



Section 1: Identification of the Material and Supplier

Product Name: Multi-Bac

Other Names: Buffered, chlorinating bactericide.

Proper shipping name (ADG Code): None assigned.

Recommended use: As a bactericide for sanitising equipment.
Use as directed on the product label.

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

HEAD OFFICE

60 Gleadow Street,
INVERMAY TAS 7248
Tel: 03 6331 4755
Fax: 03 6334 1065

HOBART OFFICE

105 Albert Road,
MOONAH TAS 7009
Tel: 03 6228 7955
Fax: 03 6228 7988

BURNIE OFFICE

22 Pearl Street,
WIVENHOE TAS 7320
Tel: 03 6431 9627
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: 50/53 Very toxic to aquatic organisms.
May cause long term adverse effects in the aquatic environment.

Safety Phrases: S: 2 Keep out of the reach of children.
S: 8 Keep container dry.
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: 60 This material and its container must be disposed of as hazardous waste.
S: 61 Avoid release to the environment. Refer to special instructions / Material Safety Data Sheet.

Section 3: Composition/Information on Ingredients

Ingredients:

Sodium dichloroisocyanurate dihydrate	[51580-86-0]	10 - 30 %
Other ingredients deemed not to be hazardous		to 100 %
Available chlorine	[7782-50-5]	8 %

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. Seek medical advice.

First Aid facilities:

Mandatory: Eye wash. Hand wash basin.

Advice to Doctor:

Product is an alkaline mixture containing a moderate proportion of a chlorinating agent, with about 8 % available chlorine. May be irritating to skin and eyes. If swallowed, possible risk of mucosal damage. Inhalation exposure may lead to delayed onset pulmonary oedema. Contact Poisons Information Centre.

Aggravated medical conditions:

No specific data found.

Section 5: Fire Fighting Measures

HAZCHEM Code: None assigned.

Evacuate: No.

Extinguishant: Water.

Risk of violent reaction or explosion: No.

Products of combustion: Water vapour, chlorine, hydrogen chloride, oxides of nitrogen, hydrogen cyanide.

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:

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 closed 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.
Keep away from acids.

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. Keep away from acids, oxidising agents, other types of chlorinating agents. Protect from physical damage. Clean up all spills promptly; avoid secondary accidents.

Incompatibles:

Acids, other types of chlorinating agents, 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.

[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/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:

Dust mask
Face shield or safety glasses
Gloves, rubber or plastic
Plastic apron, sleeves and boots
Impervious overalls.

CAUTION: *Cotton or linen overalls impregnated with oxidising agents are readily ignited, and can burn fiercely.*

Section 9: Physical and Chemical Properties

Appearance: White, granular powder.
Odour: Slight smell of chlorine.
Odour threshold: from 0.3 ppm.
pH: About 8.2
Vapour Pressure: No data.
Vapour Density: No data.
Boiling Point: No data.
Melting Point: No data.
Volatiles: About 8 % as available chlorine.
Volatile Organic Compounds (VOC): Nil.
Evaporation Rate: Not applicable.
Solubilities: Soluble in water.
Specific Gravity/Density: No data.
Flash Point: None.
Flammable Limits: None.
Dust Explosion: Will not happen.
Auto-ignition Temperature: 240 °C

Other Information:

Alkaline mixture. Will react vigorously with acids, generating chlorine, a toxic gas, and carbon dioxide, a simple asphyxiant. May react with oxidising agents, reducing agents, and other types of chlorinating agents. May react violently with calcium hypochlorite. Slightly hygroscopic, may absorb moisture from the air. Will decompose slowly on contact with moisture. Dissolves in water to form a mixture, including sodium cyanurate, sodium hypochlorite and free chlorine. Heating above 240 °C may cause a self-sustaining auto-decomposition, generating toxic fumes. Incompatible with ammonium salts and nitrogenous compounds, combustible materials.

Section 10: Stability and Reactivity

- Chemical Stability:** Stable under normal conditions.
- Conditions to Avoid:** Incompatible materials, moisture, heat.
- Incompatible Materials:** Acids, oxidising agents, reducing agents, other types of chlorinating agents, ammonium compounds.
- Hazardous Decomposition Products:** Oxides of nitrogen, chlorine, hydrogen cyanide.
- Hazardous Reactions:** Reacts vigorously with acids, generating carbon dioxide and chlorine. May react violently with calcium hypochlorite, and other types of chlorinating agents. May react with combustible materials, especially in the presence of moisture.

Section 11: Toxicological Information

Health Effects:

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

- Acute:**
- Swallowed:** Harmful if swallowed. Likely to cause gastric upset, a burning sensation, nausea, vomiting and diarrhoea. May cause electrolyte disturbances if swallowed. May cause ulceration and bleeding from the digestive tract. Other effects may include lachrymation, difficulty breathing, sore throat.
 - Skin:** May be irritating to the skin. May cause redness, pain, skin burns - especially when wet.
 - Eyes:** Irritating to eyes. May cause redness, pain and possible burns.
 - Inhaled:** Irritating to the upper respiratory system. May cause coughing, sore throat. Exposure to higher levels of dust, or chlorine vapour, may cause pulmonary oedema (fluid build-up in the lungs), with the potential to become a medical emergency. Onset of symptoms may be delayed.
- Chronic:** Repeated or prolonged exposure to low levels of chlorine vapour may lead to chloracne.

LD₅₀:	Sodium dichloroisocyanurate	1,420 mg/kg oral, rat.
	Other ingredient #1	4,220 mg/kg oral, rat. 3,360 mg/kg oral, mouse.
LDLo:	Sodium dichloroisocyanurate	3,570 mg/kg oral, human.
TDLo:	Other ingredient #1	1,260 mg/kg oral, infant.

Section 12: Ecological Information

Ecotoxicity:	Very 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:	No data.

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.

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 assigned.
Packaging group:	None assigned.
Special precautions for user:	Contain spillages.
HAZCHEM Code:	None assigned.
Material for export:	Not regulated.

Section 15: Regulatory Information

Poisons (SUSDP):	Schedule S5. <i>Sodium dichloroisocyanurates, containing less than 40 % of available chlorine, but more than 4 % of available chlorine.</i>			
Dangerous Goods:	No. <i>The provisions of the Australian Dangerous Goods Code do not apply to the dihydrate of sodium dichloroisocyanurate.</i>			
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: June 2007
Complete review and re-write of all sections.

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.