Safety data sheet

E-Glass

Section 1: Identification of the substance and of the company titles

1.1 Identification of the substance: Untreated glassfibre textile materials

Chemical formula

E-glass.

Product description

Glass fibre textile in the form of:- woven cloth, woven roving cloth, woven tape, rope lagging, braided packing, knitted packing, twisted yarn, needlefelt.

1.2 Company titles:

THS Industrial Textiles, Foxholes, Foxholes Road, Rochdale OL12 9BS
Cel-Glass Limited, Foxholes, Foxholes Road, Rochdale OL12 9BS
Telephone: + 44 (0)1706 861928 Telefax: + 44 (0)1706 641360

Section 2: Composition/Information on ingredients

Ingredients	% weight	Control limit
Fibrous Glass (E type, continuous filament) Composition consisting principally of oxides of silicon, aluminium, calcium boron and magnesium, fused in an amorphous vitreous state.	90.0 (Min)	To be considered as a (non respirable) “nuisance” dust. Control limits according to local regulations.
Surface sizing – complex mixture, in general, of polymers.	2.0 (Max)	None established

Glass fibre does not meet the classification for a “dangerous substance” according to 67/548/EEC. Glass fibre carries no CA, no CAS registry number and no EPA code designation number. Glass as a generic substance, the E glass composition including, has been incorporated in the EINECS under no. 65997-17-3.
Glass fibre is considered to be an article as defined in section 710.2 (F) of the U.S. TSCA and, as such, is exempt from section 5 and section 8 (B) reporting requirements.

Section 3: Hazards Identification

Overview

Exposure to continuous filament glass fibres sometimes causes irritation of the skin, and, less frequently, irritation of the eyes, nose or throat. However, the fibres, due to their favourable diameters are not respirable, nor can they become respirable by any normal industrial processing.

Primary Route of entry

Inhalation.

Signs and Symptoms of Over exposure

Rash, itching, conjunctivitis, coughing, sneezing.

Health Hazards

Exposure to continuous filament glass fibres sometimes causes irritation of the skin and less frequently, irritation to the eyes, nose or throat.

Carcinogenic Status

Continuous filament glass fibre has been designated by the International Agency for Research on Cancer as a Group 3, “not classifiable as to human carcinogicity”. This means that evidence is insufficient to link that fibre to cancer.

Medical Conditions Aggrevated by Exposure

None known.

EEC Labelling Classification

Not a dangerous substance or preparation.

Section 4: First-Aid Measures

Eye Contact

Flush eyes with clear water for at least 15 minutes – seek medical attention.

Skin Contact

Rinse contact areas with water which is room temperature to cool, then wash gently with mild soap. If glass fibre becomes embedded, seek medical attention.

Inhalation

If irritation persists, seek medical attention.

If swallowed

Seek medical attention.

Section 5: Fire Fighting Measures

Flash Point:	Non-burning.
Flammable Limits:	N/A.
Extinguishing Media:	N/A.
Special Fire Fighting Procedures:	In a sustained fire, self-contained breathing apparatus should be used.
Unusual Fire and Explosion Hazards:	N/A.
Special Exposure Hazards from Fire:	Hazardous products in the size or binders may be released in a sustained fire. The glass fibre product is nonflammable E glass.

Section 6: Accidental Release Measures

Steps to be taken in Case Material is Released or Spilled

No special precautions.

Waste Disposal Method

Dispose of as solid waste in accordance with Government regulations.

Product is to be considered as a non-respirable “nuisance dust”. Use of suitable overalls maximize comfort both at cleaning up and normal processing activities.

Section 7: Handling and Storage

7.1 Handling

Precautions to be Taken in Handling

None relative to health and safety. This product is to be considered as a non-respirable “nuisance” dust. Control limits according to local regulations, typical Threshold Limit Value (TLVâ) being 10 mg/m^3 (time weighted average (TWA), 8 hours).

7.2 Storage

Precautions to be Taken in storage

For optimum performance glass fibre products should be stored at temperatures less than 25ºC and a relatively humidity less than 65%. Glass fibre has electrical isolation properties and so may give some static.

Section 8: Exposure Controls/Personal Protection

Respiratory Protection

None required. If airborne glass fibre concentrations exceed the control limit, respiratory protection for nuisance dust should be provided.

Ventilation

Use local exhaust ventilation, if necessary, to maintain airborne levels to below established limits.

Skin Protection

Protective gloves may reduce skin irritation in some operations.

Eye Protection

Safety glasses with side shields should be worn.

Other Protective Equipment

Use of overalls, buttoned to fit loosely at the neck and wrists, long trousers and good personal hygiene will maximize comfort. The use of barrier creams may provide extra comfort.

Measurement Procedures/References

The American Conference of Governmental Hygienists (ACGIH) has adopted a Threshold Limit Value (TLVâ) for fibrous glass dust of 10 mg/m³ (TWA, 8 hours). The TLVâ's have been adopted by many other countries. The TLVâ pertains to airborne continuous filament glass fibre concentrations in mg of glass fibre/m³ of air. A clear distinction should be made between non-respirable fibres and airborne respirable fibres.

THS/Cel-Glass does not manufacture glass fibre products with diameters which are classified as respirable (fibres with diameters less than 3.0 microns).

Section 9: Physical and Chemical Properties

Appearance: Yellow to white fibres bound together in strands.
Odour: None.
pH: N/A.
Boiling Point: N/A.
Melting Point (softening): 800ºC
Freezing Point: N/A.
Flash Point: Non-burning.
Flammability: N/A.
Auto-ignition/Explosion Limits: N/A.
Oxidation Risk: N/A.
Electrical Conductivity: E-glass is an electrical insulator.
Autoflammability: N/A
Evaporation Rate: N/A.
Vapour Pressure: N/A
Specific Gravity (bare glass): 2.6
Vapour Density: N/A
Percent Volatile: 2% max.
Octanol/Water Partition coefficient: N/A.
Solubility: Insoluble in water. Glass fibre will disperse, to some extent in organic solvents like styrene, acetone, etc. depending on their specific application.

Section 10: Stability and Reactivity

Stability

Stable.

Conditions to void

None known.

Incompatibility (Materials to void)

None known.

Hazardous Decomposition Products

In a sustained fire, sizings and binders may decompose releasing products of combustion. (See Section 5).

Hazardous Polymerisation

Will not occur.

Section 11: Toxicological Information

This product is not classified as "dangerous" according to the Seventh Amendment to 67/548/EEC.

Immediate Health Hazards (Acute)

Exposure to continuous filament glass fibres sometimes causes irritation of the skin and, less requently, irritation of the eyes, nose or throat.

Delayed Health Hazards (Chronic)

Inhalation is the primary route of entry into the human body for glass fibres. Because of the narrow, bending passages of the human nose and pharynx, large diameter fibres (approx. 5 microns or larger) will either be too large to enter the nose, will be filtered out by nasal hairs or will strike the surfaces of the nose or pharynx and stop.

THS/Cel-Glass does not manufacture products using glass fibre with diameters that are classified as respirable (fibres with diameters less than 3.0 microns which are capable of travelling into the body to the trachea, bronchi, etc.).

All of the glass fibre products used by, or manufactured by, THS/Cel-Glass have fibre diameters equal to or greater than 4.5 microns and are therefore not physically capable of travelling beyond the nose and pharynx.

In October 1986, the World Health Organisation held an International Symposium on Man Made Mineral Fibres. It was concluded that no harmful effects, including lung cancer and non-malignant respiratory disease, could be demonstrated from exposure to continuous glass fibre dust. Continuous glass fibre has been designated by the International Agency for Research on Cancer as a Group 3, "not classifiable as to human carcinogenicity". This means that evidence is insufficient to link that fibre to cancer.

Section 12: Ecological Information

Because glass fibre is generally considered to be an inert solid waste, no special precautions should be taken in case it is released or spilled. THS/Cel-Glass does not use or manufacture any glass fibre product that contains or is manufactured with Class 1 or Class 11 Ozone Depleting Chemicals (CFC's).

Section 13: Disposal Considerations

Glass fibre is generally considered to be an inert solid waste not requiring hazardous waste disposal procedures.
Local and/or national regulations should be consulted to ensure proper disposal procedures for your location. Glass fibre products which have been used in conjunction with other materials must be disposed of with consideration for disposal requirements for those other materials.

Section 14: Transport Information

No special precautions or restrictions involving transport or conveyance of glass fibre are known.

Section 15: Regulatory Information

Glass fibre carries no CA or CAS registry number and no EPA code designation number. Glass as a generic substance, the E-Glass composition included, has been incorporated in the EINECS (Europe) under No. 65997-17-3.

Section 16: Other information

THS/Cel-Glass does not use or manufacture products from glass fibre that contains or is manufactured with Class 1 or Class 11 Ozone-Depleting Chemicals (CFC's).

The data mentioned above refers to questions of safety and are given to the best of our present knowledge. These data must not be regarded as quality features and do not not release from the responsibility for the handling of this material and from observing legal regulations and directives.