Section 1: Identification of the Material and Supplier

Product Name: **Chlorbrite - Powder Bleach**

Other Names: Mixture of inorganic salts containing the dihydrate of sodium dichloroisocyanurate.

Proper shipping name (ADG Code): None assigned.
The dihydrated sodium salt of dichloroisocyanuric acid is not subject to the provisions of the *Australian Dangerous Goods Code, 6th Edition.*

Recommended use: As a powder bleach.
Use as directed on the product label.

Supplier: **Hunters Products (TAS) Pty. Ltd.,**
A.C.N. 004 601 263

HEAD OFFICE	**HOBART OFFICE**	**BURNIE OFFICE**
60 Gleadow Street,	105 Albert Road,	22 Pearl Street,
INVERMAY TAS 7248	MOONAH TAS 7009	WIVENHOE TAS 7320
Tel: 03 6331 4755	Tel: 03 6228 7955	Tel: 03 6431 9627
Fax: 03 6334 1065	Fax: 03 6228 7988	Fax: 03 6432 2083

Emergency Phone Numbers:

Transport/Fire Emergency:	**000**	(Emergency services)
Medical Emergency:	**131126**	(Poisons Information Centre)

Section 2: Hazards Identification

Classified as hazardous according to criteria of Worksafe Australia.

Non-dangerous goods.

Risk Phrases:	R: 31	Contact with acids liberates toxic gas.
	R: 36/37/38	Irritating to eyes, respiratory system and skin.
	R: 51/53	Toxic to aquatic organisms. May cause long term adverse effects in the aquatic environment.
Safety Phrases:	S: 26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	S: 41	In case of fire and/or explosion do not breathe fumes.
	S: 61	Avoid release to the environment. Refer to special instructions/safety data sheets.

Section 3: Composition/Information on Ingredients

Ingredients:

Sodium dichloroisocyanurate dihydrate	[51580-86-0]	10 - 30 %
Inorganic salts		to 100 %

Contains:

Available chlorine	*[7782-50-5]*	*up to 13.5 %*

Section 4: First Aid Measures

For advice, contact a Poisons Information Centre (Phone 131126) or a doctor.

Swallowed: If swallowed, do NOT induce vomiting.

Skin: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.

Eyes: If in eyes wash out immediately with water.

Inhaled: Remove from exposure, rest and keep warm. Unless exposure has been slight, obtain medical advice.

First Aid facilities:

Mandatory: Eye wash.

Recommended: Hand wash basin.

Advice to Doctor:

Product is a mixture of inorganic salts containing a moderate proportion of sodium dichloroisocyanurate as the dihydrate. Irritating to eyes and respiratory system. Contact Poisons Information Centre.

Aggravated medical conditions:

Pre-existing respiratory disorders.

Section 5: Fire Fighting Measures

HAZCHEM Code: None assigned.

Evacuate: No.

Extinguishant: Water fog or fine water spray.

Risk of violent reaction or explosion: No.

Products of combustion: Oxides of carbon, oxides of nitrogen, chlorine, hydrogen chloride, oxides of phosphorus.

Protective Equipment: Breathing apparatus and protective gloves for fire only.

Section 6: Accidental Release Measures

Emergency Procedures:
Contain.
Increase ventilation.

For large spills:
Contain spillages with sand or earth. Transfer both liquid and solids to suitable container(s). Treat residues as for small spills.

For small spills:
Avoid generating dust.
If local regulations permit, mop up with plenty of water and run to waste, diluting greatly with running water. Otherwise, mix with inert absorbent and transfer to suitable container. Wash site of spillage thoroughly with water and detergent. Ventilate area to dispel any residual vapours.

Section 7: Handling and Storage

Precautions for safe handling:
Avoid contact with skin and eyes.
Avoid breathing dust or vapours.

Conditions for safe storage:
Store in a cool, dry, well ventilated place, out of reach of children. Store in original container. Keep container tightly closed and out of direct sunlight. Prevent vapours from collecting in enclosed spaces. Keep away from acids, combustible materials and other oxidising agents. Protect from physical damage. Clean up all spills and splashes promptly; avoid secondary accidents.

Incompatibles:
Acids, combustible materials, other oxidising agents.

Section 8: Exposure Controls/Personal Protection

National Exposure Standards:

ES-TWA:	Chlorine	1 ppm, 3 mg/m³
ES-STEL:	None assigned.	
ES-PEAK:	Chlorine	1 ppm, 3 mg/m³
Notations:	None assigned.	

[Peak] indicates a ceiling concentration which should not be exceeded, even momentarily.

Biological Limit Values: No data found.

Engineering Controls:

Ensure adequate ventilation (same as outdoors) when using. If handling industrial quantities, or if dust or vapour risk exists, consider local mechanical exhaust/extraction to keep airborne contamination as low as possible and at least below the TLV.

Personal Protective Equipment:

Avoid contact with skin and eyes. Avoid breathing dust or vapours. Personal protection to be selected from those recommended below, as appropriate to mode of use, quantity handled and degree of hazard:-

Normal Use:

Eye/face protection
Gloves, rubber or plastic.

Industrial Quantities:

Positive pressure air-hood or self-contained breathing apparatus
Face shield or safety glasses
Gloves, rubber or plastic
Plastic apron, sleeves and boots
Impervious overalls.

Section 9: Physical and Chemical Properties

Appearance:	White, granular powder.
Odour:	Mild odour of chlorine. Odour threshold: 0.3 ppm in air [chlorine]
pH:	Slightly alkaline.
Vapour Pressure:	No data.
Vapour Density:	Chlorine gas is heavier than air.
Boiling Point:	Not applicable.
Melting Point:	No data.
Volatiles:	Up to 13.5 % as available chlorine.
Volatile Organic Compounds (VOC):	None.
Evaporation Rate:	No data.
Solubilities:	Soluble in water.
Specific Gravity/Density:	No data.
Flash Point:	None.
Flammable Limits:	None.
Dust Explosion:	Not applicable.
Auto-ignition Temperature:	No data.

Other Information:

Hygroscopic, may absorb moisture from the air.
Contact with acids will generate chlorine, a toxic gas.
May decompose on long contact with moisture, generating chlorine.
May react vigorously or violently with other chlorine bleaches.
Incompatible with ammonium compounds, nitro compounds.

Section 10: Stability and Reactivity

Chemical Stability: Stable under normal conditions.

Conditions to Avoid: Incompatible materials, moisture.

Incompatible Materials: Other oxidising agents, acids.

Hazardous Decomposition Products: Oxides of nitrogen, oxides of phosphorus, chlorine, hydrogen chloride.

Hazardous Reactions: May react violently with other oxidising agents (e.g. hypochlorites). Contact with acids will generate chlorine gas.

Section 11: Toxicological Information

Health Effects:

No data available for the mixture. Information presented relates to individual ingredients.

Acute:

Swallowed: May be harmful if swallowed.
Likely to cause gastric upset, nausea, vomiting and diarrhoea. May cause a burning sensation, sore throat, possible ulceration and bleeding from the digestive tract.
May cause lachrymation and difficulty breathing.

Skin: Irritating to skin. May cause redness, pain, skin burns (especially when moist).

Eyes: Irritating to eyes. May cause redness, pain and severe, deep burns.

Inhaled: Dust will be irritating to the respiratory system.
Chlorine gas is irritating at low concentrations. At 1 ppm, may cause irritation to the nose, mouth and throat. At 1.3 ppm and above may cause further irritation, coughing and difficulty breathing. Onset of symptoms may be delayed.

Chronic: Repeated skin contact may lead to irritation and dermatitis. Over-exposure to sodium dichloroisocyanurate may cause liver disfunction, lung congestion.

Chronic exposure to low levels of chlorine can lead to chloracne and erosion of the teeth.

LD50:	Sodium dichloroisocyanurate	700 mg/kg oral, rat. 6,000 mg/kg skin, rabbit.
	Inorganic salt #1	5,989 mg/kg oral, mouse.
	Inorganic salt #2	3,120 mg/kg oral, rat.
LC50:	Chlorine	293 ppm/1 hour, rat. 137 ppm/1 hour, mouse.
LDLo:	Sodium dichloroisocyanurate	3,570 mg/kg oral, human - ulceration, bleeding from the stomach, death.
LCLo:	Chlorine	2,530 mg/m³/30 minutes, human - emphysema, pulmonary oedema, death. 500 ppm/5 minutes, human - death.

Section 12: Ecological Information

Ecotoxicity: Toxic to aquatic organisms. May cause long term adverse effects in the aquatic environment.

Persistence and degradability: No data.

Mobility: Readily transported by water.

Environmental Fate: No data.

Bioaccumulative potential: No data.

Other adverse environmental effects: Contains phosphates. May contribute to algal blooms in natural waters.

Section 13: Disposal Considerations

The generator of any wastes from this product is responsible for its proper classification, transport and disposal.

Consult appropriate local and State regulations.

Disposal methods and containers:
Avoid disposal to natural waters or the environment.
Contains sulphate. Disposal of large quantities to sewer may be regulated by local authorities.

Special precautions for landfill or incineration:
Unsuitable for incineration.

Section 14: Transport Information

UN Number: None assigned.

UN Proper shipping name: None assigned.

Class and subsidiary risk: None.

Packaging group: None.

Special precautions for user: Keep away from acids, moisture, combustible materials, other types of oxidising agents.

HAZCHEM Code: None assigned.

Material for export: May be regulated. Refer to **IMO/IMDG** and **IATA/ICAO**.

Section 15: Regulatory Information

Poisons (SUSDP): Schedule 5
Sodium dichloroisocyanurate, containing 40 % or less, but more than 4 %, of available chlorine.

Dangerous Goods: No. The dihydrated sodium salt of dichloroisocyanuric acid is not subject to the provisions of *the Australian Dangerous Goods Code, 6th Edition.*

Carcinogen:	**Australia**	**IARC**	**NTP**	**RTECS**
	No.	No.	No.	No.

Agricultural and Veterinary Chemicals Act: Not applicable.

Australian Inventory of Chemical Substances (AICS): Listed.

Other National/International Regulations: No data.

Section 16: Other information

Date of MSDS update: September 2005

Abbreviations:

NOHSC - National Occupational Health and Safety Commission.
ACGIH - American Conference of Governmental Industrial Hygienists.
MAK - Maximum workplace concentration - Germany, (*maximale Arbeitsplatzkonzentration*)
IARC - International Agency for Research on Cancer (France).
NPT - National Toxicology Program (USA).
RTECS - Registry of Toxic Effects of Chemical Substances.

Literature references:

Other Available Sources of Data:
National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [2011(2003)] - NOHSC.
Australian Dangerous Goods Code.
Standard for the Uniform Scheduling of Drugs and Poisons - AHMAC.
Exposure Standards for Atmospheric Contaminants in the Occupational Environment [1003]- NOHSC.
List of Designated Hazardous Substances [10005] - NOHSC.
Merck Index - Merck Inc.
Sax's Dangerous Properties of Industrial Materials - Lewis.
Handbook of Toxic and Hazardous Chemicals and Carcinogens - Sittig.
Handbook of Reactive Chemical Hazards - Bretherick.
Hawley's Condensed Chemical Dictionary - Wiley Interscience.
AUSREG's Chemical Data Package for PCs - AUSREG Consultancy.