



Material Safety Data Sheet

Guardex Advantage Chlor

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Company Details

Company:	Hydrotech Australia Pty Ltd
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Product Identification

Product Name:	Guardex Advantage Chlor	UN Code:	None *
Product Code(s):	H2911, H2912, H2913, H2914, H2915	HazChem Code:	None *
Other Names:	None	Dangerous Goods Class:	None *
Use(s):	Swimming pool sanitiser and shock treatment	Poisons Schedule:	S6

* For the purposes of transportation by road and rail, this product has been identified as a **non-dangerous good** by the Australian WorkCover Authority.

Hazardous according to the criteria of Worksafe Australia

Oxidising Agent (O)		Sensitisation (Xn)		Irritant (Xi)	
R8	Contact with combustible material may cause fire.	R22 R31	Harmful if swallowed. Contact with acids liberates toxic gas.	R36 R37	Irritating to eyes. Irritating to respiratory system.

Ref: National Occupational Health and Safety Commission, *Approved Criteria for Classifying Hazardous Substances* [NOHSC:1008(1999)]

PHYSICAL DESCRIPTION AND PROPERTIES

Boiling Point:	N App	Solubility:	34 g/L in water at 20°C
Melting Point:	Decomposes > 204° C	Specific Gravity:	1.0
Flammability Limits:	N Av	pH:	3.8 - 4.0
Vapour Pressure:	N Av	Appearance:	White granular solid, chlorine odour
Reactivity:	Stable under normal conditions.		
	Hazardous polymerisation will not occur under normal conditions.		

	To prevent degassing, avoid contact with water during storage or handling.
	Avoid contact with alkalis, easily oxidisable organic material, ammonia, urea and similar nitrogen-containing compounds.
	Avoid contact with calcium hypochlorite.

(N Av = Not Available; N App = Not Applicable)

COMPOSITION

Chemical Entity	Proportion by Weight	CAS Registry Number
Trichloro-s-triazinetrione (Trichloroisocyanuric Acid), 90 % Available Chlorine	71.8 %	87-90-1
Sodium Tetraborate Pentahydrate	8.0 %	12179-04-3
Non-hazardous Materials (not including Water)	Balance	Not allocated

Health Hazard Information

HEALTH EFFECTS

1. Effects from Acute Exposure

Swallowed:	Corrosive. Ingestion may result in severe burns to the digestive tract and can be fatal.
Eyes:	Corrosive. May cause severe eye irritation and possibly blindness.
Skin:	Corrosive. May cause burns.
Inhalation:	Corrosive. Inhalation of dust may cause irritation to nose, mouth and throat.

2. Effects from Chronic Exposure

Contains borates which have been shown to have reproductive and developmental toxicity when fed to test animals in extremely high doses. If used in accordance with label directions, however, these borates do not present an acute or chronic human toxicity hazard.

FIRST AID

Swallowed:	Do NOT induce vomiting. Give a glass of water and contact a Doctor or Poisons Information Centre (Phone: 13 1126). NEVER attempt to give anything by mouth to an unconscious person.
Eyes:	Immediately irrigate with copious quantities of water for at least 15 minutes. Eyelids to be held open. Seek medical attention.
Skin:	Immediately wash contaminated area with plenty of water. Remove contaminated clothing. Wash contaminated clothing before re-use. If irritation occurs, contact a Doctor.
Inhalation:	Move victim into fresh air and obtain medical assistance. If breathing has stopped, clear airway and give artificial respiration, preferable mouth-to-mouth. If breathing is difficult, give oxygen.

Advice to Doctor: Probable mucosal damage may contraindicate the use of gastric lavage.

Precautions for Use

The following advisory levels have been established for the constituents of this product:

Main Constituent	TLV (TWA)
Nuisance Dusts, Total	10 mg/m ³
Nuisance Dusts, Respirable	5 mg/m ³
Sodium Tetraborate Pentahydrate	1 mg/m ³

Data as published by the American Conference of Governmental Industrial Hygienists, Inc. (ACGIH). TLV (Threshold Limit Value) is the time-weighted average concentration of the work atmosphere for a normal 8-hour day and a 40-hour week, to which nearly all workers can be repeatedly exposed day after day without adverse effect. TWA is the Time-Weighted Average airborne concentration over an 8-hour working day, for a 5-day working week over an entire working life. TLV and TWA values are issued as guidelines for good practice. All atmospheric contamination should be kept to as low a level as is practically possible. These limits are stated only to indicate the **least** stringent airborne dust exposure levels applicable to nuisance dust. Dust from this product may cause irritation at exposure concentrations below these limits.

ENGINEERING CONTROLS

Use adequate ventilation to control exposure to levels below stated airborne limits.

PERSONAL PROTECTION

Avoid skin and eye contact. Wear overalls, chemical goggles and impervious gloves. Avoid generating and inhaling dusts. If dust exists, wear approved dust mask. Always wash hands before smoking, eating, drinking or using the toilet.

FLAMMABILITY

This product did not ignite when exposed to pallet-scale burn tests performed by an independent fire research facility.

Safe Handling Information

STORAGE AND HANDLING

This product is not considered as a Class 5.1 Oxidiser, having satisfied the burn testing requirements of UN Test 0.1. Not defined as Dangerous Goods in the *Australian Code for the Transport of Dangerous Goods by Road or Rail*. Protect from moisture and extremes of temperature.

SPILLS AND DISPOSAL

If fire or decomposition occurs in area of spill, immediately douse with plenty of water. Otherwise, sweep up all visible material using a clean, dry shovel and broom and dissolve material in water. Spilled material that has been swept up and dissolved in water should be used immediately in the normal application for which this product was being consumed. If this is not possible, carefully neutralise dissolved material by adding anhydrous

sodium sulfite (CAS Registry No. 7757-83-7) then diluting the neutralised material with plenty of water and flush to sewer. NOTE: Only properly neutralised material should be flushed to sewer. Unneutralised material can cause environmental damage to receiving water and can interfere with water treatment plant equipment.

FIRE AND/OR EXPLOSION HAZARD

This product did not ignite when exposed to pallet-scale burn tests. Nitrogen trichloride gas may be generated slowly by the reaction of small quantities of water with high concentrations of this product. Whilst nitrogen trichloride can pose an explosion hazard, an assessment performed upon the product indicates this risk is very low.

Extinguishing Medium:	Use large amounts of water only; smothering is ineffective due to ability of product to supply oxygen under combustion.
Special Fire Fighting Instructions:	Wear self-contained breathing apparatus.
Hazardous Combustion Products:	Under extreme heat (> 204°C) or in a fire environment, this product may evolve noxious chlorine-containing gases necessitating the need for self-contained breathing apparatus (SCBA) when applying extinguishing media (water).

Contact Information

Emergency Response Team Coordinator, Patrick Logistics - 1800 024 973 (24-hour service)

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