

GEOGARD ULTRA – SAFETY DATA SHEET

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

PRODUCT IDENTIFIER

Product name	Geogard Ultra
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DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Registered distributor company name	Pure Ingredients Ltd
Address	626A Rosebank Road, Avondale, Auckland 1026 New Zealand
Telephone	+649 8135619
Website	www.pureingredients.co.nz
Email	compliance@pureingredients.co.nz

EMERGENCY TELEPHONE NUMBER

CHEMCALL	0800 CHEMCALL / 800 243 622 (24hr)
Emergency telephone numbers	111
Other emergency telephone numbers	NZ Poisons Centre 0800 POISON (0800 764 766)

SECTION 2 HAZARDS IDENTIFICATION

GHS Classification

Combustible dust:

Eye irritation: Category 2A (6.4A - *Correlation between GHS and New Zealand HSNO Classes and Categories)

GHS label elements



Hazard pictograms:

Signal word: Warning

Hazard statements: May form combustible dust concentrations in air. H319 Causes serious eye irritation.

Precautionary statements:

Prevention: P264 Wash skin thoroughly after handling. P280 Wear eye protection/ face protection.

Response: 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 advice/ attention.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances / Mixtures: Mixture

Chemical name	CAS-No.	Concentration (%)
D-Glucono-1,5-lactone	90-80-2	70.00 - 80.00
Sodium benzoate	532-32-1	22.00 - 28.00
Calcium gluconate	299-28-5	1.00 - 2.00

SECTION 4 FIRST AID MEASURES

NZ Poisons Centre 0800 POISON (0800 764 766) | NZ Emergency Services: 111

Inhalation	Move to fresh air. Consult a physician after significant exposure. If unconscious, place in recovery position and seek medical advice. If breathing is irregular or stopped, administer artificial respiration. Keep respiratory tract clear.
Skin Contact Ingestion	After contact with skin, wash immediately with plenty of soap and water. If on clothes, remove clothes. In the case of skin irritation or allergic reactions see a physician.
Eye Contact	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

Notes to physician: Treat symptomatically.

In case of doubt or if the symptoms persist, always consult a doctor NEVER give anything by mouth to an unconscious person.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing Media	Water spray, Alcohol-resistant foam, Dry chemical
Specific hazards during firefighting	Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Heating or fire can release toxic gas.
Special protective equipment for firefighters	In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Use personal protective equipment. Avoid dust formation.
Environmental Precautions	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.
Methods of Cleaning for containment and cleaning up	Pick up and arrange disposal without creating dust. Non-sparking tools should be used. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).

SECTION 7 HANDLING AND STORAGE

Advice on safe handling	Avoid formation of respirable particles. Do not breathe vapours/dust. Avoid contact with skin and eyes. Smoking, eating and drinking should be prohibited in the application area. Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with local and national regulations.
Conditions for safe storage	Keep container tightly closed. Keep in a well-ventilated place. Electrical installations / working materials must comply with the technological safety standards. To maintain product quality, do not store in heat or direct sunlight.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Components with workplace control parameters	Contains no substances with occupational exposure limit values.
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Hazardous components without workplace control parameters

Components	CAS-No.
Sodium benzoate	532-32-1

Appropriate engineering controls: It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks.

Personal protective equipment

Respiratory protection: In the case of dust or aerosol formation use respirator with an approved filter.
Half mask with a particle filter P2 (EN 143)

Hand protection Material: Nitrile rubber
Remarks: Wear protective gloves. Break through time: > 480 min

Eye protection: Safety glasses with side-shields conforming to EN166. Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection: Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures: Avoid contact with skin, eyes and clothing. When using do not eat or drink. When using do not smoke.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Form	Powder	Vapor pressure	Not applicable
Colour	White	Relative Vapour Density	Not applicable
Odour	Mild	Relative Density	No data available
pH	No data available	Water solubility	Soluble
Melting point / Range	No data available	Partition coefficient: n-octanol / water	No data available
Boiling point / Range	Not applicable	Auto ignition temperature	Not determined

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES cont'd..

Flash Point	Not applicable	Decomposition Temperature	No data available
Evaporation Rate	Not applicable	Viscosity, dynamic	No data available
Flammability (solid, gas)	No data available	Explosive properties	No hazards to be specifically mentioned
Upper Explosion limit	No data available	Oxidizing properties	No data available
Lower Explosion limit	No data available		

SECTION 10 STABILITY AND REACTIVITY

Reactivity	No decomposition if stored and applied as directed.
Chemical Stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Stable under recommended storage conditions. No hazards to be specially mentioned.
Conditions to avoid	Heat.
Incompatible materials	Strong acids and strong bases Oxidizing agents
Hazardous decomposition products	Strong acids and strong bases Oxidizing agents

SECTION 11 TOXICOLOGICAL INFORMATION

Information on likely routes of exposure: Inhalation, Ingestion, Eyes, Skin

Acute toxicity:

Acute oral toxicity (Acute toxicity estimate): 2,661 mg/kg Method: Calculation method

Acute dermal toxicity (Acute toxicity estimate): 3,367 mg/kg Method: Calculation method

Skin corrosion/irritation:

Skin irritation: non irritant Exposure time: 15 min Method: EPISKIN Human Skin Model Test

Serious eye damage/eye irritation

Eye irritation: Remarks: no data available

Respiratory or skin sensitisation

Sensitisation: Remarks: no data available

Germ cell mutagenicity

Genotoxicity in vitro: Remarks: no data available

Carcinogenicity

Carcinogenicity: Result: no data available

Reproductive toxicity

Effects on fertility: Remarks: no data available

STOT - single exposure

Remarks: no data available

STOT - repeated exposure

Remarks: no data available

Aspiration toxicity: No aspiration toxicity classification

Further information: Remarks: no data available

The following toxicological data refer to: D-Glucono-1,5-lactone (CAS-No.: 90-80-2) Acute toxicity

Acute oral toxicity (LD50): > 2,000 mg/kg Species: Rat Method: OECD Test Guideline 401

Remarks: Information given is based on data obtained from similar substances.

Acute dermal toxicity (LD50): > 2,000 mg/kg Species: Rat Exposure time: 24 h Method: OECD Test Guideline 402

Remarks: Information given is based on data obtained from similar substances.

Skin corrosion/irritation

Skin irritation: Species: Rabbit Exposure time: 72 h Method: OECD Test Guideline 404

Remarks: Information given is based on data obtained from similar substances.

Serious eye damage/eye irritation

Eye irritation: Species: Rabbit Exposure time: 72 h Method: OECD Test Guideline 405

Remarks: Information given is based on data obtained from similar substances.

Respiratory or skin sensitisation

Sensitisation: Species: Mouse Method: OECD Test Guideline 429 Result: not sensitizing

Remarks: Information given is based on data obtained from similar substances.

Germ cell mutagenicity

Genotoxicity in vitro: negative Ames test, Salmonella typhimurium

Metabolic activation: yes Remarks: Literary reference

Negative Chromosome aberration test in vitro, Chinese hamster lung cells Metabolic activation: no Remarks: Literary reference

Reproductive toxicity

Effects on foetal development: Species: Mouse Application Route: Oral Duration of Single Treatment: 20 d

General Toxicity Maternal: No observed adverse effect level: 695 mg/kg body weight

Method: OECD Test Guideline 414

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity	Toxicity to fish:	Remarks: no data available
Persistence and degradability	Biodegradability:	Result: no data available
Bioaccumulative potential	Bioaccumulation:	Remarks: no data available
Mobility in soil	Distribution among environmental compartments:	Remarks: no data available
Other adverse effects	Additional ecological information:	no data available

The following ecotoxicological data refer to: D-Glucono-1,5-lactone (CAS-No.: 90-80-2)

Ecotoxicity	Toxicity to fish (LC50):	360 mg/l
	Species: <i>Leuciscus idus</i> (Golden orfe) Acute toxicity	Exposure time: 48 h Method: DIN 38412 Part 15
Toxicity to daphnia and other aquatic invertebrates (EC50):		305 mg/l
	Species: <i>Daphnia magna</i> (Water flea) Immobilization	Exposure time: 24 h Method: OECD Test Guideline 202
Toxicity to algae (ErC50):		> 500 mg/l
	Species: <i>Scenedesmus capricornutum</i> (fresh water algae) End point: Growth rate	Exposure time: 72 h Method: DIN 38412
Chronic toxicity to Daphnia:	Toxicity to bacteria (EC0):	> 500 mg/l
	Species: <i>Pseudomonas putida</i> Growth inhibition	Exposure time: 16 h Test Type: Growth inhibition Method: DIN 38412 Part 8
Persistence and degradability		
	Test Type: Closed Bottle test Result: Readily biodegradable. Biodegradation: 71 % Exposure time: 5 Days	
	Method: OECD Test Guideline 301D	
	Test Type: Zahn-Wellens Test Result: Biodegradable Biodegradation: 98 % Exposure time: 2 Days	
	Method: OECD Test Guideline 302 B Test substance: see user defined free text	
	Test Type: Closed Bottle test Result: Readily biodegradable. Biodegradation: 89 % Exposure time: 28 d	
	Remarks: Information given is based on data obtained from similar substances.	
Bioaccumulative potential	Bioaccumulation :	Bioconcentration factor (BCF): 3 Remarks: Literary reference
Mobility in soil		no data available
Other adverse effects		no data available

SECTION 13 DISPOSAL CONSIDERATION

Waste from residues: Dispose of contents/container in accordance with local regulation. Contact waste disposal services. Do not dispose of waste into sewer.

Contaminated packaging: Dispose of as unused product. Do not re-use empty containers.

SECTION 14 TRANSPORT INFORMATION

IATA, IMDG, ADR, RID, DOT, TDG: Not dangerous goods

UN number	: Not applicable
Proper shipping name	: Not applicable
Transport hazard class	: Not applicable
Packing group	: Not applicable
Environmental hazards	: no

Special precautions for user : none

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: not applicable

SECTION 15 REGULATORY INFORMATION

WHMIS Classification: Not a controlled Product

EPCRA - Emergency Planning and Community Right-to-Know Act SARA 311/312 Hazards

See above: SECTION 2. Hazard Identification-GHS Classification

SARA 302 No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SECTION 16 OTHER INFORMATION

The information contained in this Safety Data Sheet is obtained from current and reliable sources. Pure Ingredients Ltd provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This Safety Data Sheet summarises our best current knowledge of the health and safety hazard information of the product, but does not claim to be all inclusive. This document is intended only as a guide to the appropriate handling of this material.

References:

Manufactures Safety Data Sheet

Version: 00 Revision Date: 03/04/2018: PIL New issue.

Version: 01 Revision Date: 04/05/2020: PIL SDS Change of address