


Material Safety Data Sheet

HUDBAY

24 Hour Emergency Number:
1(204)687-2291

General Inquiries:
1(204)687-2691

WHMIS	Protective Clothing	TDG Road/Rail
Not A Controlled Product		TDG: Not Regulated IATA: Not Regulated

Section I. Product Identification and Uses

Product Name(s)	Zinc Metal - Special High Grade (Pure Grades)
Chemical Name	Zinc Metal - Special High Grade (Pure Grades)
Supplier	Hudson Bay Mining and Smelting Co., Limited P.O. Box 1500, Flin Flon, MB, R8A 1N9
Material Uses	Steel Galvanizing, Alloying
Synonyms	SHG

Section II. Hazardous Ingredients

Name	CAS #	%	TLV (mg/m ³)
1) Zinc Metal	7440-66-6	99.95-99.99	Not Available For Mixture
2) Lead Metal	7439-92-1	0.001-0.003	2
3) Iron Metal	7439-89-6	0-0.003	0.05
4) Copper Metal	7440-50-8	0-0.002	1
5) Cadmium Metal	7440-43-9	0-0.003	1
6) Aluminum Metal	7429-90-5	0-0.002	0.01
			1
LD₅₀ (Species/route)		LC₅₀ (Species)	
Not Available For Mixture		Not Available For Mixture	

Section III. Physical Data			
Physical state	Solid	Specific Gravity	7.13
and appearance / Odour	Odourless blue-white metal		
pH	Not Applicable	Vapour Density	Not Applicable
Odour Threshold	None	Vapour Pressure	1 mm Hg @ 487 °C
Percent Volatile	Unknown	Water/oil dist. Coeff.	Not Available
Freezing Point °C	Not Applicable	Evaporation rate	Not Applicable
Boiling Point °C	907	Solubility	Unknown

Section IV. Fire and Explosion Data	
Flash Point	Not Applicable
Flammable limits	Bulk metal is not flammable, however dust or powder form may be flammable or explosive when mixed with air.
Auto-ignition temperature	Not Applicable
Sensitive to Mechanical impact	None
Sensitive to Static Discharge	None
Fire extinguishing procedures	Do not use water on molten material. Use dry chemical suitable for metal fires.
LEL/UEL	Not Applicable/Not Applicable
Special Procedures	Use caution when immersing solid zinc into a molten zinc bath. Moisture/condensation can cause molten zinc to bubble, splash, or explode. Fire fighters should be equipped with NIOSH self contained breathing apparatus

Section V. Reactivity Data	
Stability	Stable
Hazardous decomp. Products	None
Incompatibility	Acids, Alkalies, and Halogens
Reaction Products	Hydrogen gas

Section VI. Toxicological Properties			
Routes of Entry	Eye, Inhalation, Ingestion		
Effects of Acute Exposure	Eye contact with fume or dust may cause local eye irritation. Inhalation of fume may cause zinc fume fever resulting in flu-like symptoms.		
Effects of Chronic Overexposure	May cause gastrointestinal disturbances.		
Mutagenicity	Unknown	Teratogenicity	Unknown
Carcinogenicity	See Additional info	Sensitisation	Unknown

Section VI. Toxicological Properties			
Synergistic Material	None Known	Reproductive Toxicity	Lead
Irritancy	Slight		

Section VII. Preventive Measures	
Protective Clothing in case of spill and leak	Wear gloves and clothing to protect against physical hazard or hot metal splash. Goggles or face-shield with molten metal. If Ventilation is inadequate, a NIOSH approved respirator.
Spill and leak	Contain and put in leak proof containers. Shovel rather than sweep to avoid dusting conditions.
Waste disposal	Check with federal, Provincial, and Local government regulations
Storage	Store closed containers in a well ventilated area. Protect from physical damage.
Engineering Controls	Local exhaust ventilation may be needed to control fume/dust blow the recommended exposure limit.
Handling Procedures	Exposure to this material can be controlled in many ways. The measures appropriate for a particular work site depend on how this material is used and on the extent of exposure. Use this general information to help develop specific control measures. Avoid contact with skin, eyes or clothing. Avoid breathing dust and/or vapour/mist.

Section VIII. First Aid measures	
Eye Contact	Treat as foreign body. Immediately flush with water. Seek medical attention
Skin Contact	Wash with soap and water
Inhalation	Remove to fresh air. Apply artificial respiration if victim not breathing and seek medical attention
Ingestion	Rare in industry. Seek medical attention

Section IX. Preparation Information	
Prepared by Industrial Hygiene	Validated: 2012-03-15
Telephone # (204) 687-2691	
Additional Information	LEAD: IARC reports tat the "evidence for carcinogenicity to humans" is "inadequate". CADMIUM: IARC reports the "evidence for carcinogenicity to humans" is "limited". Practice good hygiene. If clothes are contaminated, remove and launder before using them again.
Sources Used	Canadian Centre for Occupational Health and Safety ACGIH, , <u>Threshold Limit Values</u> 2011 Merck & Co., Inc. <u>The Merck Index</u> , 11 th ed. Ragway N.J. Merck & Co., Inc. 1989 Sax, Irving N. <u>Dangerous Properties of Industrial Materials</u> , 11 th ed. Toronto, ON. Litton Educational Publishing, Inc., 2004
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