



MATERIAL SAFETY DATA SHEET

1. Product and Supplier Identification

Product Name: Glass Fiber Woven Cloth

Product: **Orca Composites Knitted Material (All)**

Chemical Name: E-Glass

Product Use: FRP Manufacturing Processes.

Supplier: **Fiberlay Inc.**
(800) 942-0660

2. Composition

| Component | % (w/w) |
|----------------------------------------------------------------------|---------|
| E-Glass (silica, boron, lime, alumina) | >98% |
| Size Materials Cured (silane, film former, friction reduction agent) | <2% |

3. Hazards Identification

Emergency Overview

Under normal conditions of use, this product is not expected to create any unusual emergency hazards.

Inhalation of excessive amounts of dust from the product may cause temporary upper respiratory irritation and/or congestion – remove affected individuals to fresh air.

Eye irritation may be treated by flushing eyes with large amounts of water. If irritation persists, contact a physician.

In the event of fire, use normal fire fighting procedures.

Acute (short-term) Health Effects:

ORCA Composites Knitted Material

Fiber is a mechanical irritant to skin, eyes and upper respiratory system.

Chronic (long-term) Health Effects:

No known chronic health hazards.

Target Organs:

Respiratory system, skin and eyes.

Primary Routes of Entry (Exposure):

Inhalation (breathing), oral (mouth), skin, and eye contact.

Medical Conditions Which May be Aggravated:

Pre-existing upper respiratory and lung disease or condition.

Symptoms of Overexposure:

Inhalation: Irritation of the upper respiratory tract (scratchy throat), coughing, and congestion may occur in extreme exposures.

Skin: Temporary irritation (itching) or redness may occur.

Absorption: N/A

Ingestion: This product is not intended to be ingested or eaten under normal conditions of use. If ingested, it may cause choking or temporary irritation to the gastrointestinal tract, especially the stomach.

Eye: Temporary irritation (itching) or redness may occur.

4. First Aid Measures

Inhalation: Remove affected personnel from area of exposure.

Skin: Wash affected area with soap and warm water immediately to remove dust and fiber.

Ingestion: Unlikely. Consult physician if unusual reaction is noted.

Eye: Do not rub or scratch eyes. Wash with running water for 10 minutes.

Notes to Physician: This product is a mechanical irritant, and is not expected to produce any chronic health effects from acute exposures. Treatment should be directed toward removing the source of irritation with symptomatic treatment as necessary.

5. Fire Fighting Measures

No special procedures are expected to be necessary for this product. Normal fire fighting procedures should be followed to avoid inhalation of smoke and gases.

Flash point: N/A

ORCA Composites Knitted Material

Autoignition Temperature: N/A
Lower Explosive Limit: N/A
Upper Explosion Limit: N/A
Sensitivity to Impact: N/A
Sensitivity to Static Discharge: N/A

Hazardous Combustion Products: N/A

Extinguishing Media: Use that which is applicable to surrounding fire

Unusual fire and Explosion Hazard: There is no potential for fire or explosion. Size materials may thermally decompose or burn emitting toxic fumes and smoke including carbon dioxide and carbon monoxide.

Fire Fighting Instructions: Fire fighters must wear full protective gear including eye protection and self-contained breathing apparatus.

6. Accidental Release Measures

Personal Protection: Refer to Section 8

Environmental Precautions: N/A

Cleanup Procedures: Dispose of in a sanitary landfill in accordance with local regulations.

7. Handling and Storage

Transport: Glass fibers are not classified as dangerous with regard to transport regulations and are not required to follow special procedures.

Handling Procedures: Use special protective equipment of this material safety data sheet when handling uncontained material. Warehouse storage should be in accordance with package directions, if any.

Storage: Store under cover to protect products. Storage must take place in the original packaging. Avoid frequent handling.

8. Exposure Controls, Personal Protection

Recommended Protective Clothing:

- goggles
- gloves
- long sleeve clothing to avoid temporary irritation
- disposable mask

9. Physical and Chemical Properties

ORCA Composites Knitted Material

| | | | |
|------------------------------|---------------------------------|---------------------------|-----------------------|
| Colour: | White | | |
| Appearance: | Clear, fibrous solid; no odour. | Fiber, assembled rovings. | |
| Physical State: | Solid | Softening Point: | 830°C |
| Odour: | None | Melting Point: | 1250°C |
| pH: | Neutral | Boiling Point: | N/A |
| Vapour Pressure: | N/A | Freezing Point: | None |
| Solubility: | Negligible | Specific Gravity: | 2.6 g/cm ³ |
| Vapour Density: | N/A | Evaporation Rate: | N/A |
| % Volatile by Volume: | Not volatile | | |

10. Stability and Reactivity

Product is stable. Hazardous polymerization will not occur.

Chemical Stability: Product is stable.

Reactivity: Material is stable, hazardous polymerization will not occur.

Hazardous Polymerization: N/A

Incompatibility: Hydrofluoric Acid

Hazardous Decomposition Products: None

11. Toxicological Information

This product has not been tested as a separate entity. Therefore, the hazards must be evaluated on the basis of the individual ingredients, and those hazards must be assumed to be additive in the absence of complete information. The hazards described in this document have been evaluated based on a threshold of 1.0% for all hazardous ingredients and 0.1% for all carcinogens.

Primary Route of Entry: Inhalation, skin and eye contact.

Acute: Exposure to fiberglass may cause temporary skin, eye and upper respiratory irritation.

Medical Conditions which may be Aggravated: Pre-existing conditions which may be aggravated by mechanical irritants upon inhalation or skin contact.

Information for Medical Practitioners: Skin irritation responds well to mild hydrocortisone cream.

Teratogenicity: None

Mutagenicity: None

Toxicological Synergistic Products: None

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Toxicity (LD50): The LD50 and LC50 for this product have not been determined.

12. Ecological Information

Environmental Toxicity: N/A

Biodegradability: N/A

13. Disposal Considerations

Review federal, provincial or state, and local government requirements prior to disposal. Store material for disposal as indicated in Storage Conditions. Disposal by controlled incineration may be acceptable.

14. Transport Information

This product is not regulated as a hazardous material for transport.

15. Regulatory Information

CANADIAN FEDERAL REGULATIONS: This product is not regulated.

UNITED STATES REGULATIONS: This product is not regulated.

16. Other Information

Preparation Date: 11/23/2010

Prepared by: Fiberlay Inc.

Revisions: None