# Material Safety Data Sheet (Complies with 29 CFR 1910.1200)

Section I			
Manufacturer	Carlisle Brake and Friction 920 Lake Road Medina, Ohio 44256		
Emergency Phone .	330-725-4941	Effective Date	October 18, 2011
Chemical Name	Friction Material	Revision Date	October 18, 2011
Tradename	Sintered Friction Material		
Category	Inorganic—7356-1		

Section II - Hazardous Ingredients / Identity				
Component	OSHA-PEL (mg/m <sup>3)</sup>	ACGIH-TLV	%	CAS No.
		(mg/m <sup>3)</sup>		
Mullite/Glass	Resp.=5.0	10.0	Proprietary	7782-42-5
Carbon	Total=15.0 Resp.= 5.0	10.0	Proprietary	7782-42-5
Copper	1.0	1.0	Proprietary	7440-50-8
Tin	2.0	2.0	Proprietary	7440-31-5

Section III - Physical Characteristics			
Boiling Point	N/A	Sp.Gr. (H <sub>2</sub> O=1)	
Vapor Press (mm Hg)	N/A	Solubility in Water	Insoluble
Reactivity in Water	N/A	Vapor Density (Air=1)	N/A
Melting Point		Color	Reddish
Appearance/Odor	No Odor		

Section IV - Fire and Explosion Data				
Flashpoint	N/A	Method used	N/A	
Flammable Limits (LEL/UEL)	N/A	Special Fire Fighting Prod	cedure	None
Auto Ignition Temperature	N/A	Extinguishing	None	
		Media		
Unusual Fire and Explosion	None Know			
Hazards				

Section V - Reactivity Data		
Stability	Stable	
Incompatibility ( Materials to Avoid)	May react with strong oxidizers.	
Hazardous Decomposition Products		
Hazardous Polymerization	Will Not Occur	
Conditions to Avoid	None	

Page 1 7356-1

## **Section VI - Health Hazards**

## **Effects of Overexposure:**

Inhalation: a) Chronic exposure to carbon as graphite dust can cause fibrosis, emphysema and

corpulmonale.

b) Inhalation of high conc. of copper dust may cause intense sneezing, nausea, weakness and fever, hemolysis of red blood cells, deposition of hemofuscin in the liver and possible injury to lung cells.

### **Emergency Procedures**

Eye Contact: Flush with clean water for 15 minutes. If irritation persists, contact a physician.

Skin Contact: Wash thoroughly with soap and water.

Inhalation: Following exposure to a large amount of dust, remove from exposure. If breathing has

stopped, perform artificial respiration. Contact a physician.

Ingestion: If conscious, give large quantities of water to induce vomiting. Get medical attention.

Section VII - Spill/Leak Procedures		
Handling, Storage	None applicable	
DOT Shipping Rules	Non-hazardous as "article", no special precautions	
Spill/Leak	N/A	
Waste Disposal Methods	Check with local counsel for applicable laws/regulations	

Section VIII - Special Protection /Control Measures		
Respiratory Protection/Ventilation	Use a NIOSH approved respirator with appropriate filters when exposed to brake wear products. Use exhaust ventilation to keep exposure below exposure limits.	
Protective Gloves	Wear gloves to avoid skin contact.	
Eye Protection	Wear safety glasses or goggles.	
Other Protective Equipment	N/A	

## **Section IX - Special Precautions**

No special precautions necessary

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7356-1 Page 2