

SAFETY DATA SHEET

ELCOSEAL Geosynthetic Clay Liner (GCL)

Infosafe No.: LQ895 ISSUED Date : 26/08/2022 ISSUED by: GEOFABRICS AUSTRALASIA PTY LTD

Section 1 - Identification

Product Identifier

ELCOSEAL Geosynthetic Clay Liner (GCL)

Company Name

GEOFABRICS AUSTRALASIA PTY LTD

Address

83-93 Canterbury Road Braeside VIC AUSTRALIA

Telephone/Fax Number Tel: 03 8586 9144

Emergency Phone Number 03 8586 9144

Recommended use of the chemical and restrictions on use

ELCOSEAL Geosynthetic Clay Liners (GCLs) are used as an easy to install lining system in landfills and waste containment structures and for liquid containment in effluent ponds and tailings dams. ELCOSEAL GCLs are also effective liners for dams, ponds, lakes, wetlands, irrigation canals and channels.

Additional Information

Geofabrics New Zealand Ltd 14 Goodman Place, Penrose, Auckland 1061 New Zealand NZ Customer Service Number: 0011 64 9 634 6495 NZ Emergency contact number: 0011 64 9 634 6495 (available from 7.30am to 5.00pm)

Section 2 - Hazard(s) Identification

GHS classification of the substance/mixture

Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Classified as Hazardous according to the Hazardous Substances (Hazard Classification) Notice 2020, New Zealand.

Not classified as Dangerous Goods for transport according to the New Zealand Standard NZS 5433:2020 Transport of Dangerous Goods on Land.

Carcinogenicity: Category 1A

Specific target organ toxicity (repeated exposure): Category 2

Signal Word (s) DANGER

Hazard Statement (s)

H350 May cause cancer by inhalation. H373 May cause damage to organs lungs through prolonged or repeated exposure by inhalation.

Pictogram (s) Health hazard



Precautionary Statement – Prevention

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statement – Response

P308+P313 IF exposed or concerned: Get medical advice/attention. P314 Get medical advice/attention if you feel unwell.

Precautionary Statement – Storage

P405 Store locked up.

Precautionary Statement – Disposal

P501 Dispose of contents/container to an approved waste disposal plant.

Section 3 - Composition and Information on Ingredients

Ingredients

Name	CAS	Proportion
Quartz/Cristobalite	14808-60-7 & 14464-46-1	<18 %
Ingredients determined not to be hazardous		Balance

Section 4 - First Aid Measures

Inhalation

If inhaled, remove affected person from contaminated area. Apply artificial respiration if not breathing. Seek medical attention.

Ingestion

Do not induce vomiting. Wash out mouth thoroughly with water. Seek medical attention.

Skin Wash affected area thoroughly with soap and water. If symptoms develop seek medical attention.

Eye

If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing for several minutes until all contaminants are washed out completely. If symptoms develop and/or persist seek medical attention.

First Aid Facilities

Eyewash and normal washroom facilities.

Advice to Doctor

Treat symptomatically.

Other Information

For advice in an emergency, contact a Poisons Information Centre (phone Australia 131 126; New Zealand 0800 764 766) or a doctor at once.

Section 5 - Firefighting Measures

Suitable Extinguishing Media

Use extinguishing media that are suitable for the surrounding combustible materials.

Hazards from Combustion Products

Non combustible material.

Specific hazards arising from the chemical

This product is non combustible. However heating can cause expansion or decomposition. The packaging may burn under fire conditions.

Decomposition Temperature

Not available

Precautions in connection with Fire

Fire fighters should wear Self-Contained Breathing Apparatus (SCBA) operated in positive pressure mode and full protective clothing to prevent exposure to vapours or fumes. Water spray may be used to cool down heat-exposed product.

Section 6 - Accidental Release Measures

Emergency Procedures

Increase ventilation. Evacuate all unprotected personnel. Wear sufficient respiratory protection and full protective clothing to prevent exposure. Sweep up material avoiding dust generation or dampen spilled material with water to avoid airborne dust, then transfer material to a suitable container. Wash surfaces well with soap and water. Seal all wastes in labelled plastic containers for subsequent recycling or disposal. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

Section 7 - Handling and Storage

Precautions for Safe Handling

Use only in a well ventilated area. Prevent the build up of dust in the work atmosphere. Avoid inhalation of dust, and skin or eye contact. Maintain high standards of personal hygiene i.e. Washing hands prior to eating, drinking, smoking or using toilet facilities. Avoid exposure. Do not handle until all safety precautions have been read and understood.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated area, out of direct sunlight and moisture. Ensure at all times the product is labelled as HAZARDOUS and that locations in which the product is stored has appropriate reference to the presence of HAZARDOUS material. Store away from incompatible materials. Ensure that storage conditions comply with applicable local and national regulations.

Section 8 - Exposure Controls and Personal Protection

Occupational exposure limit values

No exposure standards have been established for this material. However, the available exposure limits for ingredients are listed below:

Crystalline Silica (quartz and cristobalite) (Australia and New Zealand) TWA: 0.05 mg/m³ Notices: Carc.1A (Australia) Notes: confirmed carcinogens (New Zealand)

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eighthour working day, for a five-day week.

STEL (Short Term Exposure Limit): The average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

'Carc.1A' Notice: Known to have carcinogenic potential for humans.

Source: Safe Work Australia and Workplace Exposure Standards and Biological Exposure Indices, New Zealand.

Biological Monitoring

No biological limits allocated.

Control Banding

Not available

Engineering Controls

This substance is hazardous and should be used with a local exhaust ventilation system, drawing solid/dust away from workers' breathing zone.

Respiratory Protection

If engineering controls are not effective in controlling airborne exposure then an respirator with a replaceable dust/particulate filter should be used. Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

Eye and Face Protection

Safety glasses with side shields, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/ face protection will vary according to individual circumstances. Eye protection devices should conform to relevant regulations. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337(series) - Eye Protectors for Industrial Applications.

Hand Protection

Wear gloves of impervious material. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

Thermal Hazards

No further relevant information available.

Body Protection

Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

Properties	Description	Properties	Description
Form	Powder	Appearance	Light pink, off white impalpable powder or granules
Colour	Light pink, off white	Odour	No distinct odour
Melting Point	Not available	Boiling Point	Not applicable
Decomposition Temperature	Not available	Solubility in Water	Insoluble. Forms colloidal suspensions in water, with strong thixotropic properties.
Specific Gravity	3.30	рН	7-9 (20% aqueous slurry)
Vapour Pressure	Not applicable	Relative Vapour Density (Air=1)	Not applicable
Evaporation Rate	Not available	Odour Threshold	Not available
Viscosity	Not available	Partition Coefficient: n- octanol/water (log value)	Not available
Flash Point	Not applicable	Flammability	Non-combustible
Auto-Ignition Temperature	Not applicable	Explosion Limit - Upper	Not applicable
Explosion Limit - Lower	Not applicable	Particle Size	Not available
Particle Characteristics	Not available		

Section 9 - Physical and Chemical Properties

Section 10 - Stability and Reactivity

Reactivity Not available

Chemical Stability Stable under normal conditions of storage and handling.

Possibility of hazardous reactions Not available

Conditions to Avoid

Extremes of temperature, dust accumulation.

Incompatible Materials

Not available

Hazardous Decomposition Products Not available

Hazardous Polymerization

Will not occur.

Section 11 - Toxicological Information

Toxicology Information

No toxicity data available for this product.

Ingestion

Ingestion of this product may irritate the gastric tract causing nausea and vomiting.

Inhalation

Inhalation of dusts may irritate the respiratory system. Chronic exposure to this material may aggravate existing respiratory disorders and lung disorders such as bronchitis, emphysaema and asthma. Onset and progression are related to dust concentrations and duration of exposure.

Repeated exposure to respirable crystalline silica dust may lead to silicosis, or other serious delayed lung injury. The onset of silicosis is usually slow and lung damage may occur even when no symptoms or signs of ill-health have occurred. Silicosis can develop to a more serious degree even after exposure has ceased, and may also lead to other diseases including heart disease and scleroderma. Exposure by inhalation may aggravate pre-existing upper respiratory and lung disorders such as bronchitis, emphysaema and asthma.

Skin

Skin contact may cause mechanical irritation resulting in redness, itching and swelling. Repeated exposure may cause skin dryness and cracking and may lead to dermatitis.

Eye

Eye contact may cause mechanical irritation. May result in mild abrasion.

Respiratory Sensitisation

Not expected to be a respiratory sensitiser.

Skin Sensitisation

Not expected to be a skin sensitiser.

Germ Cell Mutagenicity

Not considered to be a mutagenic hazard.

Carcinogenicity

May cause cancer by inhalation.

Respirable crystalline silica (quartz or cristobalite) is classified by International Agency for Research on Cancer (IARC) as carcinogenic to humans by inhalation (Group 1).

Reproductive Toxicity

Not considered to be toxic to reproduction.

STOT - Single Exposure

Not expected to cause toxicity to a specific target organ.

STOT - Repeated Exposure

May cause damage to organs lungs through prolonged or repeated exposure by inhalation.

Aspiration Hazard

Not expected to be an aspiration hazard.

Section 12 - Ecological Information

Ecotoxicity

No ecological data are available for this material.

Persistence and degradability

Not available

Mobility Not available

Bioaccumulative Potential Not available

Other Adverse Effects Not available

Environmental Protection Prevent this material entering waterways, drains and sewers.

Hazardous to the Ozone Layer This product is not expected to deplete the ozone layer.

Section 13 - Disposal Considerations

Disposal Considerations

Australia:

The disposal of the spilled or waste material must be done in accordance with applicable local and national regulations. To minimise personal exposure to the chemical, refer to Section 8 — Exposure controls and personal protection.

New Zealand:

Product Disposal:

Product wastes are controlled wastes and should be disposed of in accordance with all applicable local and national regulations. This product can be disposed through a licensed commercial waste collection service. The product should be rendered non-hazardous before being sent to a licensed landfill facility.

Personal protective clothing and equipment as specified in Section 8 of this SDS must be worn during handling and disposal of this product. The ventilation requirements as specified in the same section must also be followed, and the precautions given in Section 7 of this SDS regarding handling must also be followed. Do not dispose directly into the sewerage system. Do not discharge into drains or watercourses or dispose where ground or surface waters may be affected.

In New Zealand, the disposal agency or contractor must comply with the New Zealand Hazardous Substances (Disposal) Notice (2017). Further details regarding disposal can be obtained on the EPA New Zealand website under specific group standards.

Container Disposal:

The container or packaging must be cleaned and rendered incapable of holding any substance. It can then be disposed of in a manner consistent with that of the substance it contained. In this instance the packaging can be disposed through a commercial waste collection service.

Alternatively, the container or packaging can be recycled if the hazardous residues have been thoroughly cleaned or rendered nonhazardous.

In New Zealand, the packaging (that may or may not hold any residual substance) that is lawfully disposed of by householders or other consumers through a public or commercial waste collection service is a means of compliance with regulations.

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Section 14 - Transport Information

Transport Information

Australia Road and Rail Transport (ADG Code): Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code) (7th edition).

New Zealand

Road and Rail Transport:

Not classified as Dangerous Goods for transport according to the New Zealand Standard NZS 5433: 2020 Transport of Dangerous Goods on Land.

Marine Transport (IMO/IMDG):

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Air Transport (ICAO/IATA):

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

ADG U.N. Number None Allocated

ADG Proper Shipping Name None Allocated

ADG Transport Hazard Class None Allocated

Special Precautions for User Not available

IMDG Marine pollutant No

Transport in Bulk Not available

Section 15 - Regulatory Information

Regulatory Information

Australia:

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) including Work, Health and Safety Regulations, Australia.

Not Classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

New Zealand:

Classified as Hazardous according to the Hazardous Substances (Minimum Degrees of Hazard) Notice 2020, New Zealand. Group Standard: Additives, Process Chemicals and Raw Materials (Carcinogenic) Group Standard 2020.

Poisons Schedule Not Scheduled

HSNO Approval Number HSR002512

Australia (AICS/AIIC) All components of this product are listed on the Inventory or exempted.

Montreal Protocol Not listed

Stockholm Convention Not listed

Rotterdam Convention Not listed

International Convention for the Prevention of Pollution from Ships (MARPOL)

Not available

Agricultural and Veterinary Chemicals Act 1994 Not available

Basel Convention Not available

Section 16 - Any Other Relevant Information

Date of Preparation

SDS Reviewed: August 2022 Supersedes: August 2017

Version Number

2.0

Literature References

Australia

Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.

Standard for the Uniform Scheduling of Medicines and Poisons.

Australian Code for the Transport of Dangerous Goods by Road & Rail.

Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.

Code of Practice for Supply Diversion into Illicit Drug Manufacture.

National Code of Practice for Chemicals of Security Concern.

Agricultural Compounds and Veterinary Chemicals Act.

International Agency for Research on Cancer (IARC) Monographs.

Montreal Protocol on Substances that Deplete the Ozone Layer.

Stockholm Convention on Persistent Organic Pollutants (POPs).

Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade.

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal.

International Air Transport Association (IATA) Dangerous Goods Regulations.

International Maritime Dangerous Goods (IMDG) Code.

Workplace exposure standards for airborne contaminants.

Adopted biological exposure determinants, American Conference of Industrial Hygienists (ACGIH).

Globally Harmonised System of Classification and Labelling of Chemicals (7th revised edition).

Code of Practice: Managing Noise and Preventing Hearing Loss at Work.

New Zealand

Hazardous Substances and New Organisms Act (1996).

Health and Safety at Work (Hazardous Substances) Regulations (2017).

Workplace Exposure Standards and Biological Exposure Indices.

Agricultural Compounds and Veterinary Medicines Act 1997.

Montreal Protocol on Substances that Deplete the Ozone Layer.

Stockholm Convention on Persistent Organic Pollutants (POPs).

Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade.

Transport of Dangerous goods on land NZS 5433.

Preparation of Safety Data Sheets - Approved Code of Practice Under the HSNO Act 1996 (HSNO CoP 8-1 09-06).

Assigning a hazardous substance to a group standard.

Adopted biological exposure determinants, American Conference of Industrial Hygienists (ACGIH).

END OF SDS

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