F) Fis	her Scientific								
Material Safety Data Sheet									
Zinc, Gra	nular and Mossy								
MSDS# 8	38125								
	Section 1 - Chemical Product and Company Identification								
MSDS Name:	Zinc, Granular and Mossy								
Catalog Numbers:	rs: AC222605000, AC222610000, AC222610025, AC222611000, AC222615000, Z11-500, Z15-3, 3LC, Z15-500, Z16-500, Z2-3, Z2-500								
Synonyms	S: None		Fisher Scientific						
Company	Identification:		One Reagent Lane Fair Lawn, NJ 07410						
For inforn	nation in the US, call	1:	201-796-7100						
Emergenc	y Number US:		201-796-7100						
CHEMTF	REC Phone Number	;, US:	800-424-9300						
		Section 2 - Compos	sition, Information on Ingredients						
 CAS#: 7440-66-6									
Chemical Na	ame:	Zinc	Zinc						
%:		100	100						
EINECS#:		231-175-3							
	Hazard Symbols:	Ν							
	Risk Phrases:	50/53							
Section 3 - Hazards Identification									
Caution	May cause ave and		GENCY OVERVIEW respiratory and digestive tract irritation. Toxic to aquatic organisms,						
Caution		•	he aquatic environment. Target Organs: No data found.						
	· · ·		ne aquatie environment. Target organs. 100 data round.						
	Health Effects		ne aquatie environment. Farget Organs. No data found.						
Eye:	Health Effects May cause eye irrit	tation.							
Eye: Skin:	Health Effects May cause eye irrit May cause skin irri	tation. itation. May be harmful if	absorbed through the skin.						
Eye: Skin:	Health Effects May cause eye irrit May cause skin irri May cause irritation	tation. itation. May be harmful if n of the digestive tract. M	absorbed through the skin. ay be harmful if swallowed.						
Eye: Skin: Ingestion:	Health Effects May cause eye irrit May cause skin irri May cause irritatio May cause respirat flu-like symptoms	tation. itation. May be harmful if n of the digestive tract. M ory tract irritation. Inhalat	absorbed through the skin.						
Eye: Skin: Ingestion: Inhalation:	Health Effects May cause eye irrit May cause skin irri May cause irritation May cause respirat flu-like symptoms blood cell count. M	tation. itation. May be harmful if n of the digestive tract. M ory tract irritation. Inhalat with metallic taste, fever,	absorbed through the skin. ay be harmful if swallowed. tion of fumes may cause metal fume fever, which is characterized by chills, cough, weakness, chest pain, muscle pain and increased white						
Eye: Skin: Ingestion: Inhalation:	Health Effects May cause eye irrit May cause skin irri May cause irritation May cause respirat flu-like symptoms blood cell count. M	tation. itation. May be harmful if n of the digestive tract. M ory tract irritation. Inhalat with metallic taste, fever, lay be harmful if inhaled. n may cause chronic brone	absorbed through the skin. ay be harmful if swallowed. tion of fumes may cause metal fume fever, which is characterized by chills, cough, weakness, chest pain, muscle pain and increased white						
Eye: Skin: Ingestion: Inhalation:	Health Effects May cause eye irrit May cause skin irri May cause irritatio May cause respirat flu-like symptoms blood cell count. M Repeated inhalation	tation. itation. May be harmful if n of the digestive tract. M ory tract irritation. Inhalat with metallic taste, fever, lay be harmful if inhaled. n may cause chronic bron- Section 4 flush eyes with plenty of	absorbed through the skin. ay be harmful if swallowed. tion of fumes may cause metal fume fever, which is characterized by chills, cough, weakness, chest pain, muscle pain and increased white chitis.						
Eye: Skin: Ingestion: Inhalation: Chronic:	Health Effects May cause eye irrit May cause skin irri May cause irritation May cause respirat flu-like symptoms blood cell count. M Repeated inhalation Immediately eyelids. Get Get medical	tation. itation. May be harmful if n of the digestive tract. M ory tract irritation. Inhalat with metallic taste, fever, lay be harmful if inhaled. n may cause chronic brom Section 4 flush eyes with plenty of medical aid.	Tabsorbed through the skin. Tay be harmful if swallowed. To of fumes may cause metal fume fever, which is characterized by chills, cough, weakness, chest pain, muscle pain and increased white chitis. 4 - First Aid Measures						

Ingestion:	cupfuls of milk or water.							
Inhalation:	Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.							
Notes to Physician:	-							
Antidote:	The use of Calcium disodium EDTA as a chelating agent should be determined by qualified medical personnel.							
Section 5 - Fire Fighting Measures								
General Information:	As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire.							
Extinguishing Media:	Do NOT use water directly on fire. Use dry chemical to fight fire. Use approved class D extinguishing agents or smother with dry sand, clay, or sodium bicarbonate.							
Autoignition Temperature: 460 deg C (860.00 deg F)								
Flash Poin	t: Not availal	ble						
Explosion Limits: Lower:								
Explosion Limits: Upper:								
NFPA Rating: health: 1; flammability: 1; instability: 0;								
Section 6 - Accidental Release Measures								
General Information:	Use proper personal protective equipment as indicated in Section 8.							
Spills/Leaks:	Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up or							
Section 7 - Handling and Storage								
 Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use only in a well-ventilated area. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid contact with skin and eyes. Keep container tightly closed. Avoid ingestion and inhalation. Do not allow contact with water. Keep from contact with moist air and steam. 								
Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.								
Section 8 - Exposure Controls, Personal Protection								
Chemical	Name	ACGIH	+ NIOSH	OSHA - Final PELs				

OSHA Vacated PELs: Zinc: None listed

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

|none listed |none listed |none listed |

Exposure Limits

| Zinc

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a Respirators: NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if

irritation or other symptoms are experienced. Section 9 - Physical and Chemical Properties Physical State: Solid Color: bluish white, silvery gray Odor: odorless pH: Not available Vapor Pressure: 1 mm Hg @ 487 deg C Vapor Density: Not available Evaporation Rate: Not applicable Viscosity: Not applicable Boiling Point: 907 deg C (1,664.60°F) Freezing/Melting Point: 419 deg C (786.20°F) Decomposition Temperature: Not available Solubility in water: Reacts with water Specific Gravity/Density: 7.14 Molecular Formula: Zn Molecular Weight: 65.38 Section 10 - Stability and Reactivity Chemical Stability: Stable under normal temperatures and pressures. Conditions to Avoid: Incompatible materials, excess heat, strong oxidants, exposure to moist air or water. Incompatibilities with Other Materials Oxidizing agents, acids, bases. Hazardous Decomposition Products Toxic fumes of zinc oxide. Hazardous Polymerization Has not been reported. Section 11 - Toxicological Information RTECS#: CAS# 7440-66-6: ZG8600000 LD50/LC50: RTECS: Not available. Zinc - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65. Carcinogenicity: Other: See actual entry in RTECS for complete information. Section 12 - Ecological Information Other: Do not empty into drains. Section 13 - Disposal Considerations Dispose of in a manner consistent with federal, state, and local regulations. Section 14 - Transport Information US DOT Shipping Name: Not Regulated Hazard Class: UN Number: Packing Group: Canada TDG Shipping Name: Not regulated as a hazardous material Hazard Class: UN Number: Packing Group: USA RQ: CAS# 7440-66-6: 1000 lb final RQ (no reporting of releases of this hazardous substa Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives Hazard Symbols: N Risk Phrases:

R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S 60 This material and its container must be disposed of as hazardous waste.

WGK (Water Danger/Protection)

CAS# 7440-66-6: 0

Canada

CAS# 7440-66-6 is listed on Canada's DSL List

Canadian WHMIS Classifications: Not available

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 7440-66-6 is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA

CAS# 7440-66-6 is listed on the TSCA Inventory.

Section 16 - Other Information MSDS Creation Date: 4/09/1998 Revision #6 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.
