



# SAFETY DATA SHEET

Issue Date 13-Jul-2014

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Version 2

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

### Product identifier

**Product Name** Magnesium Stearate Food Grade NF; Magnesium Stearate Food Grade NF Vegetable; Magnesium Stearate Bulky

### Other means of identification

**Biogenix Product Code** 26355; 26412; 40335, 4050291

**SDS Code** MAGSTNF

**Synonyms** None

### 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 | - |
|------------------|---|

### Label elements

#### **Emergency Overview**

##### **Warning**

May form combustible dust concentrations in air

The product contains no substances which at their given concentration, are considered to be hazardous to health

**Appearance** powder

**Physical state** Solid

**Odor** 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 |
|--------------------|-----------|----------|--------------|
| Magnesium stearate | 557-04-0  | >94      | *            |
| Water              | 7732-18-5 | <4       | *            |
| Octadecanoic acid  | 57-11-4   | <2       | *            |

\* The exact percentage (concentration) of composition has been withheld as a trade secret. If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

#### 4. FIRST AID MEASURES

##### First aid measures

|                     |   |
|---------------------|---|
| <b>Eye contact</b>  | Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. (Get medical attention immediately if irritation persists.). |
| <b>Skin Contact</b> | Wash skin with soap and water. (Get medical attention immediately if symptoms occur.).  |
| <b>Inhalation</b>   | Remove to fresh air. (Get medical attention immediately if symptoms occur.).  |
| <b>Ingestion</b>    | Clean mouth with water and drink afterwards plenty of water. (Get medical attention immediately if symptoms occur.).  |

##### 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 dioxide (CO<sub>2</sub>). Carbon monoxide.

##### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

##### 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. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Avoid creating dust. Pick up and transfer to properly labeled containers.

## **7. HANDLING AND STORAGE**

**Precautions for safe handling**

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

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

**Storage Conditions** Keep containers tightly closed in a dry, cool 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.

| <b>Chemical Name</b>           | <b>ACGIH TLV</b>  | <b>OSHA PEL</b>  | <b>NIOSH IDLH</b> | <b>PMC OEL</b>            |
|--------------------------------|---|--|-------------------|---------------------------|
| Magnesium stearate<br>557-04-0 | TWA: 10 mg/m <sup>3</sup> except<br>stearates of toxic metals   | -  | -                 | -                         |
| Octadecanoic acid<br>57-11-4   | -   | -  | -                 | TWA: 10 mg/m <sup>3</sup> |
| Dust<br>DUST                   | TWA: 10 mg/m <sup>3</sup> Inhl<br>TWA: 3 mg/m <sup>3</sup> Resp | TWA: 5 mg/m <sup>3</sup> Resp<br>TWA: 15 mg/m <sup>3</sup> Total<br>29CFR1910.1000 | -                 | -                         |

**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

|                               |   |                         |                          |
|-------------------------------|---|-------------------------|--------------------------|
| Physical state                | Solid                                       | Odor                    | Slight                   |
| Appearance                    | powder                                      | Odor threshold          | No information available |
| Color                         | white                                       |                         |                          |
| <u>Property</u>               | <u>Values</u>                               | <u>Remarks • Method</u> |                          |
| pH                            | No information available                    |                         |                          |
| Melting point/freezing point  | 145 °C / 293 °F                             |                         |                          |
| Boiling point / boiling range | > 176 °C / 349 °F                           | Decomposes              |                          |
| Flash point                   | 176 °C / 349 °F                             | Cleveland Open Cup      |                          |
| Evaporation rate              | No information available                    |                         |                          |
| Flammability (solid, gas)     | No information available                    |                         |                          |
| Flammability Limit in Air     |   |                         |                          |
| Upper flammability limit:     | No information available                    |                         |                          |
| Lower flammability limit:     | No information available                    |                         |                          |
| Vapor pressure                | < 0.0000001 kPa @ 25 °C                     | negligible              |                          |
| Vapor density                 | No information available                    |                         |                          |
| Specific Gravity              | No information available                    |                         |                          |
| Water solubility              | Insoluble in water                          |                         |                          |
| Solubility in other solvents  | No information available                    |                         |                          |
| Partition coefficient         | No information available                    |                         |                          |
| Autoignition temperature      | No information available                    |                         |                          |
| Decomposition temperature     | No information available                    |                         |                          |
| Kinematic viscosity           | No information available                    |                         |                          |
| Dynamic viscosity             | No information available                    |                         |                          |
| Explosive properties          | Dust can form an explosive mixture with air |                         |                          |
| Oxidizing properties          | No information available                    |                         |                          |

### Other Information

|                               |                          |
|-------------------------------|--------------------------|
| Softening point               | No information available |
| Molecular weight              | 591.24                   |
| VOC Content (%)               | 0                        |
| Density                       | 1.09 g/cm <sup>3</sup>   |
| Bulk density                  | 0.159 g/cm <sup>3</sup>  |
| Minimum ignition energy (MIE) | 10 mJ                    |

## 10. STABILITY AND REACTIVITY

### Reactivity

No information available.

### 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 dioxide (CO<sub>2</sub>), Carbon monoxide.

## 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. No known effect based on information supplied. |
| <b>Eye contact</b>         | Dust contact with the eyes can lead to mechanical irritation.   |
| <b>Skin Contact</b>        | May cause irritation.   |
| <b>Ingestion</b>           | No data available.  |

| Chemical Name      | Oral LD50           | Dermal LD50          | Inhalation LC50 |
|--------------------|---------------------|----------------------|-----------------|
| Magnesium stearate | > 10000 mg/kg (Rat) |                      | > 2 mg/l (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>Aspiration hazard</b>        | No information available.  |

**Numerical measures of toxicity - Product Information**

**Unknown Acute Toxicity** 2.9% of the mixture consists of ingredient(s) of unknown toxicity  
**The following values are calculated based on chapter 3.1 of the GHS document .**  
**ATEmix (oral)** 10627 mg/kg

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

1% of the mixture consists of components(s) of unknown hazards to the aquatic environment

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Other adverse effects** No information available

## 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

|                               |   |
|-------------------------------|---|
| <b>Disposal of wastes</b>     | Disposal should be in accordance with applicable regional, national and local laws and regulations.                         |
| <b>Contaminated packaging</b> | Do not reuse container. Disposal should be in accordance with applicable regional, national and local laws and regulations. |

**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**

|                 |          |
|-----------------|----------|
| <b>TSCA</b>     | Complies |
| <b>AICS</b>     | Complies |
| <b>DSL/NDSL</b> | Complies |
| <b>ENCS</b>     | Complies |
| <b>KECL</b>     | Complies |
| <b>PICCS</b>    | Complies |
| <b>IECSC</b>    | Complies |
| <b>NZIoC</b>    | 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

**US Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). Any Substance regulated Title 40 of the Code of Federal Regulations, Part 372 is listed below, if it exists.

**SARA 311/312 Hazard Categories**

**Acute health hazard** No

|                                   |    |
|-----------------------------------|----|
| Chronic Health Hazard             | No |
| Fire hazard                       | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard                   | No |

**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.

**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**

**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              |

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Revision Note  
(M)SDS sections updated 1

**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**