

# SAFETY DATA SHEET

<b>Carbon Felt, Unsized</b>	<b>SDS No:</b>	0306-70-800
	<b>Revision No:</b>	1
	<b>Date:</b>	06/21/12

PRODUCT AND COMPANY INFORMATION – SECTION 1	
<b>Manufacturer/Distributor:</b>	Graphite Sales Inc. 16710 West Park Circle Drive Chagrin Falls, Ohio 44023 440-543-8221
<b>Product Name:</b>	Carbon Felt
<b>Synonyms:</b>	Carbon/Graphite Felt Insulation, Graphite Foil Laminate, Carbon Fiber Composite Laminate, CFC, Carbon/Carbon
<b>Intended Use:</b>	

<b>FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT:</b>
<b><i>In the continental U.S.: 440-543-8221</i></b>

HAZARDS IDENTIFICATION – SECTION 2	
<b>EMERGENCY OVERVIEW &amp; HAZARDS PRESENT TO MAN AND THE ENVIRONMENT</b>	This product is nontoxic. The “nuisance dust” exposure values that are listed apply to any inert substance capable of producing airborne particulate. Excessive concentrations of carbon felt may reduce visibility, cause unpleasant deposits in the eye, ears, and nasal passages, or irritate the skin or mucus membranes by mechanical means. However, normal workplace exposure has not been determined to cause a significant health effect. Carbon felt, as with many petroleum products, may cause minor skin, eye or lung irritation, but good hygienic practices can minimize these effects.
<b>REGULATORY STATUS</b>	This material is not classified as hazardous under OSHA Regulations.
<b>PRIMARY ROUTES OF EXPOSURE</b>	In dust form through inhalation, contact with eyes and contact with skin.
<b><u>POTENTIAL HEALTH EFFECTS:</u></b>	
<b><i>Eyes:</i></b>	Contact may cause mechanical irritation to the eyes. Dust from machining, grinding or sawing the cured product may cause mechanical irritation.
<b><i>Skin:</i></b>	Contact may cause mechanical irritation to the skin. Dust from machining, grinding or sawing the cured product may cause mechanical irritation.
<b><i>Inhalation:</i></b>	May cause mechanical irritation to the upper respiratory tract.. Dust from machining, grinding or sawing the cured product may cause mechanical irritation.
<b><i>Ingestion:</i></b>	Ingestion is unlikely under normal circumstances.
<b>MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:</b>	Pre-existing eye, skin or respiratory disorders may be aggravated by exposure to this product or to the dust from machining, grinding or sawing the cured product.
<b><u>CHRONIC HEALTH EFFECTS:</u></b>	
<b><i>Eyes:</i></b>	Not detected
<b><i>Skin:</i></b>	Not detected
<b><i>Inhalation:</i></b>	Individuals with preexisting chronic respiratory impairments may be at an increased risk of pneumoconiosis.
<b><i>Ingestion:</i></b>	Not determined.

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COMPOSITION INFORMATION – SECTION 3	
Chemical Name:	Carbon fiber, synthetic
Percent:	90 – 99%
CAS Number:	7440-44-0

FIRST AID MEASURES – SECTION 4	
<b>SEEK MEDICAL ATTENTION FOR ALL CASES OF OVEREXPOSURE.</b>	
<b>Eyes:</b>	If irritation occurs flush eyes thoroughly with water.
<b>Skin:</b>	In case of contact that causes irritation, immediately wash skin with soap and room temperature to cool running water. Use a washcloth to help remove the fibers. To avoid further irritation, do not rub or scratch irritated areas. Rubbing or scratching may force fibers into the skin.
<b>Inhalation:</b>	If overcome by dust concentrations, remove to a more ventilated area (fresh air).
<b>Ingestion:</b>	Do not induce vomiting. Seek consultation from a physician.
<b>Instructions for Physician</b>	None recommended.

FIRE FIGHTING MEASURES – SECTION 5					
NFPA Classification					
Health	Fire	Reactivity	Other		
1	0	0	N/A		
<b><u>FLAMMABILITY PROPERTIES</u></b>					
Flash Point:	N/A	Method:	N/A		
Flammability Limits: (in air % by volume)		LEL:	N/A	UEL:	N/A
<b><u>Autoignition Temperature:</u></b> Not determined. Difficult to ignite.					
<b><u>Hazard Combustion Products:</u></b> None					
<b><u>Extinguishing Media:</u></b> Use water spray, dry chemical, or CO2 to extinguish fires.					
<b><u>Prohibited Extinguishing Media:</u></b> Non identified					
<b><u>Firefighting Instructions:</u></b> Avoid exposure through use of s self-contained, positive pressure breathing apparatus.					
<b><u>Unusual Fire and Explosion Hazard:</u></b> Graphite and carbon dust 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 short circuits or other electrical malfunctions.					

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ACCIDENTAL RELEASE MEASURES – SECTION 6	
<b>Personnel Precautions:</b>	Avoid contact with skin, eyes or clothing. Clean up material, put into a suitable container and dispose of properly.
<b>Environmental Precautions:</b>	Environmental impact not determined.
<b>Cleanup Methods:</b>	Vacuum or sweep up spills taking care not to generate airborne fibers which can cause electrical malfunctions.

HANDLING & STORAGE – SECTION 7	
<b>Handling:</b>	In dust form, handlers should avoid excess dust generation during the handling and contact of this material.
<b>Storage:</b>	Store in a cool dry place. Maintain product being sealed against contamination from dirt.
<b>Specific Uses:</b>	Carbon and graphite fibers are electrically conductive and may cause short circuits that may result in damage to or malfunctions of electrical equipment. All forms of electrical equipment, enclosures and circuits in or near areas where fibers are used should be properly protected against infiltrations of or contact with airborne particles or fibers.

EXPOSURE CONTROLS / PERSONAL PROTECTION – SECTION 8		
<b>EXPOSURE CONTROLS:</b>		
<b>Exposure Limit Values</b>		
	<b>OSHA PEL:</b>	<b>ACGIH TLV:</b>
Nuisance Dust	15 mg/m <sup>3</sup> (Total) 5 mg/m <sup>3</sup> (Respirable)	10 mg/m <sup>3</sup> (Total) 3 mg/m <sup>3</sup> (Respirable)
<b>Engineering Controls:</b>		
VENTILATION: Keep well ventilated to minimize exposure to dust.		
<b>PERSONAL PROTECTIVE EQUIPMENT:</b>		
<b>Respiratory Protection:</b>		
If exposure limits are exceeded or if irritation is experienced. NIOSH approved respiratory protection should be worn. Respiratory protection may be needed for non-routine or emergency situations.		
<b>Hand Protection:</b>		
Appropriate chemical protective gloves should be used while handling this material.		
<b>Eye/Face Protection:</b>		
Avoid eye contact with this material. Wear safety glasses or chemical goggles. Provide and eyewash station in the work area.		
<b>Skin Protection:</b>		
Sufficient protective clothing should be worn to minimize skin exposure when handling this material. Wash contaminated clothing thoroughly before reuse.		
<b>General Hygiene Considerations:</b>		
Wash face and hands thoroughly after handling this material to prevent prolonged exposure. Remove contaminated clothing a launder before reuse.		
<b>Other Protective Equipment:</b>		
Depending upon conditions of use, additional protection may be necessary such as face shield, apron, arm-covers, ect.		

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PHYSICAL & CHEMICAL PROPERTIES – SECTION 9	
<b>PRODUCT:</b>	Natural Graphite
<b>General Information:</b>	
Appearance	Grey solid laminate, Gray-black fibrous felt. Black fibers woven into fabric of varying weight, width, and thickness, depending on the style, with and without sizing.
Odor	No distinctive Odor.

Important Health, Safety, and Environmental Information:	
Boiling Point	N/A
Melting Point	6512°F /3600°C
Flash Point	N/A
Explosive Properties	N/A
Oxidizing Properties	N/A
Specific Gravity ( <i>H<sub>2</sub>O</i> = 1)	1.4-4.5
Water Solubility	Negligible
Partition Coefficient ( <i>n</i> -octanol/water)	Not Determined
Viscosity	N/A
Vapor Pressure ( <i>mm Hg</i> )	N/A
Vapor Density ( <i>Air</i> = 1)	N/A
Evaporation Rate	N/A
% Volatile ( <i>By Volume @ 68° F</i> )	0

STABILITY & REACTIVITY – SECTION 10
<b><u>Stability:</u></b> This material is stable under normal conditions.
<b><u>Conditions to Avoid:</u></b> Excessive heating of bulk product, situation where particulate can become airborne.
<b><u>Materials to Avoid:</u></b> None
<b><u>Hazardous Decomposition Products:</u></b> The products of decomposition depend on other materials present in the fire and the actual conditions of the fire. Burning will decompose the sizing system, if appropriate, and produce carbon and nitrogen oxides, phenols, aldehydes, acrolein, carbonylic acid, traces of incompletely burned carbon products and other unidentified gases and vapors that may be toxic. Avoid inhalation.
<b><u>Hazardous Polymerization:</u></b> Polymerization will not occur under proper conditions of use. Rapid heating of the product in bulk may produce an uncontrolled exothermic reaction that may char and decompose the sizing system, if appropriate, generating unidentified gases and vapors that may be toxic. Avoid inhalation.

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TOXICOLOGICAL INFORMATION – SECTION 11				
Type of Test	Route of Exposure	Effects	Species Observed	Dose Data
No information available.				

ECOLOGICAL INFORMATION – SECTION 12
<b><u>Ecotoxicity:</u></b>
N/A
<b><u>Mobility:</u></b>
N/A.
<b><u>Persistence and Degradability:</u></b>
N/A
<b><u>Bioaccumulative Potential:</u></b>
N/A

DISPOSAL CONSIDERATION – SECTION 13
Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Do not flush to surface water or sanitary sewer system.

TRANSPORT INFORMATION – SECTION 14	
<b><u>DOT CLASSIFICATION:</u></b>	
UN Number:	This material is not regulated by DOT for transportation.
Class:	
Proper Shipping Name:	
Packing Group:	
Marine Pollutant:	
Other Information:	
<b><u>IATA CLASSIFICATION:</u></b>	
UN Number:	This material is not regulated by IATA for transportation.
Class:	
Proper Shipping Name:	
Packing Group:	
Marine Pollutant:	
Other Information:	
<b><u>IMDG CLASSIFICATION:</u></b>	
UN Number:	This material is not regulated by IMDG for transportation.
Class:	
Proper Shipping Name:	
Packing Group:	
Marine Pollutant:	
Other Information:	

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REGULATORY INFORMATION – SECTION 15	
<b><u>US REGULATIONS:</u></b>	
<b>ACGIH</b>	10 mg/m3 (TLV for nuisance dust )
<b>CAA Section 112</b>	Not Listed
<b>CERCLA</b>	Not Listed
<b>IARC</b>	Not Listed
<b>NTP</b>	Not Listed
<b>OSHA</b>	15 mg/m3 (PEL for a nuisance dust)
<b>SARA Title III</b>	Not Listed
<b>TSCA</b>	Not Listed
<b><u>STATE REGULATIONS:</u></b>	
<b>MA Substance List</b>	Not Listed
<b>NJRTK Hazardous Substance List</b>	Not Listed
<b>PA Hazardous Substance List</b>	Not Listed
<b>Canadian WHMIS</b>	Not Listed



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OTHER INFORMATION – SECTION 16	
Revision Number	Revision Date
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*To the best of our knowledge, the information contained herein is accurate. However, neither Graphite Sales Inc. nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.*