SDS Revision Date: 05/22/2018

1. Identification

1.1. Product identifier

Product Identity	SumaGrow	
Alternate Names	SumaGrow	

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use See Technical Data Sheet.	
Application Method	See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet

mpany Name Bio Soil Enhancers Inc.				
1161 James Street				
Hattiesburg, MS 39401				
Emergency				
Customer Service: Bio Soil Enhancers Inc.	601-582-4000			
0.11				

2. Hazard(s) identification

2.1. Classification of the substance or mixture

No applicable GHS categories.

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.

No applicable GHS categories.

[Prevention]:

No GHS prevention statements

SDS Revision Date: 05/22/2018

[Response]:

No GHS response statements

[Storage]:

No GHS storage statements

[Disposal]:

No GHS disposal statements

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight	GHS	Notes
Humic acids, potassium salts CAS Number: 0068514-28-3	12	Not Classified	[1]
Bacillus amyloliquefaciens	(i)	Not Classified	[1] (i)
Bacillus subtilis	(i)	Not Classified	[1] (i)
Bacillus pumilus	(i)	Not Classified	[1] (i)
Bacillus lichenformis	(i)	Not Classified	[1] (i)

⁽i)In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

The microorganisms are classified as either Risk Group 1 or Risk Group 2 by the World Health Organization (WHO).

These microorganisms may cause human infection, may pose a hazard to laboratory personnel, but are unlikely to spread in the community. Exposure to these microorganisms in the laboratory rarely causes infection. Effective prevention and treatment is readily available.

4. First aid measures

Description of first aid measures

General	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
Eyes	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.

^[1] Substance classified with a health or environmental hazard. [2] Substance with a workplace exposure limit.

^[3] PBT-substance or vPvB-substance.
*The full texts of the phrases are shown in Section 16.

SDS Revision Date: 05/22/2018

	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
Ingestion	Dilute the stomach contents by giving large amounts of water or milk.

4.2. Most important symptoms and effects, both acute and delayed

Overview	Swallowing: May cause nausea, headache.			
	Skin Absorption: No evidence of adverse effects from available information.			
	Inhalation: May cause nasal stuffiness, cough, sore throat. Avoid breathing vapors and mist.			
	Skin contact: Staining may occur - wash with soap and water. No harmful effects expected.			
	Eye contact: No harmful effects expected from vapor. If splashed in eyes, rinse immediately with water for 15 minutes.			
	Effects of Repeated (Chronic) Overexposure: No evidence of adverse effects from available information.			
	Significant Laboratory Data with Possible Relevance to Human Health Hazard Evaluation: None currently known.			
	See section 2 for further details.			

SDS Revision Date: 05/22/2018

5. Fire-fighting measures

5.1. Extinguishing media

Any media suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: No hazardous decomposition data available.

5.3. Advice for fire-fighters

None

ERG Guide

No.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Leak and Spill Procedure: Take steps to control product discharge to the environment. Notify appropriate authorities immediately and arrange for recovery of spilled material.

Waste Disposal: Ensure waste material is disposed of in accordance with applicable environmental regulations, including local requirements

7. Handling and storage

7.2. Conditions for safe storage, including any incompatibilities Handle containers carefully to prevent damage and spillage. Incompatible materials: No data available.

Store in dry place. Keep product containers closed or covered where possible. See section 2 for further details. - [Storage]:

7.3. Specific end use(s)

No data available.

8. Exposure controls and personal protection

8.1. Control parameters Exposure

SDS Revision Date: 05/22/2018

CAS No.	Ingredient	Source	Value
0068514-28-3	ted Microbes	OSHA	No Established Limit
Previously listed		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

Carcinogen Data

CAS No.	Ingredient	Source	Value	
	Humic acids, potassium salts Microbes	OSHA	Select Carcinogen: No	
		NTP	Known: No; Suspected: No	
		IARC	Group 1: No; Group 2a: No; Group 2b:	

8.2. Exposure controls

Respiratory Not required if using the product outside in the fresh air. If using in an enclosed

area, make sure there is good ventilation.

Eyes Goggles recommended.

Skin Wear overalls to keep skin contact to a minimum. Wear loose-fitting gloves.

Engineering Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If

these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

Other Work

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly

See section 2 for further details. - [Prevention]:

SDS Revision Date: 05/22/2018

9. Physical and chemical properties

Appearance	Dark brown / black Liquid
Odor	Odorless
Odor threshold	Not Measured
рН	7.0
Melting point / freezing point	Not Measured
Initial boiling point and boiling range	97 C
Flash Point	Not Applicable
Evaporation rate (Ether = 1)	Not Measured
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive	Lower Explosive Limit: Not Measured
Upper Explosive Limit: Not Measured	
Vapor pressure (Pa)	Not Measured
Vapor Density	Not Measured
Specific Gravity	1.04
Solubility in Water	Not Measured
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	Not Measured
Decomposition temperature	Not Measured
Viscosity (cSt)	Not Measured
Coefficient of Oil/Water Distribution	Not applicable

9.2. Other information

No other relevant information.

SDS Revision Date: 05/22/2018

10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

No data available.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

No hazardous decomposition data available.

11. Toxicological information

Acute toxicity

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalati on Gas LC50, ppm
Humic acids, potassium salts - (68514-28-3) Microbes, various CAS# (listed previously in ingredients)	No data available	No data available	No data available	No data available	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	Categor	Hazard Description	
Acute toxicity (oral)		Not Applicable	
Acute toxicity (dermal)		Not Applicable	
Acute toxicity (inhalation)		Not Applicable	
Skin corrosion/irritation		Not Applicable	
Serious eye damage/irritation		Not Applicable	

SDS Revision Date: 05/22/2018

Respiratory sensitization	Not Applicable			
Skin sensitization		Not Applicable		
Germ cell mutagenicity		Not Applicable		
Carcinogenicity		Not Applicable		
Reproductive toxicity		Not Applicable		
STOT-single exposure		Not Applicable		
STOT-repeated exposure		Not Applicable		
Aspiration hazard		Not Applicable		
12. Ecological information				

12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	, 3	50 crustacea, mg/l	50 algae, mg/l
Humic acids, potassium salts - (68514-28-3)	Not Available	Not Available	Not Available

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

SDS Revision Date: 05/22/2018

14. Transport information

DOT (Domestic IMO / IMDG (Ocean ICAO/IATA

Surface Transportation)

14.1. UN numberNot ApplicableNot RegulatedNot Regulated14.2. UN properNot RegulatedNot RegulatedNot Regulated

shipping name

14.3. Transport
hazard class(es)DOT Hazard Class:
Not ApplicableIMDG: Not ApplicableAir Class:
Not Applicable14.4. PackingNot ApplicableSub Class: NotNot Applicable14.4. PackingNot ApplicableNot ApplicableNot Applicable

14.5. Environmental hazards

IMDG Marine Pollutant: No 14.6. Special precautions for user

No further information

15. Regulatory information

Regulatory The regulatory data in Section 15 is not intended to be all-inclusive, only

Overview selected regulations are represented.

Toxic Substance All components of this material are either listed or exempt from listing on the

Control Act (TSCA) TSCA Inventory.

WHMIS Not Regulated Classification

US EPA Tier II Hazards Fire: No

Sudden Release of Pressure: No

Reactive: No Immediate (Acute): No Delayed (Chronic): No

EPCRA 311/312 Chemicals and RQs:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Carcinogens (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

SDS Revision Date: 08/07/2015

OSHA Hazards: Irritant

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Massachusetts RTK Substances (>1%)

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

New Jersey RTK Substances (>1%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Pennsylvania RTK Substances (>1%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

SARA 302 Components: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards: Acute health hazard.

16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats are not applicable.

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