



Issue Date: 25-Nov-2019 v.1

1. Identification

1.1. Product Identifier

Product form _____ Liquid
 Product Name _____ PheNom

1.2 Identified Uses

Recommended Use _____ Seed or Soil Inoculant

1.3 Supplier of the SDS

Dakota Bio
 6066 Shingle Creek Parkway #216
 Brooklyn Center, Mn. 55430
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2. Hazards Identification

2.1 Classification of the mixture _____ Not considered hazardous substance by OSHA
 2.2 Labeling Elements _____ Not applicable
 2.3 Other hazards _____ None
 2.4 Unknown acute toxicity _____ None

3. Composition on ingredients

3.1 Substance _____ Liquid
 3.2 Mixture of ingredient
 Mixture Active Ingredient _____ Patented Bacteria Blend

4. First Aid

Health Hazard rating 0

4.1 Description of First Aid

First Aid General _____ Not harmful by ingestion
 First Aid Inhalation _____ Not harmful by inhalation. Breath fresh air, rest.
 First Aid Skin Contact _____ Not harmful by contact. Wash exposed skin with soap and water.
 First Aid Eye Contact _____ Not harmful, may cause discomfort. Rinse immediately, seek medical attention if irritation persists.
 First Aid ingestion _____ Not harmful to ingest. Rinse mouth, give water.

4.2 Symptoms and effects: acute and delayed

Symptoms _____ Acute: None, Delayed None



5. Firefighting Measures

5.1 Extinguishing Media

Suitable extinguishing media _____ Foam, water stream

Unsuitable extinguishing media _____ None

5.2 Special Hazards

Fire Hazard _____ Combustible solid which burns but propagates flame with difficulty.

Explosion Hazard _____ Avoid creating clouds of dust in unventilated space, dust cloud may form explosive mixture with source of ignition.

Reactivity _____ Combustion products include: carbon monoxide, carbon dioxide, nitrogen oxides. Avoid contamination with oxidizing agents, nitrates, oxidizing agents, chlorine bleach.

5.3 Advice for Firefighters

Firefighting instructions _____ Use water spray or fog for cooling containers

Protective equipment for firefighters' _____ Full protective gear as in any fire

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 Non-emergency personnel

Emergency procedures _____ Stop source of leak or contamination, clean spill.

6.1.2 Emergency responders

Protective equipment _____ Equip cleanup crew with proper protection

Emergency procedure _____ Ventilate the area

6.2 Environmental precautions

None

6.3 Methods and material for contaminant cleanup

Methods _____ Collect spillage, put in waste disposal.
Store away from other chemicals, dispose according local regulation.

6.4 Reference to other sections

No additional information

7. Handling and Storage

7.1 Precautions for safe handling

Precautions _____ Store in closed container, keep away from ignition sources.

Hygiene measures _____ Handle with good industrial hygiene and safety practices. Wash hands after handling.



7.2 Conditions for safe storage, including any incompatibilities

Storage conditions	Keep in original container, cool, well ventilated away from direct sunlight away from extreme high and low temperatures. Keep container closed when not in use. Do not freeze.
Incompatible materials	Oxidizing agents, nitrates, oxidizing agents, chlorine bleach.
Storage Temperature	4-26° C (39-80° F)

7.3 Specific uses

No additional information

8. Exposure controls/personal protection

8.1 Control parameters

No additional information available

8.2 Exposure controls

Appropriate engineering controls	Ensure adequate ventilation, emergency fountains, safety showers eye wash
Personal protective equipment	Avoid unnecessary exposure. Protective goggles, clothing and gloves.
Hand Protection	Protective gloves.
Eye Protection	Chemical or safety goggles
Skin and body protection	Wear suitable protective clothing.
Respiratory protection	Use approved respiratory protection
Other information	Do not eat, drink, or smoke during use.

9. Physical and Chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Powder
Appearance	Light Tan Powder
Color	Light Tan/White
Odor	Odorless
pH	7
Relative evaporation rate	Not available
Melting point	>300C
Freezing point	-4 C (25 F)
Boiling point	Not available
Flash point	Not available
Auto ignition temperature	Not applicable
Decomposition temperature	Not available



9.1 Continued - Information on basic physical and chemical properties

Flammability (solid, gas)	Not applicable
Vapor pressure	Negligible
Relative vapor density at 20C	Not available
Relative Density	Not available
Solubility	Partly miscible
Log Pow	Not available
Log Kow	Not available
Viscosity, kinematic	Not available
Viscosity dynamic	Not available
Explosive properties	Not available
Oxidizing properties	Not available
Explosive limits	Not available

10. Stability and reactivity

10.1 Reactivity	Stable, no known hazardous reactions
10.2 Chemical stability	Stable, when stored at ambient conditions
10.3 Possibility of hazardous reactions	None
10.4 Conditions to avoid	Ignition
10.5 Incompatible materials	Oxidizing agents, Combustible substances
10.6 Hazardous decomposition products	None

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity	None
Skin corrosion/irritation	None
Serious eye damage/irritation	Irritation
Respiratory or skin sensitization	None
Germ cell mutation	None
Carcinogenicity	None
Reproductive toxicity	None
Target organ toxicity (single exposure)	None
Target organ toxicity (repeat exposure)	None
Aspiration hazard	None
Symptoms/injuries after eye contact	May cause irritation



12. Ecological information

12.1 Toxicity	No additional information available
12.2 Persistence and degradability	No additional information available
12.3 Bio accumulative potential	Not established
12.4 Mobility in soil	No additional information available
12.5 Other adverse effects	
Effects on Ozone	None
Effect on global warming	None
Other	None

13. Disposal consideration

13.1 Waste treatment methods	
Waste disposal recommendations	Dispose in safe manner in accordance with local regulations.

14. Transport information

In accordance with DOT	Not regulated as hazardous material
Additional information	
Other	No supplemental information needed

15. Regulatory information

15.1 National regulations	This material is not considered hazardous
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16. Other Information

NFPA health hazard	0 – Exposure could cause irritation
NFPA fire hazard	1 – Minimum fire hazard
NFPA reactivity	0 – Stable, even under fire conditions, not reactive with water.

Information and recommendations listed herein are presented in good faith and believed to be correct as of the date hereof. Dakota Bio or any of its subsidiaries makes no representations as to the completeness or accuracy thereof.