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

Section I				
Manufacturer	Carlisle Brake & Fri	ction 920 Lake Roa	d Medina, Ohio 44256	
Emergency Phone	330-725-4941		Effective Date	5-Jun-86
Chemical Name	Friction Material		Revision Date	5-Jan-15
Tradename	Sintered Friction Material			
Category	Inorganic-	761Z-8		

Section II-Hazardous Ingredients/Identity				
Component	OSHA-PEL (mg/m3)	ACGIH-TLV (mg/m3)	%	CAS No.
Iron	Total=15.0 Resp.= 5.0	10.0	Proprietary	7439-89-6
Carbon	Total=15.0 Resp.= 5.0	10.0	Proprietary	7782-42-5
Silicon Carbide	Total=15.0 Resp.= 5.0	10.0	Proprietary	409-21-2
Copper	1.0	1.0	Proprietary	7440-50-8

Section III Physical Characteristics			
Boiling Point	Fe-5432 F	Sp.Gr. $(H_2O = 1)$	7.86
Vapor Press (mm Hg)	N/A	Solubility in Water	Not soluble
Reactivity in Water	N/A	Vapor Density	N/A
Melting Point	N/A	Color	Gray color
Appearance/Odor	Odorless		

Section IV-Fire and Explosion Data	a		
Flashpoint	N/A	Method Used	N/A
Flammable Limits (LEL/UEL)	N/A	Special Fire Fighting Proc.	Graphite, dolomite,NaCl to exclude air or smother.
Auto Ignition Temperature	N/A	Extinguishing Media	CO2, fog nozzels & fine
			spray to prevent dusting.
Unusual Fire and Explosion	Iron is not con	Iron is not considered flammable under most conditions but finely	
Hazards	divided powder in	divided powder in the form of a dust cloud can ignite if contacted by an ignition souce.	

Section V-Reactivity Data		
Stability	Stable	
Incompatibility(Materials to Avoid)	N/A	
Hazardous Decomposition Products	N/A	
Hazardous Polymerization	N/A	
Conditions to Avoid	None.	

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### Section VI -Health Hazards

Effects of Overexposure:

- a) Iron can cause coughing, slight upper respiratory irritation, and a metallic taste in the mouth.
- b) Chronic exposure to carbon as graphite dust can cause fribrosis, emphysema and corpulmale.
- c) Inhalation of high concentrations of copper dust may cause intense sneezing, nausea, weakness, and fever, hemolysis of red blood cells, depostion of hemofuscin in the liver and possible injury to lung cells.

Repeated exposure to copper (as salts) may casue dermatitis.

**Emergency Procedures** 

Skin:

Eye Contact: Copper may cause conjunctivitis or ulceration and turbidity of the cornea. In case of contact,

immediately flush with water for 15 min. including under the eyelids. Seek medical help if

material cannot be adequately removed from the eye.

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: Seek medical advice immediately.

Section VII- Spill/Leak Procedure	es
Handling, Storage	N/A
DOT Shipping Rules	N/A
Spill/Leak	Preferably wet methods or vacuum to clean up. Avoid dusting.
Waste Disposal Methods	Check with local counsel for applicable laws/regulations.

Section VIII-Special Protection/Control Methods		
Respiratory Protection/Ventilation	Use a NIOSH approved respirator with appropriate filters when exposed to brake wear products. Use exhaust venhilation to keep exposure below exposure limits.	
Protective Gloves	Recommended, particularly if sensitive skin.	
Eye Protection	Recommended.	
Other Protective Equipment	Long sleeve shirts recommended.	

## Section IX- Special Precautions

Do not store adjacent to strong oxidizers.

#### **Disclamer**

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