

SAFETY DATA SHEET

Issue Date 28-May-2014

Revision Date 28-May-2014

Version 1

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

Product identifier		
Product Name	Calcium Stearate FN; Calcium Stearate FN ND; Calcium Stearate FN Vegetab Calcium Stearate FN Vegetable ND	ole;
Other means of identification		
Biogenix Product Code	40057; 40035; 40019; 28017; 27975; 10279; 40225; 40230; 4052031; 40014; 400)03;
SDS Code	4051051 CALSTFN	
SDS Code Synonyms	None	
Recommended use of the chemical		
Recommended Use	Chemical intermediate. Lubricant.	
Uses advised against	Consumer use	
Details of the supplier of the safety	data sheet_	
Supplier Address	Manufacturer Address	
PMC Biogenix, Inc.	PMC Biogenix, Inc.	
1231 Pope Street	1231 Pope Street	
Memphis, TN 38108	Memphis, TN 38108	
USA	USA	
Emergency telephone number		
Company Phone Number	PMC Biogenix Customer Service: 1-800-641-2152	
24 Hour Emergency Phone Number		
Emergency Telephone	Biogenix Environmental Health and Safety Department +1-901-320-5820	
	2. HAZARDS IDENTIFICATION	
Classification		
OSHA Regulatory Status		
	s by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)	
Combustible dust	L]
Label elements		
	E-manuary Quantieur	
Warning	Emergency Overview	
May form combustible dust concentrat	tions in air	
The product contains no subs	stances which at their given concentration, are considered to be hazardous to healt	th
	Physical state Onlid	den Olimbu
Appearance powder	Physical state Solid Oc	dor Slight
Precautionary Statements - Respon	ISE	
Get medical advice/attention if you fee		
	ter for several minutes. Remove contact lenses, if present and easy to do. Continue	rinsing. If
eye irritation persists: Get medical adv	vice/attention.	-

IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Drink 1 or 2 glasses of water. Get medical advice/attention if you feel unwell.

Hazards not otherwise classified (HNOC)

 Dust can form an explosive mixture with air

 Other Information

 Unknown Acute Toxicity
 0.1%

0.1% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
Calcium stearate	1592-23-0	>96	*

* 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

Eye contact	Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists: Get medical advice/attention.	
Skin Contact	Wash skin with soap and water. (Get medical attention immediately if symptoms occur.).	
Inhalation	Remove to fresh air. (Get medical attention immediately if symptoms occur.).	
Ingestion	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. 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.

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

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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 containm	ent 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, includ	ing 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.			
Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH	PMC OEL
Calcium stearate 1592-23-0	TWA: 10 mg/m ³ except stearates of toxic metals	-	-	-
Octadecanoic acid 57-11-4	-	-	-	TWA: 10 mg/m ³
Dust DUST	TWA: 10 mg/m ³ Inhl TWA: 3 mg/m ³ Resp	TWA: 5 mg/m ³ Resp TWA: 15 mg/m ³ Total 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 clothin
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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 Appearance Color	Solid powder white	Odor Odor threshold	Slight No information available
Property	Values_ No information available	Remarks • Method	
pH Melting point/freezing point	160 °C / 320 °F		
Boiling point / boiling range	Decomposes	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	No information available		
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 v	vith air	
Oxidizing properties	No information available		
Other Information			
Softening point	No information available		
Molecular weight	No information available		
VOC Content (%)	No information available		
Density	No information available		
Bulk density	No information available		
Minimum ignition energy (MIE)	100 mJ		

10. STABILITY AND REACTIVITY

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

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

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

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Calcium stearate	5000-10000 mg/kg (Rat)	5000 mg/kg (Rabbit)	
	>10gm/kg (Mouse)		
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

Sensitization Germ cell mutagenicity Carcinogenicity	No information available. No information available. This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
Reproductive toxicity	No information available.
STOT - single exposure	No information available
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity	2% 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)	5204 mg/kg
ATEmix (dermal)	5204 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

0.1% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Calcium stearate 1592-23-0		>100 mg/l		>100 mg/l (Daphnia magna)

Persistence and degradability

No information available.

Bioaccumulation

No information available.

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.				

14. TRANSPORT INFORMATION

DOT	Not regulated
TDG	Not regulated
IATA	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

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
 Australian Inventory of Chemical Substances

NZIOC - New Zealand Inventory of Chemicals

US Federal Regulations

<u>SARA 313</u>

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						
NFPA_	Health hazards 0	Flammability 1	Instability 0	Physical and Chemical Properties -		
HMIS	Health hazards 0	Flammability 1	Physical hazards 0	Personal protection X		
Prepared By Issue Date	PMC Group 28-May-2014					
Revision Date Revision Note	28-May-2					
No information available 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