Material Safety Data Sheet - Magnesium Anodes

Section 1 – Material Identification and Use	
Product Name: Magnesium Anodes	**Product Use:** Cathodic protection systems.
Manufacturer's Name: Exothermal Industries Inc.	**Distributor's Name:**
Address: 21 Regan Road, Unit D Brampton, ON L7A 1C5	**Address:**
Emergency Phone: 1-866-598-2232	**Emergency Phone:**

Section 2 – Hazardous Ingredients				
Chemical	**%**	**CAS/PIN**	**LD_{50}**	**LC_{50}**
• Magnesium	25 – 50 %	7439-95-4	N/A	N/A
• Bentonite	5 – 8 %	14808-60-7	N/A	N/A
• Sodium Sulphate	2 – 3 %	7757-82-6	N/A	N/A
• Gypsum	26 – 37 %	10101-41-4	N/A	N/A

Section 3 – Physical Data			
Physical State: Solid	**Odour/Appearance:** Odourless silver metal packaged in a cardboard tube or cotton bag	**Odour Threshold:** Nil	**pH:** N/A
Specific Gravity: 1.74 kg/L (magnesium)	**Evaporation Rate:** N/A	**Vapour Density:** N/A	**Vapour Pressure:** Nil at room tempeature.
Boiling Point: 650 °C (magnesium)	**Melting Point:** 1090 °C (magnesium)	**Coefficient of Water/Oil Distribution:** N/A	

Section 4 – Fire and Explosion Data			
Flammability: Dust or powder may be flammable or explosive. Magnesium filings are extremely flammable.			
Means of Extinction: Use dry chemical suitable for metal fires.			
Special Procedures: NIOSH approved self-contained breathing apparatus			
Flash Point: N/A	**Auto Ignition Temperature:** N/A	**Lower Explosion Limit:** N/A	**Upper Explosion Limit:** N/A
Explosion Data – Sensitivity to Mechanical Impact: N/A		**Explosion Data – Sensitivity to Static Discharge:** N/A	

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Section 5 – Reactivity Data	
Conditions of Reactivity: Contact with acid liberates explosive hydrogen gas.	**Chemical Incompatibility:** Acids, alkalis, strong oxidizing agents, water.
Chemical Stability: Stable	**Hazardous Decomposition Products:** none

Section 6 – Toxicological Properties of Product			
Exposure Limits	**TLV (mg/m^3)**	**Routes of Entry:** Eye contact, inhalation, ingestion	**Effect of Acute Exposure:** Inhalation of fume may cause zinc fume fever, resulting in flu-like symptoms.
Magnesium Sodium Sulphate Bentonite Gypsum	5 5 5 5	**Mutagenicity:** Unknown	**Carcinogenicity:** Unknown
Reproductive Toxicity: Unknown	**Irritancy:** Slight	**Teratogenicity:** Unknown	**Sensitisation:** Unknown

Section 7 – Preventive Measures
Personal Protective Equipment: Gloves and steel toe boots should be worn when handling anodes.
Engineering Controls: None.
Leak/Spill Procedures: Shovel rather than sweep to avoid creating excess dust.
Waste Disposal: If material cannot be re-used, dispose of in accordance with local regulations.
Special Shipping Information: Not regulated.
Handling Procedures: Anodes over 50 lbs. should be lifted by two people. Avoid breathing dust or fumes. Exposure to this product can be controlled in many ways, use measures appropriate for the worksite. Practice good hygiene.
Storage Requirements: Store products away from incompatible materials and in a manner which prevents the product from falling.

Section 8 – First Aid Measures
Skin – Wash with soap and water. **Eyes –** Treat as foreign body. Immediately flush with water. Seek medical attention. **Inhalation –** Remove to fresh air. Apply artificial respiration if victim is not breathing. Seek medical attention. **Ingestion –** Rare in industry. Seek medical attention.

Section 9 – Preparation Data	
Prepared by: Exothermal Industries Inc. (905) 840-2232	**Revised:** January, 2013