



# Material Safety Data Sheet

NFPA	HMIS	Personal Protective Equipment						
	<table border="1" style="margin: auto;"> <tr> <td style="background-color: #00FFFF;">Health Hazard</td> <td style="text-align: center; border: 1px solid black;">1</td> </tr> <tr> <td style="background-color: #FFC0CB;">Fire Hazard</td> <td style="text-align: center; border: 1px solid black;">0</td> </tr> <tr> <td style="background-color: #FFFF00;">Reactivity</td> <td style="text-align: center; border: 1px solid black;">1</td> </tr> </table>	Health Hazard	1	Fire Hazard	0	Reactivity	1	 See Section 15.
Health Hazard	1							
Fire Hazard	0							
Reactivity	1							

Section 1. Chemical Product and Company Identification		Page Number: 1
<b>Common Name/Trade Name</b>	Zinc Metal, Ganular	<b>Catalog Number(s).</b> XX138, Z1010, Z1015, Z1018, Z1019 <b>CAS#</b> 7440-66-6
<b>Manufacturer</b>	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	<b>RTECS</b> ZG8600000 <b>TSCA</b> TSCA 8(b) inventory: Zinc Metal, Ganular
<b>Commercial Name(s)</b>	Not available.	<b>CI#</b> Not applicable.
<b>Synonym</b>	Not available.	<b>IN CASE OF EMERGENCY</b> <a href="tel:800-424-9300">CHEMTREC (24hr) 800-424-9300</a>  CALL (310) 516-8000
<b>Chemical Name</b>	Zinc	
<b>Chemical Family</b>	Metal.	
<b>Chemical Formula</b>	Not available.	
<b>Supplier</b>	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	

Section 2. Composition and Information on Ingredients					
Name	CAS #	Exposure Limits			% by Weight
		TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )	CEIL (mg/m <sup>3</sup> )	
1) Zinc Metal, Ganular 20 mesh	7440-66-6				100
<b>Toxicological Data on Ingredients</b> <b>Zinc Metal, Ganular 20 mesh</b> LD50: Not available. LC50: Not available.					

Section 3. Hazards Identification	
<b>Potential Acute Health Effects</b>	Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion. Non-hazardous in case of inhalation.
<b>Potential Chronic Health Effects</b>	<b>CARCINOGENIC EFFECTS:</b> Not available. <b>MUTAGENIC EFFECTS:</b> Not available. <b>TERATOGENIC EFFECTS:</b> Not available. <b>DEVELOPMENTAL TOXICITY:</b> Not available. Repeated or prolonged exposure is not known to aggravate medical condition.

**Section 4. First Aid Measures**

<b>Eye Contact</b>	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.
<b>Skin Contact</b>	Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.
<b>Serious Skin Contact</b>	Not available.
<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear.
<b>Serious Inhalation</b>	Not available.
<b>Ingestion</b>	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
<b>Serious Ingestion</b>	Not available.

**Section 5. Fire and Explosion Data**

<b>Flammability of the Product</b>	Non-flammable.
<b>Auto-Ignition Temperature</b>	Not applicable.
<b>Flash Points</b>	Not applicable.
<b>Flammable Limits</b>	Not available.
<b>Products of Combustion</b>	Not available.
<b>Fire Hazards in Presence of Various Substances</b>	Slightly flammable to flammable in presence of oxidizing materials, of acids, of alkalis, of moisture.
<b>Explosion Hazards in Presence of Various Substances</b>	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available. Slightly explosive in presence of moisture.
<b>Fire Fighting Media and Instructions</b>	Not applicable.
<b>Special Remarks on Fire Hazards</b>	Zinc + NaOH causes ignition. Oxidation of zinc by potassium proceeds with incandescence. Residues from zinc dust /acetic acid reduction operations may ignite after long delay if discarded into waste bins with paper. Incandescent reaction when Zinc and Arsenic or Tellurium, or Selenium are combined. When hydrazine mononitrate is heated in contact with zinc, a flaming decomposition occurs at temperatures a little above its melting point. Contact with acids and alkali hydroxides (sodium hydroxide, potassium hydroxide, calcium hydroxide, etc.) results in evolution of hydrogen with sufficient heat of reaction to ignite the hydrogen gas. Zinc foil ignites if traces of moisture are present. It is water reactive. Produces flammable gases on contacts with water. It may ignite on contact with water or moist air.
<b>Special Remarks on Explosion Hazards</b>	Not available.

**Section 6. Accidental Release Measures**

**Small Spill** Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

**Large Spill** Flammable solid that, in contact with water, emits flammable gases. Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Cover with dry earth, sand or other non-combustible material. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

**Section 7. Handling and Storage**

**Precautions** Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not breathe dust. Keep away from incompatibles such as oxidizing agents, acids, alkalis, moisture.

**Storage** Keep container tightly closed. Keep container in a cool, well-ventilated area. Keep from any possible contact with water. Do not allow water to get into container because of violent reaction.

**Section 8. Exposure Controls/Personal Protection**

**Engineering Controls** Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protection** Safety glasses. Lab coat. Gloves (impervious).

**Personal Protection in Case of a Large Spill** Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits** Not available.

**Section 9. Physical and Chemical Properties**

<b>Physical state and appearance</b>	Solid. (Granular solid. Metal solid.)	<b>Odor</b>	Odorless.
<b>Molecular Weight</b>	65.39 g/mole	<b>Taste</b>	Not available.
<b>pH (1% soln/water)</b>	Not applicable.	<b>Color</b>	Bluish-grey
<b>Boiling Point</b>	907°C (1664.6°F)		
<b>Melting Point</b>	419°C (786.2°F)		
<b>Critical Temperature</b>	Not available.		
<b>Specific Gravity</b>	Not available.		
<b>Vapor Pressure</b>	Not applicable.		
<b>Vapor Density</b>	Not available.		
<b>Volatility</b>	Not available.		
<b>Odor Threshold</b>	Not available.		
<b>Water/Oil Dist. Coeff.</b>	Not available.		
<b>Ionicity (in Water)</b>	Not available.		
<b>Dispersion Properties</b>	Not available.		
<b>Solubility</b>	Insoluble in cold water, hot water, methanol, diethyl ether, n-octanol, acetone.		

**Section 10. Stability and Reactivity Data**

<b>Stability</b>	The product is stable.
<b>Instability Temperature</b>	Not available.
<b>Conditions of Instability</b>	Excess heat, incompatible materials, moisture
<b>Incompatibility with various substances</b>	Reactive with oxidizing agents, acids, alkalis, moisture. The product reacts violently with water to emit flammable but non toxic gases.
<b>Corrosivity</b>	Not available.
<b>Special Remarks on Reactivity</b>	Incompatible with acids, halogenated hydrocarbons, NH <sub>4</sub> NO <sub>3</sub> , barium oxide, Ba(NO <sub>3</sub> ) <sub>2</sub> , Cadmium, CS <sub>2</sub> , chlorates, Cl <sub>2</sub> , CrO <sub>3</sub> , F <sub>2</sub> , Hydroxylamine, Pb(N <sub>3</sub> ) <sub>2</sub> , MnCl <sub>2</sub> , HNO <sub>3</sub> , performic acid, KClO <sub>3</sub> , KNO <sub>3</sub> , N <sub>2</sub> O <sub>2</sub> , Selenium, NaClO <sub>3</sub> , Na <sub>2</sub> O <sub>2</sub> , Sulfur, Te, water, (NH <sub>4</sub> ) <sub>2</sub> S, As <sub>2</sub> O <sub>3</sub> , CS <sub>2</sub> , CaCl <sub>2</sub> , chlorinated rubber, catalytic metals, halocarbons, o-nitroanisole, nitrobenzene, nonmetals, oxidants, paint primer base, pentacarbonyliron, transition metal halides, seleninyl bromide, HCl, H <sub>2</sub> SO <sub>4</sub> , (Mg +Ba(NO <sub>3</sub> ) <sub>2</sub> +BaO <sub>2</sub> ), (ethyl acetoacetate +tribromoneopentyl alcohol). Contact with Alkali Hydroxides(Sodium Hydroxide, Potassium Hydroxide, Calcium Hydroxide, etc) results in evolution of hydrogen. Ammonium nitrate + zinc + water causes a violent reaction with evolution of steam and zinc oxide. Some may react vigorously or explosively on contact with water.
<b>Special Remarks on Corrosivity</b>	Not available.
<b>Polymerization</b>	Will not occur.

**Section 11. Toxicological Information**

<b>Routes of Entry</b>	Ingestion.
<b>Toxicity to Animals</b>	LD <sub>50</sub> : Not available. LC <sub>50</sub> : Not available.
<b>Chronic Effects on Humans</b>	Not available.
<b>Other Toxic Effects on Humans</b>	Slightly hazardous in case of skin contact (irritant), of ingestion. Non-hazardous in case of inhalation.
<b>Special Remarks on Toxicity to Animals</b>	Lowest Published Lethal Dose: LDL [Duck] - Route: Oral; Dose: 388 mg/kg
<b>Special Remarks on Chronic Effects on Humans</b>	Not available.
<b>Special Remarks on other Toxic Effects on Humans</b>	Acute Potential Health Effects: Skin: May cause skin irritation. Dermal exposure to zinc may produce leg pains, fatigue, anorexia, and weight loss. Eyes: May cause eye irritation. Ingestion: May be harmful if swallowed. May cause digestive tract irritation with tightness in throat, nausea, vomiting, diarrhea, malaise, loss of appetite, abdominal pain, fever, and chills. May affect behavior/central nervous system and autonomic nervous system with ataxia, lethargy, staggering gait, mild derangement in cerebellar function, lightheadness, dizziness, irritability, muscular stiffness, and pain. May also affect blood. Inhalation: Zinc in the granular form does not pose an inhalation hazard. Inhalation of zinc dust or fumes may cause respiratory tract and mucous membrane irritation with cough and chest pain. It can also cause "metal fume fever", a flu-like condition characterized appearance of chills, headached fever, malaise, fatigue, sweating, extreme thirst, aches in the legs and chest, and difficulty in breathing. A sweet taste may also be present in metal fume fever, as well as a dry throat, aches, nausea, and vomiting, and pale grey cyanosis.


**Section 12. Ecological Information**

<b>Ecotoxicity</b>	Not available.
<b>BOD5 and COD</b>	Not available.
<b>Products of Biodegradation</b>	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
<b>Toxicity of the Products of Biodegradation</b>	Not available.
<b>Special Remarks on the Products of Biodegradation</b>	Not available.

**Section 13. Disposal Considerations**

<b>Waste Disposal</b>	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
-----------------------	----------------------------------------------------------------------------------------------------------

**Section 14. Transport Information**

<b>DOT Classification</b>	Not a DOT controlled material (United States).
<b>Identification</b>	Not applicable.
<b>Special Provisions for Transport</b>	Not applicable.
<b>DOT (Pictograms)</b>	

**Section 15. Other Regulatory Information and Pictograms**

<b>Federal and State Regulations</b>	<p>California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.</p> <p>California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.</p> <p>New York release reporting list: Zinc Metal, Ganular</p> <p>Rhode Island RTK hazardous substances: Zinc Metal, Ganular</p> <p>Pennsylvania RTK: Zinc Metal, Ganular</p> <p>Florida: Zinc Metal, Ganular</p> <p>Michigan critical material: Zinc Metal, Ganular</p> <p>Massachusetts RTK: Zinc Metal, Ganular</p> <p>New Jersey: Zinc Metal, Ganular</p> <p>California Director's List of Hazardous Substances: Zinc Metal, Ganular</p> <p>TSCA 8(b) inventory: Zinc Metal, Ganular</p> <p>TSCA 12(b) one time export: Zinc Metal, Ganular</p> <p>SARA 313 toxic chemical notification and release reporting: Zinc Metal, Ganular</p> <p>CERCLA: Hazardous substances.: Zinc Metal, Ganular. 1000 lbs. (453.6 kg)</p>
<b>California Proposition 65 Warnings</b>	<p>California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.</p> <p>California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.</p>
<b>Other Regulations</b>	

EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances (EINECS No. 231-175-3).  
 Canada: Listed on Canadian Domestic Substance List (DSL).  
 China: Listed on National Inventory.  
 Japan: Not listed on National Inventory (ENCS).  
 Korea: Listed on National Inventory (KECI).  
 Philippines: Listed on National Inventory (PICCS).  
 Australia: Listed on AICS.

**Other Classifications**




**WHMIS (Canada)** Not controlled under WHMIS (Canada).

**DSCL (EEC)** R15- Contact with water liberates extremely flammable gases  
 S7/8- Keep container tightly closed and dry.  
 R17- Spontaneously flammable in air.

**HMS (U.S.A.)**

Health Hazard	1
Fire Hazard	0
Reactivity	1
Personal Protection	E

**National Fire Protection Association (U.S.A.)**

Health  Flammability  Reactivity  Specific hazard

**WHMIS (Canada) (Pictograms)**



**DSCL (Europe) (Pictograms)**



**TDG (Canada) (Pictograms)**



**ADR (Europe) (Pictograms)**



**Protective Equipment**



Gloves



Lab coat.



Not applicable.  
 Safety glasses

**Section 16. Other Information****MSDS Code** Z3021**References** Not available.**Other Special Considerations** Not available.

Validated by Sonia Owen on 6/25/2009.

Verified by Sonia Owen.  
Printed 6/25/2009.

CALL (310) 516-8000

**Notice to Reader**

*All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.*