




(FLINN)

MATERIAL SAFETY DATA SHEET

911 Commerce Court
Buffalo Grove, IL 60089-2375
1-800-727-4368WLC4960R WLC4966T
WLC4960T WLC4975T
WLC4963T WLC4975V
MSDS No.
Effective Date May 21, 1999

SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

Product	ZINC METAL	 CHEMTREC 800-424-9300 Day 716-226-6177  NFPA HAZARD RATING LEAST SLIGHT MODERATE HIGH EXTREME 0 1 2 3 4  HMIS*
Chemical Synonyms	Zinc metal, mossy, granular, shot.	
Formula	Zn <i>30 mrsst</i>	
Unit Size	up to 2.5 Kg.	
C.A.S. No.	7440-66-6	

SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Zinc Metal, Mossy, Granular, Shot	100%	See Section V.

CAUTION! USE CARE IN HANDLING. ABRASIVE TO SKIN.

REACTS WITH ACIDS TO LIBERATE HYDROGEN GAS -

A FLAMMABLE AND EXPLOSIVE GAS.

SECTION III PHYSICAL DATA

Melting Point (°F)	419°C (787°F)	Specific Gravity (H ₂ O = 1)	7.14
Boiling Point (°F)	907°C (1665°F)	Percent Volatile by Volume (%)	Non-volatile (NA).
Vapor Pressure (mm Hg)	1 mm at 487°C	Evaporation Rate (=1)	Non-volatile (NA).
Vapor Density (Air=1)	2.26		
Solubility in Water	Insoluble.		
Appearance & Odor	Silvery metal, mossy, granular, shot; no odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Non-flammable (NA).	Flammable Limits in Air % by Volume	Lower	Upper
Extinguisher Media	Smother with dry sand, earth or soda ash, dry powder (ABC). Water will react violently with molten metal.			

SPECIAL FIREFIGHTING PROCEDURES

In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus. When heated, the fumes are highly toxic, causing "metal fume fever".

UNUSUAL FIRE AND EXPLOSION HAZARDS

Dust forms explosive mixtures with air. Bulk dust in damp state may heat spontaneously and ignite on exposure to air. Contact with acids and alkali hydroxide (sodium hydroxide, potassium hydroxide, calcium hydroxide, etc.) results in evolution of hydrogen.

D.O.T. NON-REGULATED.

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20

SECTION V HEALTH HAZARD DATA

ZZ 15

Threshold Limited Value

Zinc as fume: PEL 5 mg/m³; TLV 5 mg/m³; STEL 10 mg/m³.

Effects of Overexposure

INHALATION: Dust may cause upper respiratory tract irritation. When heated above 400°C, inhalation of the fumes may lead to metal fume fever. Mild to severe symptoms of chills and fever, profuse perspiration, weakness, nausea and coughing can occur. **EYES:** May cause eye irritation. **SKIN:** Prolonged or repeated skin contact may cause skin irritation.

Emergency and First Aid Procedures

INHALATION: Remove from exposure, treat symptomatically and get medical attention, if symptoms persist. **EYES:** Using great care, flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention. **SKIN:** Flush thoroughly with water, then wash with mild soap and water.

SECTION VI REACTIVITY DATA

Stability	Unstable		Conditions to Avoid
	Stable	X	

Incompatibility (Materials to Avoid)

Strong oxidizers, acids, alkalis.

Hazardous Decomposition Products

Oxides of zinc may be present. Zinc fumes.

Hazardous Polymerization

Conditions to Avoid

May Occur	Will Not Occur
	X

Not applicable.

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled

Sweep up for reuse or place in a suitable container for disposal.

Waste Disposal Method

Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only.

Dispose of in an approved chemical landfill or contract with a licensed waste disposal service.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type) None needed in normal laboratory handling. If dust conditions prevail, wear a NIOSH/MSHA-approved dust mask or work in adequate ventilation hood.

Ventilation	Local Exhaust	Not needed.	Special	No.
	Mechanical (General)	Recommended.	Other	No.

Protective Gloves	Suitable to protect against skin abrasions.	Eye Protection	Chemical safety glasses.
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Other Protective Equipment Lab coat, goggles, eye wash station, fire extinguisher.

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing Store in a cool, dry, ventilated place. Separate from acids, halogenated hydrocarbons and strong alkali hydroxides. Protect from moisture. Wash thoroughly after handling.

Other Precautions Read label on container before using. Do not wear contact lenses when working with chemicals.

Remove and wash contaminated clothing.

For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Revision No. 7 Date 5/21/99 Approved Michael Raszeja Chemical Safety Coordinator MR

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