



MATERIAL SAFETY DATA SHEET



SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Company: COLAN PRODUCTS PTY LIMITED
Address: 6 Woods Close, Huntingwood NSW 2148
Telephone Number: (61 2) 9672 7888
Emergency Telephone Number: 0418 460 721

Product Name: Fibreglass Woven Fabrics & Tapes
Other Names: Glassfibre Fabrics & Tapes
Manufacturer's Product Code: AF & AT series Fabrics
UN Number: N/A
Dangerous Goods Class and Subsidiary Risk: Non-hazardous
Hazchem Code: N/A
Poisons Schedule Number: N/A
Use: Composite Reinforcement and Heat Resistant Textiles

SECTION 2 HAZARDS IDENTIFICATION

Emergency Overview

The product is stable and not flammable under normal industrial conditions. No unusual conditions are expected from this product.

Primary Route(s) of Exposure

Inhalation, skin, eye.

Health Effects

Acute

- Swallowed:** Temporary mechanical irritation of the digestive tract. Observe individual - if symptoms develop, consult a physician.
- Eye:** Eye contact with dusts and fibres may produce temporary mechanical irritation.
- Skin:** Skin contact with dusts and fibres may produce itching and temporary mechanical irritation.
- Inhaled:** Inhalation of dusts and fibres may result in irritation of the upper respiratory tract (mouth, nose and throat).

Chronic

There are no other known health effects associated with chronic exposure to this product.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Proportion</u>	<u>(% w/w)</u>
	65997-17-3		
Silicon Dioxide		55.0 }	
Aluminium Oxide		14.5 }	
Calcium Oxide		22.0 }	
Magnesium Oxide		0.3 }	97.5
Sodium Oxide		0.4 }	
Boron Oxide		7.5 }	
Potassium Oxide		0.3 }	
Organic Size		- }	2.5

SECTION 4 FIRST AID MEASURES

First Aid

- Swallowed:** Rinse mouth with water. An emetic is not necessary unless choking is apparent. Seek medical attention
- Eye:** Wash with running water using eye bath or wash bottle. If irritation persists, seek medical attention.
- Skin:** Wash with mild soap and running water. Use a washcloth to help remove dust and fibres. To avoid further irritation, do not rub or scratch irritated areas. Rubbing or scratching may force fibres into the skin. Seek medical attention if irritation persists.
- Inhaled:** Move individual to fresh air. Seek medical attention if irritation persists.
- Advice to Doctor:** Emergency treatment.

SECTION 5 FIRE FIGHTING MEASURES

Flash Point: May emit smoke briefly between 120-180°C but is unlikely to flash.
Flammability Limits: Non-flammable

Flash Point Method: Not determined
Upper Flammability Limit: None **Lower Flammability Limit:** None
Flammability Classification: Non-flammable

Extinguishing Media: Dry chemical, foam, carbon dioxide and water fog.

Unusual Fire & Explosion Hazards: None known

Fire-Fighting Instructions:

In any sustained fire, wear self-contained breathing apparatus and a full bunker turnout gear. Every company should have written Fire Evacuation Policy including training that complies to government regulations.

Special Exposure Hazards From Fire:

The larger part of the product is non-flammable E-Glass. Hazardous decomposition products of combustion from sizing and binders may be released in a sustained fire.

In a sustained fire, sizing and binders may decompose, releasing combustion products including carbon dioxide, carbon monoxide and water.

Additionally, there are many chemicals that can evolve during any partial decomposition of chemical products. The amounts or identities cannot be predicted and can differ in each situation.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Containment Procedures:

Air Release: This material will settle out of air. If concentrated on land it can then be scooped up or disposed of as a non-hazardous waste.

Land Spill: Scoop up material for disposal as non-hazardous waste. Dispose of as a solid waste in accordance with Local, State and Federal Government regulations.

Water Spill: This material will sink and disperse along the bottom of waterways and ponds. It cannot be easily removed after it is waterborne, however, the material is non-hazardous in water.

Clean-Up Procedures:

Scoop up material and put into a suitable container for disposal as a non-hazardous waste.

Response Procedures:

Isolate area. Keep unnecessary personnel away.

Special Procedures: None.

SECTION 7 HANDLING AND STORAGE

Handling Procedures:

In accordance with good working practices keep the product in its package as long as practicable to minimise potential dust generation. Keep the work areas clean.

Storage Procedures:

Store in a dry place and in such a manner that will prevent airborne dust in the work place. For optimum performance, store at temperatures 15 - 25°C and at a relative humidity below 65% in their original packages.

SECTION 8 EXPOSURE CONTROL AND PERSONAL PROTECTION

Exposure Limits:

The American Conference of Governmental Hygienist [ACGIH] has adopted a Threshold Limit Value [TLV] of $5\text{mg}/\text{m}^3$ for 8 hour time weighted average [TWA] exposure for fibrous glass dust, invaluable fraction.

The Occupational Safety and Health Administration [OSHA] does not prescribe Permissible Exposure Limit [PEL] for fibrous glass but relies on the PEL-TWA's for nuisance dust of $15\text{mg}/\text{m}^3$ (total) and $5\text{mg}/\text{m}^3$ (respirable).

Available air sampling/analytical methods:

Gravimetric total dusts NIOSH Sampling & Analytical Method 0500; the Gravimetric respirable dusts NIOSH Method 0600 and the NIOSH 7400, B Fibre Counting Rules. The later two methods may be performed as redundant verification that there are no respirable glass fibres.

Ventilation:

Local exhaust ventilation (if needed) to minimize airborne dust levels.

Engineering Controls: Not Applicable

Personal Protection:

Respiratory Protection - Some application of these products may not required respiratory protection. However, if airborne fibrous glass concentrations exceed regulatory limits, respiratory protection apparatus for nuisance dusts is recommended.

Skin/Eye Protection - Good personal hygiene and the use of barrier creams, caps, protective gloves, cotton coveralls, or long sleeved loose fitting clothing will maximize comfort. Vacuum equipment may be used to remove fibres from clothes. Work clothing should be laundered separately from other clothing. When there is a chance of airborne glass fibres contacting eyes, wear appropriate eye protection such as safety glasses with side shields.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES



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Appearance:	White fibres with virtually no odour. Non-combustible solid.
Melting Point:	>800°C
Boiling Point:	Not applicable
Freezing Point:	Not applicable
Vapour Pressure:	Not applicable
Specific Gravity:	2.54 - Glass Fibre
Solubility in Water:	Negligible

Additional Information:
No additional information available

SECTION 10 STABILITY AND REACTIVITY

Stability:	Stable	Conditions to avoid:	None known
Incompatible Materials:	None	Hazardous Polymerisation:	Will not occur

Hazardous Decomposition Products:
Sizing and binders may decompose in a fire. See section 5 of the MSDS for information on hazardous combustion products.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute Effects:

General Product Information

Dust may cause mechanical irritation to eyes and skin. Ingestion may cause transient irritation of throat, stomach and gastrointestinal tract. Inhalation may cause coughing, nose and throat irritation and sneezing. People with pre-existing respiratory conditions may experience breathing difficulty, congestion and chest tightness.

Factors in the fibre toxicity include fibre dimensions and degree of exposure.

Fibre Dimensions:

Fibres are either non-respirable or respirable. Respirable fibres can penetrate to the deep lung area. According to the World Health Organisation (WHO) man-made mineral fibres with diameters equal to or greater than 3 microns are non-respirable. According to the National Institute for Occupational Safety and Health (NIOSH) fibres with diameters equal to or greater than 3.5 microns are non-respirable. The narrow bending passages of the human respiratory system do not permit the relatively large non-respirable fibres to enter the deep lung area. Instead they stride the surfaces of the upper respiratory tract, nose or pharynx and stop. Nasal hairs or other natural mechanisms may then filter them.

Due to the manufacturing process used the fibreglass products have diameters greater than 3.5 microns and are considered to be non-respirable. The fibres do not become respirable fibres upon the machine/sanding processing activities typical of our customers. Upon breakage the fibres may break horizontally into smaller lengths but not longitudinally in to smaller diameters. As with any sanding/grinding activity respirable dust may be generated.



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Degree of Exposure:

According to Johnson ET. Al. in a 1969 US study of four fibrous glass production plants, it was stated, as 'the results in terms of airborne concentrations of fibreglass and total dust would indicate that the workmen's exposure to these materials is negligible'.

Carcinogenicity:

Fibreglass Continuous Filament:

The International Agency of Research on cancer (IARC) is part of the World Health Organisation. IARC concludes that fibreglass continuous filaments are not classifiable as to their Carcinogenicity in human (Group 3) because there is inadequate evidence on the Carcinogenicity of these materials in humans or experimental animals.

In a 1987 European study (over 20 years latency) there was no excess of respiratory cancer found. In both studies there were no increasing trend with an estimated time-weighted measure of exposure. In a study of administering large diameter glass filament (>3 microns) intraperitoneal to rats, no statistically significant tumour response was found. The American Conference of Governmental Hygienist (ACGIH) gives continuous filament fibreglass an (A4) designation meaning 'Not classifiable as a human carcinogen'. Continuous filament fibreglass is not listed in the National Toxicology Program (NTP) 7th Annual Report on Carcinogens, nor it is regulated by OSHA as a carcinogen.

Note: There is no known chronic health effects connected with a long-term use or contact with these products.

SECTION 12 ECOLOGICAL INFORMATION

Fibreglass is generally considered to be an inert solid waste and no special precautions are required in case it is released or spilled. These products do not contain nor are manufactured with Class1 or Class11 Ozone-Depleting Chemicals (CFCs) identified in the Clean Air Act Amendment, 1990 List of Ozone Depleting Chemicals.

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal Instructions:

Fibreglass is considered non-hazardous as per EPA, RCRA, 40CFR, PART 361, 1990 and considered as an inert solid waste. Local, State and National Regulations should be consulted to ensure proper disposal procedures. Fibreglass products that are part of a reinforced plastic or uncured resin system, must be disposed of in accordance with applicable requirements. Not regulated by the Department of Transportation [DOT].

No other special precautions required

SECTION 14 TRANSPORT INFORMATION

Department of Transport Information

Not regulated for transport by the Department of Transportation (DOT).



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Additional Transportation Regulations:

No additional information available.

SECTION 15 REGULATORY INFORMATION

US Federal Regulations:

General Product Information:

No additional information available.

Component Analysis:

No additional information available.

The following is provided to aid in the preparation of SARA 311 and 312 reports.

SARA311/312

Acute Health Hazard:	Yes
Chronic Health Hazard:	No
Fire Hazard:	No
Sudden Release of Pressure Hazard:	No
Reactive Hazard:	No

Clean Air Act:

No ingredient is listed in the Clean Air Act-1990 Hazardous Air Pollutants List.

Additional Regulatory Information

Canada: Exempt from Canadian Environmental Protection Act (CEPA) reporting on the Domestic Substance Lists as these products are considered as articles. Exempt from Workplace Hazardous Materials Information System (WHMIS) labelling and MSDS requirements. However, fibrous glass is on the Ingredient Disclosure List. It must be listed as an ingredient on MSDS as 'controlled products' with fibreglass concentration of greater than 1.0%.

European Economic Committee (EEC) Labelling Classification: Fibreglass does not meet the classification for a 'dangerous substance' according to 67/548/EEC. The E-glass composition has been incorporated in the EINECS under NR-65997-17-3 as a generic substance.

Japan: Chemical Substances Control Law: Fibreglass is exempt from this law.

United States of America: EPA Toxic Substances Control Act (TSCA): Fibreglass carries no chemical abstracts index name, CAS registry number or EPA code designation number, Fibreglass is an 'article' as defined in section 710.2(f). It is exempted from EPA SARA Title III reporting that they do not meet its health or physical hazards definitions nor contain any SARA313 chemical ingredients in excess of EPA's minimus concentrations.

SECTION 16 OTHER INFORMATION

Work/Hygiene Practices:

Recommend washing work clothes separately and wipe out the washing machine after use.

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Health and Safety on Product Packaging:

Contact with fibrous glass may cause temporary skin irritation. Wear long-sleeved, loose fitting clothing when handling the material. Gloves and eye protection may be appropriate in certain operations. Wash with soap and warm water after handling. Use of a disposable mask in accordance with Occupational Safety and Health Administration 1910.134 respiratory protection requirements designed for nuisance dust is advisable where high dust levels may be encountered. The International Agency for Research on Cancer [IARC] has designated continuous filament fibreglass as a group 3 “not classifiable as to human carcinogenicity”, meaning that evidence is not sufficient to link that fibre to cancer.

CONTACT POINT:

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DISCLAIMER

The information provided herein is believed to be accurate but is not warranted to be, whether it originated with Colan Products or not. Much of the information contained in this Material Safety Data Sheet originates from the suppliers, this information cannot be warranted by Colan Products to be correct or appropriate for the recipient’s intended use. Recipients are advised to confirm in advance of need that the information is correct, applicable and suitable to their circumstances.