



SAFETY DATA SHEET

Issue Date 09-Jul-2014

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Version 1

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

Product identifier

Product Name Kemamide® EBS

Other means of identification

Biogenix Product Code 4051741; 40013; 40227; 26286; 40126; 26287; 26238; 26414
SDS Code KEMEBS
Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Chemical intermediate.
Uses advised against Consumer use

Details of the supplier of the safety data sheet

Supplier Address	Manufacturer Address
PMC Biogenix, Inc. 1231 Pope Street Memphis, TN 38108 USA	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 not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label elements

Emergency Overview

Hazard statements

Handle in accordance with good industrial hygiene and safety practice

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

Appearance powder, pellets

Physical state Solid

Odor Slight

Precautionary Statements - Response

Get medical advice/attention if you feel unwell

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/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% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
N,N'-Ethylenebis(stearamide)	110-30-5	99.8	*
Water	7732-18-5	0.2	*

* 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

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.

Hazardous combustion products Carbon monoxide. Carbon dioxide (CO₂). Nitrogen oxides (NO_x).

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 None known based on information supplied.

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
N,N'-Ethylenebis(stearamide) 110-30-5	-	-	-	-
Water 7732-18-5	-	-	-	-
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 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, pellets	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	140 - 147 °C / 248 - 297 °F	
Boiling point / boiling range	260 °C / 500 °F	
Flash point	280 °C / 536 °F	Pensky-Marten closed cup ASTM D 93
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	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	No information available
VOC Content (%)	0
Density	0.89 g/cm ³
Bulk density	No information available

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.
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Conditions to avoid

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

Incompatible materials

None known based on information supplied.

Hazardous Decomposition Products

Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides (NO_x).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

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

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
N,N'-Ethylenebis(stearamide)	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 58 mg/l (Rat)

Information on toxicological effects

Symptoms No information available.

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

Sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	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

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	15412 mg/kg
ATEmix (dermal)	20040 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
N,N'-Ethylenebis(stearamide) 110-30-5		>1000 mg/l: LC50 (rainbow trout; 96h) > 300 mg/l: LC50 (medaka-48h)		140 mg/l: EC50 (Daphnia magna-48h)

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	Partition coefficient
N,N'-Ethylenebis(stearamide) 110-30-5	13.98

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

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

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

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Revision Note
 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