

## Material Safety Data Sheet - Zinc Anodes

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

<b>Section 2 – Hazardous Ingredients</b>				
Chemical	%	CAS/PIN	LD <sub>50</sub>	LC <sub>50</sub>
• Zinc	35 – 50 %	7440-66-6	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

<b>Section 3 – Physical Data</b>			
<b>Physical State:</b> Solid	<b>Odour/Appearance:</b> Odourless/ bluish silver metal packaged in a cardboard tube or cotton bag	<b>Odour Threshold:</b> Nil	<b>pH:</b> N/A
<b>Specific Gravity:</b> 7.14 kg/L (zinc)	<b>Evaporation Rate:</b> N/A	<b>Vapour Density:</b> N/A	<b>Vapour Pressure:</b> Nil at room temperature.
<b>Boiling Point:</b> 907 °C (zinc)	<b>Melting Point:</b> 419.53 °C (zinc)	<b>Coefficient of Water/Oil Distribution:</b> N/A	

<b>Section 4 – Fire and Explosion Data</b>			
<b>Flammability:</b> Dust or powder may be flammable or explosive. Zinc dust or shavings are explosive in high concentrations in air.			
<b>Means of Extinction:</b> Use dry chemical suitable for metal fires.			
<b>Special Procedures:</b> NIOSH approved self-contained breathing apparatus			
<b>Flash Point:</b> N/A	<b>Auto Ignition Temperature:</b> N/A	<b>Lower Explosion Limit:</b> N/A	<b>Upper Explosion Limit:</b> N/A
<b>Explosion Data – Sensitivity to Mechanical Impact:</b> N/A		<b>Explosion Data – Sensitivity to Static Discharge:</b> N/A	

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

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

<b><u>Section 7 – Preventive Measures</u></b>
<b>Personal Protective Equipment:</b> Gloves and steel toe boots should be worn when handling anodes.
<b>Engineering Controls:</b> None.
<b>Leak/Spill Procedures:</b> Shovel rather than sweep to avoid creating excess dust.
<b>Waste Disposal:</b> If material cannot be re-used, dispose of in accordance with local regulations.
<b>Special Shipping Information:</b> Not regulated.
<b>Handling Procedures:</b> 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.
<b>Storage Requirements:</b> Store products away from incompatible materials and in a manner which prevents the product from falling.

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

<b><u>Section 9 – Preparation Data</u></b>	
<b>Prepared by:</b> Exothermal Industries Inc. (905) 840-2232	<b>Revised:</b> January, 2013