Space INDUSTRIES LTD SAFETY DATA SHEET

Section 1: Identification of the Substance/Mixture and of Supplier

Product name	**SPA CHLOR GRANULES**
Recommended use:	Sterilization of swimming pools and spas
Supplier:	Space Industries Limited
Street Address:	160 Plunket Ave, Wiri, Auckland New Zealand
Telephone Number:	+ 64 9 262 3902
Facsimile:	+ 64 9 262 3948
E-mail:	orders@spaceindustries.co.nz
Website:	www.spaceindustries.co.nz
Emergency Telephone	0800 764 766 (all hours)
Date of preparation:	25 May 2021

Section 2: Hazards Identification

Hazard Classification: Hazardous according to the criteria or the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

HSNO Approval Code: HSR002684

Hazard Categories:

Acute Toxicity (all) – Category 4

Serious Eye Damage/Irritation – Category 2

Aquatic Toxicity – Category 1

Pictograms:

Signal Word: WARNING

Hazard Statements:

H302 – Harmful if swallowed

H319 – Causes serious eye irritation

H400 – Very toxic to aquatic life

H433 – Harmful to terrestrial invertebrates

Precautionary Statements:

General

P102 – Keep out of reach of children

	P103 – Read Label before use
Prevention	P220 – Store away from combustible materials
	P264 – Wash hands thoroughly after handling
	P270 – Do not eat drink or smoke when using this product
	P273 – Avoid release to the environment
	P280 – Wear protective gloves, clothing and eye/face protection
Response	P101 – If medical assistance is needed have the container at hand
	P330 – Rinse Mouth
	P391 – Collect Spillage
	P301 + P312 -IF SWALLOWED: call a POISON CENTER or doctor/physician if you feel unwell
	P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing
	P337 + P313 -if eye irritation persists get medical attention.
Disposal	P501 – Dispose of any left over chemical at an approved hazardous substance collection facility
Environment Protection Authority (New Zealand)	Hazardous Substances and New Organisms Amendment Act 2015
HASNO Classifications	Health Hazards 6.1D - Substances that are acutely toxic/harmful 6.4A - Substances that cause serious eye damage/irritaion Environmental Hazards 9.1A - Substances that are very toxic in the aquatic environment 9.3C – Substances that are harmful to terrestrial invertebrates

Section 3: Composition/information on ingredients

Product Description: It is widely used for sterilization of swimming pools, spas and drinking water, industrial circular water, aquaculture, hotel, hospital and other public places. Also used as bleaching agent and antiseptic for wood, cotton, textile, chemical fabrics etc. White crystal granular.

Dichlor Granules CAS Number	**Proportion**	**Risk Phrases**
Sodium Dichloro-di-isocyanuric acid dihydrate 51580-86-0	>56%	R20, R21, R22, R31, R34, Xi; R36/37, R41, N; R50/53

Section 4: First Aid Measures

Show this Safety Data Sheet to a Doctor
Short term exposure by all routes is considered to be harmful.

Inhalation:	May cause respiratory irritation. Remove victim to fresh air. If irregular or not breathing, give artificial respiration. Seek immediate medical attention.
Skin Contact:	Harmful if swallowed. Immediately flush with large quantities of water. Ensure all contaminated clothing is removed, including footwear (wash thoroughly). Get medical attention immediately.
Eye Contact:	Causes serious eye irritation. Check for and remove contact lenses. Immediately irrigate with copious quantities of water for at least 15 minutes holding eyelids apart. Retract eyelids to ensure complete wash of all eye and lid tissues. Urgently seek medical assistance.
Ingestion:	If victim is conscious and alert, allow to rinse mouth and then drink two cups of water. Never give anything by mouth to an unconscious person. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs spontaneously, keep airway clear. Drink more water when vomiting stops. Contact a Doctor or the Poisons Information Centre (0800 764 766) for further advice immediately. **Treat symptomatically and supportively. Treatment may vary with condition of victim and specifics of incident. Corrosive.**
Notes to Doctor:	If swallowed - causes severe burning and corrosion to the mucous membranes and tissues of the mouth, throat and stomach. Corrosive to eyes – can cause irreversible damage. Can cause corneal burns. Skin contact will cause moderate irritation. Corrosive on contact with moist skin and will cause burns. Avoid inhalation – may be fatal if inhaled – mist vapour can produce respiratory irritation and may cause damage of the upper respiratory tract and lung tissues.
Medical conditions aggravated by exposure:	Asthma, skin, eye or respiratory and cardiovascular disease may be at increased risk from the irritant or allergic properties of the material..

For advice, contact the Poisons Information Centre 0800 764 766 or a doctor

Section 5: Fire Fighting Measures

Specific Hazards:	Oxidizer which supports combustion.
Suitable Extinguishing Media:	Water fog to extinguish fire. If unavailable, water spray. Deluge with water. Water may be effective for cooling containers.
Fire-fighting advice:	May react violently and produce an explosive reaction. May cause combustible materials to burn or explode. Produces poisonous gas when decomposes
Hazchem Code:	2 (WE)

Section 6: Accidental Release Measures

Procedures to be covered:	Clear area of all unprotected personnel. If contamination of sewers or waterways has occurred advise local emergency. Clean-up personnel should wear full protective clothing, including breathing apparatus in dusty conditions.

Section 7: Handling and Storage

Handling:	Never add water to this product, always add the product to large quantities of water.

Storage:	Ensure an eye bath is available and ready for use. Observe good personal hygiene practices and recommended procedures. Use clean and dry utensils. Wash hands thoroughly after handling. Ensure adequate ventilation. Do not eat, drink or smoke when using this product. Store away from foodstuffs. Avoid eye and skin and clothing contact. Keep out of reach of children. Read label before use – keep properly labeled at all times. No smoking. Store in a cool. dry. well-ventilated area away from incompatible materials (see "materials to avoid"). Keep away from heat and direct sunlight. Do not store at temperatures above 60°C. Product has an indefinite shelf life if stored at room temperature. Check regularly for spills.

Section 8: Exposure Controls/Personal Protection

Occupational Exposure Limits:	No value assigned for this specific material by the New Zealand Occupational Safety and Health Service (OSH).
Engineering Control Measures:	Use in a well ventilated area –adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.
Personal Protective Equipment:	Wear full protective clothing to avoid splashes. As product can cause eye irritation, safety glasses or goggles must be worn. The use of rubber gloves is recommended. Wash contaminated clothing and other protective equipment before storage or re-use.

Section 9: Physical and Chemical Properties

Physical state:	Granule or 20gram tablet
Colour:	White
Formula:	1,3,5-Triazine-2,4,6(1H,3H,5H)-trione
Specific Gravity/Bulk	2.2gm/cm3
Melting Point:	225C
Steam Pressure:	No
Flash Point:	No
Available Chlorine:	Min 56%

Section 10: Stability and Reactivity

Stability:	Stable under normal conditions of storage, shipment and/or use. Do not package in paper or cardboard. Begins to lose one mole of water at approximately 50°C
Incompatible materials:	Organic materials. Acids, bases, oils, grease, sawdust, Dry Fire extinguishers containing monoammonium compounds.
Hazardous decomposition products:	Nitrogen trichloride, chlorine, and carbon monoxide – potential explosion hazard. A risk of explosion and/or of toxic gas formation exists with the following substances: Ammonia, Urea, Ammonium compounds, Bases, Acids. Wet material may generate nitrogen trichloride.

Section 11: Toxicological Information

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

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

Eye contact:	Severe irritation and/or burns can occur following eye exposure. Contact may cause impairment of vision and corneal damage.
Skin contact:	Dermal exposure can cause severe irritation and/or burns characterized by redness, swelling, and scab formation. Prolonged skin exposure may cause permanent damage.
Inhalation:	Harmful if swallowed. Irritating to the nose, mouth, throat and lungs. It may also cause burns to the respiratory tract with the production of lung edema that can result in shortness of breath, wheezing, choking, chest pain, and impairment of lung function. Inhalation of high concentration can result in permanent lung damage from the corrosive action of the lung.
Acute Oral Toxicity:	LD_{50} = 500-1600 mg/kg (rat) (Merck)
Acute Inhalation Toxicity:	Quantitative data on the acute inhalation toxicity of this product are not available.
Acute Dermal Toxicity:	LD_{50} >5000 mg/kg (rabbit) (Merck)

Section 12: Ecological Information

Environmental fate, persistence and degradation:	Avoid contaminating waterways. This material is unstable in th environment because the available chlorine is rapidly reduced. Hydrolysis occurs within minutes. None of the hydrolysis products are persistent.
Bioaccumulative potential:	The product is subject hydrolysis within minutes, forming cyanuric acid and halogen moieties, which is inherently biodegradable. The material degrades relatively fast and is not considered to bioaccumulate.
Aquatic toxicity:	Very toxic to aquatic life with long lasting effects. LC_{50} = 0.25 mg/l/96h (Oncorhynchus mykiss)(ECOTOX Database)
Terrestrial toxicity:	Expected to be harmful to terrestrial species.

Section 13: Disposal Considerations

Refer to Waste Management Authority.
Dispose of material through a licensed waste contractor.
Trichlor is a hazardous waste and should be disposed accordingly.
Do not dispose of filled or partially filled containers in common waste receivers, as contaminants could generate spontaneous decomposition and fusion of the material and rupture the drum.

Section 14: Transport Information

Road and Rail Transport:	Classified as a Dangerous Good according to NZS 5433:1999 Transport of Dangerous Goods on Land.
UN No:	3077
Class-primary	9
Packing Group:	III
Proper Shipping Name:	Dichloro-isocyanuric acid, dihydrate
Hazchem Code:	2X
Marine Transport:	Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS
UN No:	3077
Class-primary	9
Packing Group:	III

Proper Shipping Name	Dichloro-isocyanuric acid - dihydrate

Section 15: Regulatory Information

ERMA Approval: HSR002684 Water Treatment Chemicals (Subsidiary Hazard) Group Standard 2020

Section 16: Other Information

.Issue Date: 25 May, 2021

Note: All information given by Space Industries Ltd is offered in good faith and is, to the best of our knowledge, true and accurate. However, since conditions of use are beyond our control, all information relevant to usage is offered without warranty or guarantee and should not be construed as a representation that the product is suitable for any particular purpose or application.