

SAFETY DATA SHEET
Tflex® Magnetic Shielding SDS

Revision Date: 06-Oct-17

Section 1: Chemical Product and Company Identification

Product Name: Tflex® Magnetic Shielding
 Product Number(s): T##TILE, where ## are any numbers, All part numbers beginning with TND
 Product Synonym(s): Tflex® Magnetic Tile, Tflex® Magnetic Blanket, Tflex® Magnetic Pipe Shield, Tflex® Magnetic Ribbon Wrap
 Identified Uses: Radiation shielding
 Manufacturer: MarShield
 4140 Morris Dr
 Burlington, Ontario L7L 5L6
 Canada
 General Information: (8-4:30 EST M-F)
 (800) 381-5335
 (905) 637-3862

24 Hour Emergency Number:
CHEMTREC: 800-424-9300

Section 2: Hazard(s) Identification

2.1 Classification of the substance or mixture

GHS Classification of substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)

Not classified

2.2 GHS Label elements, including precautionary statements

Pictogram: **NONE**

Signal Word: **None**

Hazard Statement(s):
Based on available data, the classification criteria under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) are not met.

Precautionary Statement(s):

Prevention	No precautionary statements because the product is not hazardous as defined by OSHA HCS 29 CFR 1910.1200.
Response	No precautionary statements because the product is not hazardous as defined by OSHA HCS 29 CFR 1910.1200.
Storage	P411+P235 Store at temperatures not exceeding 176°C/350°F.
Disposal	No precautionary statements because the product is not hazardous as defined by OSHA HCS 29 CFR 1910.1200.

2.3 Hazards Not Otherwise Classified (HNOC) or not covered by GHS:

Keep away from sensitive electronic devices and materials

Section 3: Composition / Information on Ingredients

Component	CAS_Number	Percentage Range
Metal Powder (May consist of Bismuth, Iron, and/or Tungsten)	Not Applicable	65-95%
Iron Metal (powder)	7439-89-6	0-95%
Tungsten Metal (Powder)	7440-33-7	0-95%
Bismuth Solid Powder	7440-69-9	0-95%
Non hazardous ingredients according to OSHA criteria.	Not Applicable	5-25%
Magnetic Material	Not Applicable	2-10%

Section 4: First-aid Measures

General Advice	The hazardous properties of this material have not been established. Information is based on compositionally and physically similar materials.
Ingestion	If swallowed, do NOT induce vomiting; seek medical advice. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Skin Contact	Wash with plenty of soap and water. If skin irritation occurs, seek medical advice.
Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical attention.
Inhalation	Remove to fresh air. If breathing is labored, administer oxygen. If not breathing, give artificial respiration. Seek medical attention.
Most important symptoms and effects, both acute and delayed	No further relevant information available.
Indication of any immediate medical attention and special treatment needed	No further relevant information available

Section 5: Firefighting Measures

Extinguishing Media	Exposed iron and tungsten requires the use of dry sand or limestone to exclude oxygen. Foam, CO2, Dry Chemical, Water Spray
Protective Equipment	Wear positive pressure self-contained breathing apparatus and full personal protective equipment.
Special Hazards	Silica, iron, and tungsten dust may present an explosion hazard under favoring conditions of dispersion, particle size, and strong ignition source. Possible combustion products include silicon dioxide (silica), tungsten, iron, carbon dioxide, and carbon monoxide.

Section 6: Accidental Release Measures

Personal precautions	Avoid creating and breathing dust. See section 8. Use proper personal protect equipment (specified in section 8)
Methods and materials for containment and clean-up	Pick up and arrange disposal without creating dust. Sweep up and shovel. Do not flush with water. Keep in suitable, closed containers for disposal.
Reference to other sections	For disposal see section 13.

Section 7: Handling and Storage

Conditions for safe handling	Avoid formation of dust and aerosols. Use mechanical exhaust if dust is formed. Do not heat above 176°C / 350°F during continuous use. Do not heat above 232°C /450°F.
Conditions for safe storage	Normal warehouse storage in cool, dry, well-ventilated area is satisfactory.
Specific End Use(s)	Apart from the uses mentioned in section 1 no other specific uses are stipulated.

Section 8: Exposure Controls / Personal Protection

Control Parameters	Contains no substances with occupational exposure limit values.
Skin Protection	Wash hands thoroughly after handling. Wear impervious gloves and clean body-covering clothing.
Respiratory protection	Respiratory protection is not normally required when using this product with adequate ventilation. Should a respirator be needed, follow OSHA respirator regulations 29 CFR 1910.134 or European Standards EN 141, 143, and 371. Use organic vapor cartridge. Do not breathe dust.

Section 9: Physical Properties

Information on basic physical and chemical properties

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Appearance:	Solid Gray or colored	Explosion Limits (Upper/Lower):	Not Established
Odor:	None	Flash Point:	> 300 °F
Odor Threshold:	Not established	Flammability:	flash point at or above 200°F
pH:	Not applicable (non-aqueous)	AutoIgnition Temperature:	Not established
Melting Point:	Not Established	Decomposition Temperature	Not established
Boiling Point:	Not Established	VaporPressure:	Not established
Relative Density:	0.065 -0.25 lb/in ³	VaporDensity:	> 1
Solubility:	Insoluble	Evaporation Rate:	Not Established
Partition Coefficient:	Not established		
Viscosity:	Not applicable		

Section 10: Stability and Reactivity

Reactivity	No hazardous reactions if stored and handled as indicated.
Chemical Stability	Stable under normal handling and storage conditions.
Hazardous reactions	Hazardous polymerization does not occur
Conditions to Avoid	No relevant information available.
Materials to Avoid	Avoid contact with strong acids, strong bases, and strong oxidizers.
Hazardous decomposition Products	Possible combustion products include silicon dioxide (silica), tungsten, iron, carbon dioxide, and carbon monoxide.

Section 11: Toxicology Information

Acute Toxicity	
Oral Effects	Ingestion/Oral-Rat LD50 > 2000 mg/kg (Immediate) Metallic taste. May cause stomach pain or vomiting.
Inhalation Effects	Exposure to dust may cause irritation. May cause coughing and difficulty breathing. No data available for acute inhalation effects of this product.
Dermal Effects	No data available for acute dermal effects. Skin absorption is unlikely.
Skin corrosion/irritation	Bismuth 99%: Skin-Human: 85.2% 15 minute(s) - Essentially non irritating.
Serious eye damage/irritation	No data available regarding serious eye damage/irritation.
Respiratory or skin sensitization	No data available regarding respiratory or skin sensitization effects of this product.
Germ Cell Mutagenicity	No data available regarding mutagenic effects of this product.
Carcinogenicity	No relevant data found.
Reproductive Toxicity	No relevant data found.
Specific Target Organ Toxicity	
Single Exposure	No data available regarding specific target organ toxicity single exposure for powder.
Repeated Exposure	No data available regarding specific target organ toxicity repeated exposure.
Aspiration Hazard	No data available regarding aspiration hazards associated with this product.

Section 12: Ecological Information

Aquatic Toxicity	No data are available on the adverse effects of this material on the environment.
Persistence and degradability	No data are available for persistence and degradability.
Bioaccumulative potential	No data are available for bioaccumulative potential.
Mobility in Soil	No data are available for mobility in soil.
Other	Not known to have any adverse effect on the aquatic environment. It is insoluble and non-toxic.

Section 13: Disposal Considerations

General	Material may be sold for reclaim if no other contamination exists. Avoid disposal to sewers and local waterways. Dispose of contents/container in accordance with federal, state, and local regulations.
Used:	For material contaminated with hazardous materials, dispose of mixture as hazardous material according to local, state, and federal regulations.

Section 14: Transport Information

Air Transport:	Magnetized Material Classification is dependent upon qty and packaging. Consult manufacturer for guidance. In US refer to 49 CFR 173.21(d) and/or IATA DGR 3.9.2.2 regarding transport in aircraft.
Ground Transport:	Not D.O.T. Hazardous when transported via means other than by air.
Water Transport:	Not Hazardous per IMDG 2012.

Section 15: Regulatory Information

US Federal Regulations	Toxic Substances Control Act (TSCA): All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30.
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Section 16: Other Information

Revision	First Issue using GHS format. This SDS replaces T-Flex® Bismuth Magnetic Tile SDS issued 4-Nov-16.
SDS Prepared By:	NPO, a brand of Eichrom Technologies LLC
Trademark:	T-Flex® is a registered trademark of Eichrom Technologies LLC's NPO Brand.

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