

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier**

**Product Name** LUBRAZINC W

**Other means of identification**

**Biogenix Product Code** 10509; 24096; 27323; 40103

**SDS Code** LUZNW

**Registration Number(s)** 01-2119513214-54 [EC# 293-049-4; Fatty acids, C16-18, zinc salts]

**Recommended use of the chemical and restrictions on use**

**Recommended Use** Chemical intermediate. Lubricant.

**Uses advised against** Consumer use

**Details of the supplier of the safety data sheet**

**Supplier Address**

PMC Biogenix, Inc.  
1231 Pope Street  
Memphis, TN 38108  
USA

**Manufacturer Address**

PMC Biogenix, Inc.  
1231 Pope Street  
Memphis, TN 38108  
USA

**Emergency telephone number**

**Company Phone Number** PMC Biogenix Customer Service: 1-800-641-2152

**24 Hour Emergency Phone Number** Chemtrec 1-800-424-9300

**Emergency Telephone** Biogenix Environmental Health and Safety Department +1-901-320-5820

## 2. HAZARDS IDENTIFICATION

**Classification**

**OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Combustible dust	-
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**Label elements**

**Emergency Overview**

<b>Warning</b>		
May form combustible dust concentrations in air		
The product contains no substances which at their given concentration, are considered to be hazardous to health		
<b>Appearance</b> powder	<b>Physical state</b> Solid	<b>Odor</b> Slight

**Hazards not otherwise classified (HNOC)**

Dust can form an explosive mixture with air

**Other Information**

Unknown Acute Toxicity 1 % of the mixture consists of ingredient(s) of unknown toxicity

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%	Trade Secret
Zinc stearate	557-05-1	>97	*
Octadecanoic acid	57-11-4	<3	*

\*The percentage listed represents batch to batch variability in the product of this product; it does not represent any specification.

#### 4. FIRST AID MEASURES

##### First aid measures

<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
<b>Inhalation</b>	Remove to fresh air.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water.
<b>Self-protection of the first aider</b>	Use personal protective equipment as required.

##### Most important symptoms and effects, both acute and delayed

**Symptoms** No information available.

##### Indication of any immediate medical attention and special treatment needed

**Note to physicians** Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

##### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

**Unsuitable extinguishing media** Do not use a solid water stream as it may scatter and spread fire.

##### Specific hazards arising from the chemical

Avoid creating dust. Dust can form an explosive mixture with air. Thermal decomposition can lead to release of irritating and toxic gases and vapors. Do not allow run-off from fire-fighting to enter drains or water courses.

**Hazardous combustion products** Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). Hazardous metal fumes and oxides. Hydrocarbons.

##### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

##### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Ensure adequate ventilation, especially in confined areas. Avoid creating dust. Dust can form an explosive mixture with air.

##### Environmental precautions

**Environmental precautions** See section 12 for additional ecological information. The product is insoluble and floats on water. Prevent further leakage or spillage if safe to do so. Do not allow into any sewer, on the ground or into any body of water. Prevent product from entering drains.

**Methods and material for containment and cleaning up**

**Methods for cleaning up** Use personal protective equipment as required. Avoid creating dust. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Take up mechanically, placing in appropriate containers for disposal. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Advice on safe handling** Avoid generation of dust. Handle in accordance with good industrial hygiene and safety practice.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep container tightly closed in a dry and well-ventilated place.

**Incompatible materials** Strong oxidizing agents.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**Exposure Guidelines** Exposure limits are listed below, if they exist.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH	PMC OEL
Zinc stearate 557-05-1	TWA: 10 mg/m <sup>3</sup> inhalable particulate matter TWA: 3 mg/m <sup>3</sup> respirable particulate matter TWA: 10 mg/m <sup>3</sup> inhalable particulate matter except stearates of toxic metals TWA: 3 mg/m <sup>3</sup> respirable particulate matter except stearates of toxic metals	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 10 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable dust	-
Organic acid	TWA: 10 mg/m <sup>3</sup> inhalable particulate matter TWA: 3 mg/m <sup>3</sup> respirable particulate matter	-	-	TWA: 10 mg/m <sup>3</sup>
Dust DUST	TWA: 10 mg/m <sup>3</sup> Inhl TWA: 3 mg/m <sup>3</sup> Resp	TWA: 5 mg/m <sup>3</sup> Resp TWA: 15 mg/m <sup>3</sup> Total 29CFR1910.1000	-	-

NIOSH IDLH Immediately Dangerous to Life or Health  
**Other Information** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**Appropriate engineering controls**

**Engineering Controls** Showers, Eyewash stations, Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear protective gloves and protective clothing.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be

required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Avoid contact with skin, eyes or clothing. Avoid breathing (dust, vapor, mist, gas). Wash face, hands and any exposed skin thoroughly after handling. Use personal protective equipment as required.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

<b>Physical state</b>	Solid	<b>Odor</b>	Slight
<b>Appearance</b>	powder	<b>Odor threshold</b>	No information available
<b>Color</b>	white		
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>	
<b>pH</b>	Not applicable		
<b>Melting point / freezing point</b>	120 °C / 248 °F		
<b>Boiling point / boiling range</b>	> 160 °C / 320 °F	Decomposes	
<b>Flash point</b>	177 °C / 351 °F	Cleveland Open Cup	
<b>Evaporation rate</b>	No information available		
<b>Flammability (solid, gas)</b>	No information available		
<b>Flammability Limit in Air</b>			
<b>Upper flammability limit:</b>	No information available		
<b>Lower flammability limit:</b>	No information available		
<b>Vapor pressure</b>	No information available	negligible	
<b>Vapor density</b>	No information available		
<b>Specific Gravity</b>	No information available		
<b>Water solubility</b>	Insoluble in water		
<b>Solubility in other solvents</b>	No information available		
<b>Partition coefficient</b>	1.2		
<b>Autoignition temperature</b>	420 °C / 788 °F	(based on components)	
<b>Decomposition temperature</b>	No information available		
<b>Kinematic viscosity</b>	No information available	Not applicable	
<b>Dynamic viscosity</b>	No information available	Not applicable	
<b>Explosive properties</b>	Dust can form an explosive mixture with air		
<b>Oxidizing properties</b>	Not applicable		

**Other Information**

<b>Softening point</b>	No information available
<b>Molecular weight</b>	632.335 g/mol
<b>VOC Content (%)</b>	0
<b>Density</b>	1.1 g/cm3 @ 25 °C
<b>Bulk density</b>	No information available
<b>Minimum ignition energy (MIE)</b>	13 mJ

**10. STABILITY AND REACTIVITY**

**Reactivity**

No known effects under normal use conditions.

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Hazardous polymerization**

Hazardous polymerization does not occur.

**Conditions to avoid**

Avoid creating dust. Dust can form an explosive mixture with air. Extremes of temperature and direct sunlight.

**Incompatible materials**

Strong oxidizing agents.

**Hazardous Decomposition Products**

Carbon monoxide, Carbon dioxide (CO2), Hazardous metal fumes and oxides, Hydrocarbons.

**11. TOXICOLOGICAL INFORMATION**

Information on likely routes of exposure

<b>Product Information</b>	Product does not present an acute toxicity hazard based on known or supplied information.
<b>Inhalation</b>	Inhalation of dust in high concentration may cause irritation of respiratory system.
<b>Eye contact</b>	Dust contact with the eyes can lead to mechanical irritation.
<b>Skin Contact</b>	No known hazard in contact with skin. Substance may cause slight skin irritation.
<b>Ingestion</b>	No known effect.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Zinc stearate	>5000 mg/kg (Rabbit) >10000mg/kg (Mouse) >5000 mg/kg (Rat)	>2000 mg/kg (Rabbit)	>200 mg/L (1 hr)(Rat)
Octadecanoic acid	> 4600 mg/kg (Rat)	>5000 mg/kg (Rabbit)	

Information on toxicological effects

**Symptoms** No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Sensitization</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available
<b>STOT - repeated exposure</b>	No information available
<b>Target Organ Effects</b>	Eyes, Respiratory system, Skin.
<b>Aspiration hazard</b>	Not applicable.

Numerical measures of toxicity - Product Information

**Unknown Acute Toxicity** 3.9 % of the mixture consists of ingredient(s) of unknown toxicity  
 The following values are calculated based on chapter 3.1 of the GHS document .

**12. ECOLOGICAL INFORMATION**

Ecotoxicity

98.1 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Octadecanoic acid 57-11-4		12000 ug/L >4 d Oncorhynchus kisutch		

Persistence and degradability

No information available.

Bioaccumulation

Not Likely.

Chemical Name	Partition coefficient
Zinc stearate 557-05-1	1.2
Octadecanoic acid 57-11-4	8.23

**Other adverse effects** No information available

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Disposal of wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging** Do not reuse container. Disposal should be in accordance with applicable regional, national and local laws and regulations.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Zinc stearate 557-05-1	Toxic

**14. TRANSPORT INFORMATION**

**DOT** Not regulated

**TDG** Not regulated

**IATA** Not regulated.  
**Proper shipping name** Not regulated

**IMDG** Not regulated

**15. REGULATORY INFORMATION**

**All of the components in the product are on the following Inventory lists**  
The classification and labeling information in this Safety Data Sheet should be viewed as provisional.

**International Inventories**

- EINECS/ELINCS Complies
- TSCA Complies
- AICS Complies
- DSL/NDSL Complies
- ENCS Complies
- KECL Complies
- PICCS Complies
- IECSC Complies
- NZIoC Complies
- TCSI Complies

**Legend:**

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances  
**NZIoC** - New Zealand Inventory of Chemicals  
**TCSI** - Taiwan Chemical Substance Inventory

**US Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Zinc stearate - 557-05-1	557-05-1	97.1	1.0

**SARA 311/312 Hazard Categories** Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications. Under the amended regulations at 40 CFR 370, EPCRA 311/312 Tier II reporting for the 2017 calendar year will need to be consistent with updated hazard classifications.

**CWA (Clean Water Act)**

Any Substance regulated as a pollutant pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42) is listed below, if it exists.

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Zinc stearate 557-05-1		X		

**CERCLA**

Any Substance regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) is listed below, if it exists.

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Zinc stearate 557-05-1	X	X	X

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

**16. OTHER INFORMATION**

<b><u>NFPA</u></b>	Health hazards 1	Flammability 1	Instability 0	Physical and Chemical Properties -
<b><u>HMIS</u></b>	Health hazards 1	Flammability 1	Physical hazards 0	Personal protection X

**Prepared By** PMC Group  
**Issue Date** 11-Jul-2014  
**Revision Date** 17-Aug-2018  
**Revision Note**

(M)SDS sections updated 1 9

This material safety data sheet complies with the requirements of 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**