Australian Code for the Transport of Dangerous Goods by Road & Rail Edition 7.5, 2017
AS/NZS	Australian Standard/New Zealand Standard
CAS Number:	Unique Chemical Abstracts Service Registry Number
EC_{50}:	Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species).
GHS:	Globally Harmonized System of classification and labelling of chemicals (GHS)
Hazchem Code:	Emergency action code of numbers and letters that provide information to emergency services, especially fire fighters
HCIS:	Hazardous Chemical Information System (http://hcis.safeworkaustralia.gov.au/HazardousChemical)
IARC:	International Agency for Research on Cancer
LD_{50}:	Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats).
IDLH:	Immediately dangerous to life or health (**IDLH**) is **defined** by the US National Institute for Occupational Safety and Health (NIOSH)
LC_{50}:	Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population.
NTP:	National Toxicology Program (USA)
SDS:	Safety Data Sheet

STEL:	Short term exposure limit (STEL) means the time-weighted average maximum airborne concentration of a substance calculated over a 15 minute period.
TWA:	8-hour Time-weighted average (TWA) means the maximum average airborne concentration of a substance when calculated over an eight-hour working day, for a five-day working week.
WES:	Workplace exposure standard
UN Number:	United Nations Dangerous Goods Number

References:
Work Safe Australia Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice (February 2016). The exposure standards comply with the New Zealand and Australian Workplace Exposure Standards for Airborne Contaminants. The Dangerous Goods Classification complies with the Australian Code for the Transport of Dangerous Goods by Road & Rail Edition 7.5, 2017. Other information from ChemIDPlus and linked databases. European Chemicals Agency Classification and Labelling database.

Sections Revised: All

Replaces revision: August 2016

Disclaimer

This Safety Data Sheet (SDS) has been prepared in compliance with the Work Safe Australia Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice (February 2016). The information in this SDS should be provided to all who will use, handle, store, transport, or otherwise be exposed to this product. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. HY-CLOR Australia Pty. Limited shall not be held liable for any damage resulting from handling or from contact with the above product.

Mr Mark Sheridan
Technical Regulations Manager
Telephone: Australia + 61 2 8805 2400
New Zealand + 64 9 973 2477