



## Material Safety Data Sheet

<b>NFPA</b>	<b>OSHA HCS Risk Phrases</b>	<b>Personal Protective Equipment</b>
	CLASS: Irritating substance.	

### Section 1 Chemical Product and Company Identification

<b>Product Name</b> <b>Zinc Stearate</b>	
<b>Manufacturer</b> Ferro Corporation, Polymer Additives Division Cleveland Operations 1636 Wayside Road Cleveland, Ohio 44112 USA	<b>Emergency Telephone Numbers</b>  CHEMTREC                    : 1-800-424-9300  24 Hour Information        : (216) 641-5324  Plant-Week Days Only     : (216) 750-7020
<b>Chemical Name</b> Zinc Stearate	
<b>Chemical Family</b> Polymer Additive	
<b>Synonym</b> Octadecanoic acid, zinc salt	
<b>CAS#</b> 557-05-1	Issued on 2/1/2002.

### Section 2 Composition and Information on Ingredients

INGREDIENTS	CAS #	% Weight	OSHA (PEL)    ACGIH (TLV)
1) Zinc Compound		90-100	TWA: 15 (mg/m <sup>3</sup> ) from OSHA (PEL) [United States] Inhalation Total. TWA: 5 (mg/m <sup>3</sup> ) from OSHA (PEL) [United States] Inhalation Respirable.
2) Zinc compounds (as Zn)	7440-66-6	15-20	Not available.
3) Zinc Oxide	1314-13-2	1-5	TWA: 5 (mg/m <sup>3</sup> ) from OSHA (PEL) [fumes ] TWA: 5 (mg/m <sup>3</sup> ) from ACGIH (TLV) [fumes ] TWA: 15 (mg/m <sup>3</sup> ) from OSHA (PEL) [United States] Inhalation Total. TWA: 5 (mg/m <sup>3</sup> ) from OSHA (PEL) [United States] Inhalation Respirable. TWA: 10 (mg/m <sup>3</sup> ) from ACGIH (TLV) [United States] Inhalation Total.
4) Stearate			TWA: 10 (mg/m <sup>3</sup> ) from ACGIH (TLV) [United States] Total.




The specific chemical identities are being withheld as a trade secret (29CFR1910.1200).

### Section 3 Hazards Identification

<b>Emergency Overview</b>	<b>Color :</b> White.
<b>CAUTION!</b>	<b>Physical state :</b> Solid. (Powder )
	<b>Odor :</b> Mild.
MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION. Dust may cause mechanical irritation. May form explosive mixtures with air.	
<b>Potential Health Effects</b>	
<b>Acute</b>	May irritate skin and eyes. May irritate nose, throat and upper respiratory tract. Can cause gastrointestinal irritation.
<b>Chronic</b>	Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

Zinc Stearate		Ferro Corporation, Polymer Additives Division
<b>Section 4 First Aid Measures</b>		
<b>Eye</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</b>	Wash with soap and water. Get medical attention if irritation develops.	
<b>Inhalation</b>	Over-exposure by Inhalation may cause respiratory irritation. Allow the victim to rest in a well ventilated area. Oxygen may be administered if breathing is difficult. Get medical attention if symptoms appear.	
<b>Ingestion</b>	Ingestion may cause gastric disturbances. Drink two large glasses of water. Get medical attention if symptoms appear.	
<b>Section 5 Fire and Explosion Data</b>		
<b>Flash Point</b>	CLOSED CUP: 260°C (500°F). (Pensky-Martens.)	
<b>Flammable Limits</b>	Not available.	
<b>Auto-Ignition Temperature</b>	Not available.	
<b>Fire Fighting Media and Instructions</b>	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet. Fire fighters should wear proper protective equipment. Qualified persons wearing full fire-fighting suits and approved/certified self-contained breathing apparatus.	
<b>Combustion Products</b>	Carbon oxides (CO, CO2), zinc oxide fumes.	
<b>Fire Hazards</b>	Material in powder form, capable of creating a dust explosion. Avoid raising dust clouds. Dust explosion can occur under conditions of high dust concentrations in the presence of any ignition source.	
<b>Section 6 Accidental Release Measures</b>		
<b>Small Spill</b>	Use appropriate tools to put the spilled solid in a convenient waste disposal container. Wear suitable protective clothing, gloves and eye/face protection. Do not breathe dust.	
<b>Large Spill</b>	Use a shovel to put the material into a convenient waste disposal container. Wear appropriate respiratory protection. Wear suitable protective clothing, gloves and eye/face protection. Do not breathe dust. Dust can combine with air to form an explosive mixture. Keep away from heat, sparks and flame.	
<b>Personal Protection</b>		
<b>Small Spill</b>	Safety glasses. Gloves (impervious). Wear appropriate respirator when ventilation is inadequate.	
<b>Large Spill</b>	Splash goggles. Protective clothing. Gloves (impervious). Boots. Wear appropriate respirator when ventilation is inadequate.	
<b>Section 7 Handling and Storage</b>		
<b>Precaution</b>	Wash thoroughly after handling. Use only in well-ventilated areas. Avoid contact with eyes, skin, and clothing. Remove contaminated clothing and shoes. May form explosive mixtures with air. Keep away from sources of ignition.	
<b>Storage</b>	Keep container tightly closed. Keep container in a cool, well-ventilated area. Store away from incompatible materials and ignition sources.	
<b>Section 8 Exposure Controls/Personal Protection</b>		
<b>Engineering Controls</b>	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.	
<b>Personal Protection</b>	Safety glasses. Gloves (impervious). Wear appropriate respirator when ventilation is inadequate.	
<b>Exposure Limits</b>	See Section 2. Composition and Information on Ingredients	

Zinc Stearate		Ferro Corporation, Polymer Additives Division	
<b>Section 9 Physical and Chemical Properties</b>			
Physical state	Solid. (Powder)	Odor	Mild.
pH (1% soln/water)	Not applicable.	Color	White.
Boiling Point	Not available.	Specific Gravity	1.095 (Water = 1)
Melting Point	130°C (266°F)	Vapor Pressure	Not applicable.
Volatility	Not available.	Solubility	Insoluble in cold water, hot water.
<b>Section 10 Stability and Reactivity Data</b>			
Instability	The product is stable.	Hazardous Polymerization	Will not occur.
Incompatibles	Reactive with oxidizing agents, acids, alkalis.		
Corrosivity	Not considered to be corrosive for metals and glass.		
<b>Section 11 Toxicological Information</b>			
Routes of Entry	Skin contact. Eye contact. Inhalation.		
Toxicity to Animals	Acute oral toxicity (LD50): 7950 mg/kg [Mouse]. (Zinc Oxide).		
Acute Effects	May irritate skin and eyes. May irritate nose, throat and upper respiratory tract. Can cause gastrointestinal irritation.		
Chronic Effects	Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.		
<b>Section 12 Ecological Information</b>			
Ecotoxicity	Not available.		
Biodegradation	Not available.		
<b>Section 13 Disposal Considerations</b>			
Waste Disposal	Waste must be disposed of in accordance with federal, state and local environmental control regulations.		
Waste Classification	Code: RCRA Non-hazardous Classification: Non-hazardous waste		
<b>Section 14 Transport Information</b>			
DOT Classification	Not a DOT controlled material (United States).		
Reportable Quantity	CERCLA; Hazardous substances.: No products were found.		
Marine Pollutant	Not applicable.		
Special Provisions for Transport	No additional remark.		
Canada TDG Classification	Not controlled under TDG (Canada).		
WHMIS	D-2B		

<b>Zinc Stearate</b>		<b>Ferro Corporation, Polymer Additives Division</b>		
<b>Section 15 Other Regulatory Information</b>				
<b>State Regulations</b>	<u>Rhode Island RTK hazardous substances:</u> Zinc Compound; Zinc Oxide <u>Pennsylvania RTK:</u> Zinc Compound; Zinc Oxide <u>Florida:</u> Zinc Oxide <u>Minnesota:</u> Zinc Compound; Zinc Oxide <u>Massachusetts RTK:</u> Zinc Compound; Zinc Oxide <u>California prop. 65:</u> No products were found. New Jersey TSNR Number: Not available.			
<b>Reportable Quantity</b>	<u>CERCLA: Hazardous substances:</u> No products were found.			
<b>SARA 313</b>	<u>SARA 313 toxic chemical notification and release reporting:</u> Zinc Compound 95%; Zinc compounds (as Zn) 17.5%; Zinc Oxide 3%			
<b>HMIS (U.S.A.)</b>				<b>Personal Protection</b> <b>B</b>
<b>TSCA, CEPA DSL/ NDSL</b>	TSCA (Toxic Substance Control Act): This product or its components are listed on the TSCA Inventory. Canadian environmental protection act (CEPA): This product or its components appear on the Domestic Substances List (DSL) EINECS: This product or its components appear on the European Inventory of Existing Commercial Chemical Substances.			
<b>Section 16 Other Information</b>				
<b>References</b>	Not available.			
<b>Issued on</b> 2/1/2002.	<b>Printed</b> 2/1/2002.			
	M_U_WS_TCK			

**Notice to Reader**

The information and recommendations contained in this Material Safety Data Sheet have been compiled from sources believed to be reliable and to represent the most reasonable current opinion on the subject when the MSDS was prepared. No warranty, guaranty or representation is made as to the correctness or sufficiency of the information. The user of this product must decide what safety measures are necessary to safely use this product, either alone or in combination with other products, and determine its environmental regulatory compliance obligations under any applicable federal or state laws.

**Instructions to the customer/purchaser.**

This MSDS contains important environmental, safety and health information for your employees who will be using this product. Please give this information to them. If you resell this product, give a copy of this MSDS to the buyer.