Safety Data Sheet

Date Reviewed: 20 January 2023

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name:	**HY-CLOR GRANULAR BROMINE 1KG**
Chemical Name:	Sodium Dichlorisocyanurate dehydrate; Sodium Bromide
Synonyms:	
Product Code:	HYCSPAG01
Recommended Use of the Chemical and Restrictions on Use:	Spa Pool disinfectant and Sanitiser
Supplier:	HY-CLOR AUSTRALIA PTY LTD
Street Address:	178 Power Street Glendenning NSW 2761 Australia
Distributor:	NZ Chemical Care & Storage Ltd 252 James Fletcher Drive, Otahuhu, Auckland
Telephone Number:	09 973 2477 (NZ) 02 8805 2400 (Aus)
After Hours Contact:	0404 859 515 (Aus)
Facsimile:	02 8805 2401
Email Contact:	help@hyclor.com.au
Emergency Telephone:	**0800 764 766 (New Zealand Poisons Information Centre)** **111 (Dial in case of transport emergency only)** **02 8805 2400 (Aus)**

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information"

2. HAZARDS IDENTIFICATION

This product is classified as: Xn: Harmful. Xi: Irritating. N: Dangerous to the environment. Hazardous according to the criteria of the GHS as adopted in Australia. Not a Dangerous Good according to ADG 7.5.

Poisons Schedule: S6. SIGNAL WORD: WARNING

GHS Hazard Statement(s)

AUH031: Contact with acids liberates toxic gas
H301: Toxic if swallowed
H315: Toxic in contact with skin
H319: Causes serious eye irritation
H335: May cause respiratory irritation

Precautionary statements

Prevention:
P232: Protect from moisture
P233: Keep container tightly closed

P234: Keep only in original container
P261: Avoid breathing dusts
P262: Do not get in eyes, on skin or clothing
P264: Wash contacted areas 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. - if this is not the intended use.
P280: Wear protective gloves/ eye protection/ face protection.
P281: Use personal protective equipment as required
P235 + P410: Keep cool, protect from sunlight.

Response:
P335: Brush off loose particles from the skin
P361: Remove all contaminated clothing immediately
P363: Wash contaminated clothing before reuse
P301+P312: IF SWALLOWED: call a Poison Centre or doctor if felling unwell
P301+P330+P331: IF SWALLOWED: rinse mouth, Do NOT induce vomiting
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 15 minutes. Remove contact lenses, if present and easy to do so. Continue rinsing with water.

Storage:
P402: Store in a dry place
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

Hazard pictograms

Signal word WARNING

Label Statements:	KEEP OUT OF REACH OF CHILDREN FIRE AND EXPLOSION HAZARD READ SAFETY DIRECTIONS BEFORE OPENING OR USING

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS Number	Concentration (% w/w)
Sodium Dichloroisocyanurate Dihydrate	51580-86-0	>50%
Sodium Bromide	7647-15-6	<10%

Not contributing to product hazard		To 100%

4. FIRST AID MEASURES

If poisoning occurs, or medical advice needed contact a Poisons Information Centre. Phone Australia 13 1126 or a doctor. Have this SDS when you call.

Swallowed: If irritation occurs, contact a Poisons Information Centre, or call a doctor. Remove source of contamination or remove the victim to fresh air. If breathing is difficult, oxygen may be beneficial if administered by trained personnel, preferably on a doctors advice. In severe cases , symptoms of pulmonary oedema can be delayed up to 48 hours after exposure.

Skin: Wash gently and thoroughly with warm water (use non-abrasive soap if necessary) for 10-20 minutes or until product is removed. Under running water, remove contaminated clothing, shoes and leather goods (watchbands, shoes etc) and completely decontaminate them before reuse or discarding. If necessary, keep emergency vehicle waiting (show paramedics this SDS and take their advice). If breathing has stopped, trained personnel should begin artificial respiration or, if the heart has stopped cardiopulmonary resuscitation (CPR) immediately

Eye: If in eyes, remove contact lenses if present, hold eyes open, flood with water or normal saline solution for at least 20 minutes. Take care not to rinse contaminated water into the non-affected eye or onto the face. If irritation occurs seek immediate medical attention.

Inhaled: No first aid measures normally required. However, if inhalation has occurred, and irritation has developed, remove to fresh air and observe until recovered. If irritation becomes painful or persists more than 30 minutes, seek medical advice. Give activated charcoal if advised.

Note to Physician Treat symptomatically

First Aid Facilities Eye wash and normal washroom facilities. First Aid Kit.

Medical Conditions that may be aggravated by exposure Asthma and respiratory disease.

5. FIRE FIGHTING MEASURES

Fire & Explosion Hazards: The major hazard in fires is usually inhalation of heated and toxic or deficient (or both), fire gases. There is no risk of an explosion from this product under normal circumstances if it is involved in a fire. Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

Extinguishing Media: Not combustible. Use extinguishing media suited to burning

materials

Fire Fighting: When fighting fires involving significant quantities of this product, wear a fully encapsulated splash suit complete with self-contained breathing apparatus.

Flash Point: Does not burn

Autoignition Temperature: Not applicable – does not burn

Flammability Class: Does not burn

6. ACCIDENTAL RELEASE MEASURES

Accidental release: This product is sold in small packages, and the accidental release from one of these is not usually a cause for concern. For minor spills, clean up, rinsing to sewer and put empty containers in garbage. Although no special protective clothing is normally necessary because of occasional minor contact with this product, it is good practice to wear impermeable gloves when handling chemical products. In the event of a major spill, prevent spillage from entering drains or water courses.

7. HANDLING AND STORAGE

Keep out of the reach of children.

Precautions for safe handling	Avoid skin and eye contact and breathing in dust. Wear appropriate protective equipment and clothing. Remove contaminated clothing. Use in a well-ventilated area. Avoid spillage onto floor. Maintain personal hygiene by washing hands prior to eating, drinking, smoking or using toilet.
Safe storage, including any incompatibilities	Store in a cool, dry well-ventilated area, out of direct sunlight. Store in labelled, original containers. Keep containers tightly closed and upright. Avoid spillage onto the floor. Do not allow into contact with water. Store away from sources of ignition, heat and incompatible materials described in Section 10.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limits: Exposure limits for this product have not been established by SWA for any of the known significant ingredients in this product. No special equipment is usually needed when occasionally handling small quantities.

Appropriate Engineering Controls:

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. 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 Protective equipment - for manufacturing and bulk handling situations:

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

Skin Protection:	Suitable protective clothing should be worn e.g. cotton overalls and safety shoes. Wear gloves of impervious material such as nitrile rubber (glove thickness 0.11 mm & breakthrough time > 480 min) that comply with AS/NZS 2126. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken.
Eye Protection:	Tightly fitting safety goggles or full-faced shields as appropriate recommended and that comply with AS/NZS 1336 and 1337. Final choice of appropriate eye/face protection will vary according to individual circumstances i.e. methods of handling or engineering controls and according to risk assessments undertaken.
Respiratory Protection:	Respiratory protection is not normally necessary, unless the production of dust is significant or toxic gases are evolved. In such cases, a suitable respirator may be worn that meets the requirements of AS/NZS 1715 and 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: White to cream, dry free flowing powder. Chlorine odour.
Boiling Point: N/A
Freezing/Melting Point: 240 Deg C.
Vapour Pressure: N/A
Specific Gravity: N/A
Flash Point: N/A
Density: Approx 2.03
Upper Flammability Limit: N/A
Lower Flammability Limit: N/A
Solubility in Water: Appreciable
pH: 6.5 (1% solution)
Autoignition Temp: Not applicable Does not burn.

10. STABILITY AND REACTIVITY

Chemical Stability:	Exposure to high temperatures or contact with acids may liberate chlorine gas which is toxic.
Possibility of hazardous reactions:	This product will not undergo polymerisation reactions. Combustion forms carbon dioxide, and if incomplete,

	carbon monoxide and possibly smoke. Water is also formed. May form nitrogen and its compounds, and under some circumstances, oxides of nitrogen.
Conditions to avoid:	This product should be kept in a cool place, preferably below 30 Deg C. Keep containers tightly closed. Containers should be kept dry. Keep containers and surrounding areas well ventilated. Keep away from heat, flames and sparks. Keep isolated from combustible materials
Incompatible materials:	Acids, water, zinc, tin, aluminium and their alloys, organic chemicals, alkaloidal salts, mercuric chloride, zinc sulfate, and other metallic salts nitrogen containing compounds, oxidisers, dry fire extinguishers containing monoammonium phosphates.

11. TOXICOLOGICAL INFORMATION

Acute Oral	Harmful if swallowed. Ingestion may cause nausea, Vomiting, diarrhoea and irritation of the gastrointestinal tract.
Skin corrosion/irritation	May cause skin irritation. These may include delayed effects of skin redness and peeling.
Eye damage/eye irritation	This product is an eye irritant. Symptoms may include stinging and reddening of eyes and watering which may become copious. Other symptoms may become evident. If exposure is brief, symptoms should disappear once exposure has ceased. However, lengthy exposure or delayed treatment may cause permanent damage.
Inhalation	The vapour 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.

12. ECOLOGICAL INFORMATION

Ecotoxicity: Insufficient Data

13. DISPOSAL CONSIDERATIONS

Disposal: Rinse empty containers in the pool and dispose of by wrapping with paper and putting in garbage. For larger quantities, refer to Refer to local government authority for disposal recommendations. Dispose of material through a licensed waste contractor. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

14. TRANSPORT INFORMATION

This product is not classified as a Dangerous Good by ADG, IATA or IMDG/MSBC criteria. No special transport conditions are necessary unless required by other regulations.

15. REGULATORY INFORMATION

Poisons Standard (Scheduling):	Schedule 6 (Chlorinating Compounds)
APVMA Product Number:	62307/0907
Listing in the Australian Inventory of Chemical Substances (AICS)	Not applicable for APVMA registered products

16. OTHER INFORMATION

Glossary:

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
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)
Peak Limitation:	A maximum or peak airborne concentration of a particular substance determined over the shortest analytically practicable period of time which does not exceed 15 minutes.
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 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 and the European Chemicals Agency Classification and Labelling database. SDS for components,

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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.