

BioSphere CRD

SAFETY DATA SHEET

I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

BioSphere AgriTech Solutions Inc.
209 Strachan St. Port Hope, ON L1A 0E6

I. PHYSICAL DATA

PRODUCT NAME: Biosphere CRD (Crop Residual Decomposer)
CHEMICAL NAME: Soil Amendment
CHEMICAL FAMILY: Fertilizer
FORMULA: Trade Secret

INFORMATION PHONE: 1-647-381-3785

EMERGENCY PHONE: 1-647 381-3785

II. HAZARDOUS IDENTIFICATION

NFPA RATING (SCALE 0-4) HEALTH=0 FLAMMABILITY = 0 REACTIVITY= 0

EMERGENCY OVERVIEW: Do not ingest. Do not inhale dust. Use adequate ventilation and wash after handling.

GHS CLASSIFICATION:

Health

Acute Toxicity: Cat. 5
 Eye Irritation: Cat. 2B

Skin Irritation: N/A

Environmental

Acute Aquatic Toxicity: Not established
 Chronic Aquatic Toxicity: Not established

GHS LABEL ELEMENTS:

Symbol(s)



Signal Word: Caution

Hazard Statements

Not harmful if swallowed in small quantities. May cause mild eye and/or skin irritation.

Precautionary Statements

Wear protective gloves/protective clothing/eye protection/face protection IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove victim to fresh air and keep at rest in a comfortable position for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or you feel unwell: Call a doctor/physician.

III. COMPOSITION/ INFORMATION ON INGREDIENTS

COMPONENT: Trade Secret

CAS NUMBER:

Bacillus Mucilaginosus	N/A	350,000,000 cfu/g
Bacillus Subtilis	N/A	110,000,000 cfu/g
Bacillus Licheniformis	N/A	55,000,000 cfu/g
Cellulase	N/A	3,500 cfu/g
Hemicellulase	N/A	3,500 cfu/g
Xylanase	N/A	3,500 cfu/g

IV. FIRST AID MEASURES

EYE CONTACT: Wash eyes with water until powder residue is removed. If irritation persists, get medical attention.
SKIN CONTACT: Wash affected area with soap and water until powder residue is removed.
INHALATION: Remove exposed person to fresh air.
INGESTION: Do not induce vomiting. Drink plenty of water.

V. FIRE FIGHTING MEASURES

EXTINGUISHING

MEDIA: None required.

SPECIAL FIRE FIGHTING

PROCEDURES: Avoid breathing vapors or dusts. Use self-contained breathing apparatus with full face piece and protective clothing.

UNUSUAL FIRE AND EXPLOSIVE

VI. ACCIDENTAL RELEASE MEASURES

HAZARDS: None known.

IF MATERIAL IS RELEASED OR SPILLED: Contain spill and transfer to suitable containers.

Stop leak if you can do it without risk.

Small Spills: Sweep and dispose of in appropriate trash receptacle.

Large Spills: Sweep and dispose of in appropriate trash receptacle.

VII. HANDLING AND STORAGE

STORAGE: Observe all federal, state and local regulations when storing or disposing of this substance. Keep away from incompatible substances.

Use good engineering practices to establish good ventilation. Avoid contact with skin, eyes and clothing. Wear suitable protective equipment to protect from contact. Wash skin thoroughly after handling. Store in closed containers away from extreme heat, sparks, or open flames. Avoid freezing.

VIII. EXPOSURE CONTROLS/ PERSONAL PROTECTION

EXPOSURE GUIDELINES:

SKIN PROTECTION:	Wear appropriate protective gloves to prevent direct contact.
EYE PROTECTION:	Wear safety goggles to prevent eye contact with substance.
OTHER PROTECTIVE EQUIPMENT:	Impervious apron if needed to avoid prolonged or repeated skin contact.
ENGINEERING CONTROLS:	Good general ventilation and/or local exhaust ventilation at the point of generation is recommended.

PERSONAL PROTECTIVE EQUIPMENT (Pictograms):



IX. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT:	N/A Powder Form		
VAPOR PRESSURE:	Unknown		
SOLUBILITY IN WATER:	Complete		
EVAPORATION RATE:	< 1		
SPECIFIC GRAVITY:	N/A Not a liquid		
PERCENT VOLATILE	N/A		
TESTED PH:	6.5		
APPEARANCE:	Gray Powder		
ODOR:	Slight Earthy Odor		
VAPOR DENSITY:	>1		
FLASH POINT:	Unknown		
FLAMMABLE LIMITS:	N/A	LOWER: N/A	UPPER: N/A

X. STABILITY AND REACTIVITY

STABILITY:	Stable under normal temperatures and pressures
CONDITIONS TO AVOID:	N/A
INCOMPATIBILITY:	None known
If	
HAZARDOUS:	None known
POLYMERIZATION:	Will not occur

XI. TOXICOLOGY INFORMATION

EYE IRRITATION:	Information not available.
SKIN IRRITATION:	Information not available.
INGESTION:	Information not available.
CHRONIC:	Induce vomiting and seek medical attention.

XII. ECOLOGICAL INFORMATION

No data available.

XIII. DISPOSAL INFORMATION

WASTE DISPOSAL: Treatment, storage, transportation, and disposal must be in accordance with applicable federal, state and local regulations.

XIV. TRANSPORTATION INFORMATION

Non-Hazardous Substance

XV. REGULATORY INFORMATION

Information not available.

XVI. OTHER INFORMATION

Classification Standards:

HEALTH HAZARD

4-Deadly
3- Extreme Danger
2- Hazardous
1-Slightly Hazardous
0-Normal Material

NFPA **FIRE HAZARD**

Flash Points
4-Below 73°F
3-Below 100°F
2-Above 100°F, Not
exceeding 200°F
1-Above 200°F
0-Will not burn

REACTIVITY

4-May detonate
3-Shock and heat
may detonate
2-Violent chemical change
1-Unstable if heated
0-Stable

Table 3.8 Acute Toxicity

Acute toxicity	Cat. 1	Cat. 2	Cat. 3	Cat. 4	Category 5
Oral (mg/kg)	≤ 5	> 5 ≤ 50	> 50 ≤ 300	> 300 ≤ 2000	Criteria: <ul style="list-style-type: none"> Anticipated oral LD₅₀ between 2000 and 5000 mg/kg; Indication of significant effect in humans;* Any mortality at class 4;* Significant clinical signs at class 4;* Indications from other studies.* *If assignment to more hazardous class is not warranted.
Dermal (mg/kg)	≤ 50	> 50 ≤ 200	> 200 ≤ 1000	> 1000 ≤ 2000	
Gases (ppm)	≤ 100	> 100 ≤ 500	> 500 ≤ 2500	> 2500 ≤ 5000	
Vapors (mg/l)	≤ 0.5	> 0.5 ≤ 2.0	> 2.0 ≤ 10	> 10 ≤ 20	
Dust & mists (mg/l)	≤ 0.05	> 0.05 ≤ 0.5	> 0.5 ≤ 1.0	> 1.0 ≤ 5	

Figure 4.11
ACUTE ORAL TOXICITY - Annex 1





	Category 1	Category 2	Category 3	Category 4	Category 5
LD ₅₀	≤ 5 mg/kg	> 5 < 50 mg/kg	≥ 50 < 300 mg/kg	≥ 300 < 2000 mg/kg	≥ 2000 < 5000 mg/kg
Pictogram					No symbol
Signal word	Danger	Danger	Danger	Warning	Warning
Hazard statement	Fatal if swallowed	Fatal if swallowed	Toxic if swallowed	Harmful if swallowed	May be harmful if swallowed

Table 3.9 Skin Corrosion/Irritation

Skin Corrosion Category 1			Skin Irritation Category 2	Mild Skin Irritation Category 3
Destruction of dermal tissue: visible necrosis in at least one animal			Reversible adverse effects in dermal tissue	Reversible adverse effects in dermal tissue
Subcategory 1A Exposure < 3 min. Observation < 1hr,	Subcategory 1B Exposure < 1hr. Observation < 14 days	Subcategory 1C Exposure < 4 hrs. Observation < 14 days	Draize score: ≥ 2.3 < 4.0 or persistent inflammation	Draize score: ≥ 1.5 < 2.3

Table 3.10 Eye Effects

Category 1 Serious eye damage	Category 2 Eye Irritation	
Irreversible damage 21 days after exposure Draize score: Corneal opacity ≥ 3 Iritis > 1.5	Reversible adverse effects on cornea, iris, conjunctiva Draize score: Corneal opacity ≥ 1 Iritis > 1 Redness ≥ 2 Chemosis ≥ 2	
	Irritant Subcategory 2A Reversible in 21 days	Mild Irritant Subcategory 2B Reversible in 7 days

Figure 4.9
























GHS Pictograms and Hazard Classes		
		
<ul style="list-style-type: none"> ▪ Oxidizers 	<ul style="list-style-type: none"> ▪ Flammables ▪ Self Reactives ▪ Pyrophorics ▪ Self-Heating ▪ Emits Flammable Gas ▪ Organic Peroxides 	<ul style="list-style-type: none"> ▪ Explosives ▪ Self Reactives ▪ Organic Peroxides
		
<ul style="list-style-type: none"> ▪ Acute toxicity (severe) 	<ul style="list-style-type: none"> ▪ Corrosives 	<ul style="list-style-type: none"> ▪ Gases Under Pressure
		
<ul style="list-style-type: none"> ▪ Carcinogen ▪ Respiratory Sensitizer ▪ Reproductive Toxicity ▪ Target Organ Toxicity ▪ Mutagenicity ▪ Aspiration Toxicity 	<ul style="list-style-type: none"> ▪ Environmental Toxicity 	<ul style="list-style-type: none"> ▪ Irritant ▪ Dermal Sensitizer ▪ Acute toxicity (harmful) ▪ Narcotic Effects ▪ Respiratory Tract ▪ Irritation

Figure 4.10

Transport "Pictograms"		
		
Flammable Liquid Flammable Gas Flammable Aerosol	Flammable solid Self- Reactive Substances	Pyrophorics (Spontaneously Combustible) Self- Heating Substances

		
Substances, which in contact with water, emit flammable gases (Dangerous When Wet)	Oxidizing Gases Oxidizing Liquids Oxidizing Solids	Explosive Divisions 1.1, 1.2, 1.3
		
Explosive Division 1.4	Explosive Division 1.5	Explosive Division 1.6
		
Compressed Gases	Acute Toxicity (Poison): Oral, Dermal, Inhalation	Corrosive
		
Marine Pollutant	Organic Peroxides	

The information appearing in this document is based upon data obtained from raw material manufacturers and/or recognized technical sources. While this information is believed to be correct, BioSphere AgriTech, makes no representations as to its accuracy or sufficiency, usage or the hazards connected with the use of this material. Since this product may be applied under conditions unfamiliar to us or beyond our control, we claim no responsibility for the results of its use, and users are responsible for the verification of this information under their own operating conditions to determine whether the product is suitable for their particular purposes, and these users assume all risks of their use, handling, and disposal of the product. This information relates only to the product designated above and does not relate to its use in combination with any other process.

BIOSPHERE AGRITECH
Revision Date: August 11, 2022