

MMG Canada Limited

10 Vansco Road
Toronto, Ontario Canada
416-251-2831

Material Safety Data Sheet

IDENTITY (As Used on Label and List) Manganese Zinc Ferrite Sintered Manganese Zinc Ferrite Powder	Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.
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Section I

Manufacturer's Name TT electronics / MMG Canada Limited	Emergency Telephone Number (416) 251-2831
Address (Number, Street, City, State, and ZIP Code) 10 Vansco Road	Telephone Number for Information (416) 251-6790
Toronto, Ontario M8Z 5J4	Date Prepared 10 June 1997
	Signature of Preparer (optional)

Section II - Hazard Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	%(optional)
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Sintered Manganese Zinc Ferrite (MnZn Ferrite) is a material consisting of sintered oxides of the following:
(10 – 90 %) Major: Iron (Fe), Manganese (Mn) and Zinc (Zn)
(<5 wt. %) Minor: Silicon (Si), Zirconium (Zr), Titanium (Ti) and trace level impurities (PPM)

Section III - Physical/Chemical Characteristics

Boiling Point	None	Specific Gravity (H ₂ O = 1)	4.8gm / cc
Vapor Pressure (mm Hg.)	N/A	Melting Point	N/A
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	N/A
Solubility in Water Nil			
Appearance and Odor - Black odorless solid, (hard)			

Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used) - N / A	Flammable Limits – N/A	LEL	UEL
Extinguishing Media – Carbon Dioxide, Water, Dry Chemical, Foam, Halon			
Special Fire Fighting Procedures -			
Unusual Fire and Explosion Hazards - Avoid reducing agent when heating over 1000 °C			

Section V - Reactivity Data

Stability	Unstable		Conditions to Avoid
	Stable	X	
Incompatibility (<i>Materials to Avoid</i>)			
Hazardous Decomposition or Byproducts			
Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	

Section VI - Health Hazard Data

Route(s) of Entry:	Inhalation? X	Skin?	Ingestion? X
Health Hazards (<i>Acute and Chronic</i>) – If ground and a dust results, maintain at TLV 15mg / m3.			
Carcinogenicity:	NTP? – None Reported	IARC Monographs? – None Reported	OSHA Regulated? – None Reported
Signs and Symptoms of Exposure - Unknown			
Medical Conditions Generally Aggravated by Exposure - Unknown			
Emergency and First Aid Procedures – Wash dust / powder from skin, prevent ingestion, move to fresh air.			

Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled – Using recommended PPE, sweep up and discard. Does not present any unusual hazard.
Waste Disposal Method – To be performed in compliance with all Local, State and Federal regulations.
Precautions to Be taken in Handling and Storing – In accordance with good industrial practice, handle with care.
Other Precautions - None

Section VIII - Control Measures

Respiratory Protection (<i>Specify Type</i>) – A half mask respirator approved for dust and mist protection is recommended.		
Ventilation	Local Exhaust - Yes	Special
	Mechanical (<i>General</i>) - Yes	Other
Protective Gloves – PVC coated is recommended		Eye Protection – Safety glasses or splash shield.
Other Protective Clothing or Equipment – Eye Bath recommended		
Work/Hygienic Practices - In accordance with good industrial practice, wash thoroughly after handling and before eating.		