



MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT IDENTIFICATION

Manufacture's Name

Carbon Composites, Inc.

Emergency Telephone No.

(978) 840-0707

Address12 Jytek Park
Leominster, MA 01453-5932**Telephone No. for Information**

(978) 840-0707

Product NameRigidized Carbon Felt Insulation
Carbon Fiber Composite**Date Prepared**January, 2002
Updated December 4, 2009**Synonyms**Carbon/Graphite Felt Insulation
Graphite Foil Laminate
Carbon Fiber Composite Laminate, CFC, Carbon/Carbon

SECTION 2 - INGREDIENTS (INERT & HAZARDOUS)

<u>Composition</u>	<u>%</u>	<u>CAS #</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Carbon/Synthetic Graphite	99.9+	7440-44-0 7782-42-5	15 mg/m ³	10 mg/m ³

SECTION 3 - PHYSICAL / CHEMICAL DATA

Boiling Point	N/A	Melting Point	N/A
Evaporation Rate (Butyl Acetate = 1)	N/A	Solubility in Water	Negligible
Vapor Pressure (mm Hg)	N/A	Vapor Density (Air = 1)	N/A
Specific Gravity (H₂O = 1)	0.13 – 0.25	Volatiles by Weight	Negligible @ RT
Carbon Fiber Composite	1.3 – 1.5 g/cc		

Appearance and Odor

Gray solid laminate, Gray-black fibrous felt; negligible odor

SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

Flash Point	N/A	Flammable Limits	LEL – N/A; UEL – N/A
Extinguishing Media	Water, CO ₂ , Sand	Extinguishing Media to Avoid	N/A

Special Fire Fighting Procedures N/A, Difficult to Ignite**Unusual Fire and Explosion Data**

Graphite and carbon dusts are normally not explosive, but these may weakly contribute if the event is initiated by another explosive dust or gas. Graphite and carbon dusts are electrically conductive; dust accumulations may cause electrical short circuits or other electrical malfunctions.



SECTION 5 - REACTIVITY DATA

Hazardous Polymerization	Will Not Occur	Conditions to Avoid	N/A
Stability	Stable		
Incompatibility	None		
Hazardous Decomposition or Byproducts	None		

SECTION 6 - HEALTH HAZARD DATA

<u>Primary Routes of Exposure</u>	<u>Inhalation</u>	<u>Skin</u>	<u>Ingestion</u>	<u>Eyes</u>
Dust and Fibers	Yes	Yes	Unlikely	Yes

Effects of Overexposure

- Eyes: At high dust levels, mechanical irritation.
- Breathing: Fibers from insulation are a possible slight lung irritant under constant exposure. Prolonged and repeated overexposure may lead to pneumoconiosis.
- Skin: Itching of skin may be possible.

Carcinogenicity NTP – No IARC Monographs – No OSHA Regulated - No

Signs and Symptoms of Exposure

Acute: Severe Coughing, Black Sputum

Medical Conditions Generally Aggravated by Exposure

Individuals with pre-existing chronic respiratory impairments may be an increased risk of pneumoconiosis.

Emergency and First Aid Procedures

- Eyes: Flush with water if irritation occurs.
- Skin: Wash with soap and water.
- Inhalation: Remove to fresh air.
- Ingestion: None necessary.

SECTION 7 – PRECAUTIONS FOR SAFE HANDLING AND USE

Steps To Be Taken In Case Material Is Released Or Spilled

Use normal housekeeping practice. Vacuum or sweep up spills taking care not to generate airborne fibers which can cause electrical malfunctions.

Waste Disposal Method

Material may be bagged, and then disposed of in an approved landfill. Incinerating may cause airborne particles. Disposal must be in compliance with federal, state, and local laws and regulations.

Precautions to be Taken in Handling and Storing

Carbon and graphite fibers are electrically conductive and may cause short circuits that may result in damage to or malfunction of electrical equipment. All forms of electrical equipment, enclosures, and circuits in or near areas where fibers are used should be properly protected against infiltration of or contact with airborne particles or fibers.

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SECTION 8 – CONTROL MEASURES

Respiratory Protection	Use approved respirator if exposure exceeds PEL limits.
Ventilation	Local ventilation or dust collection recommended if dust exceeds PEL limits. General mechanical as necessary to minimize fibers.
Eye Protection	Safety glasses with side shields. Goggles may be required on excessive exposure.
Protective Gloves	Cotton or latex gloves may be required on excessive exposure. Recommended due to the potential of fiber splinters.
Other Protective Clothing or Equipment	Exposed skin may need covering on excessive exposure. Eye wash station. Good ventilation.
Work/Hygienic Practices	Material should be handled so as to prevent eye contact and excessive or repeated skin contact. Inhalation of fibers should be avoided.

SECTION 9 – OTHER SPECIAL PRECAUTIONS OR COMMENTS

Wash clothes separately from other clothes.

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