

Certificate Of Compliance

January 15, 2024

TO: Whom it May Concern

Re: Ecology Control M-Binder – Stabilizing Emulsion

To Whom It May Concern:

We are providing the following information as a part of the Certificate of Compliance requirements.

- 1. Material Safety Data Sheet for the tackifier.**
- 2. Product label describing the tackifier as an erosion control product.**
- 3. List of pollutant indicators and potential pollutants for the use of temporary soil binders. Pollutant indicators are described under "Sampling and Analysis Plan for Non-Visible Pollutants" in the Preparation Manual.**
- 4. Determination of acute and chronic toxicity for aquatic organisms conforming to EPA methods for the tackifier.**
- 5. Composition of ingredients including chemical formulation.**

Item 1 – Material Safety Data Sheet for the tackifier

An MSDS is attached as Exhibit 1. This product is manufactured with a plantago/psyllium based tackifier for erosion control and soil stabilization.

Item 2 – Product label/literature describing the tackifier as an erosion control product

A product label/literature is attached as Exhibit 2. The label is for the Ecology Controls M-Binder product and clearly indicates that the product is intended for use as an erosion control product.

Item 3 – List of pollutant indicators and potential pollutants for the use of temporary soil binders

The Ecology Controls M-Binder is not visually observable.

The pollutant indicators under the Sampling and Analysis Plan are COD, and TOC.

The suggested field analyses and laboratory tests include EPA 410.4(COD), and EPA 415.1 (TOC)

Item 4 – Determination of acute and chronic toxicity for aquatic organisms conforming to EPA methods for the tackifier

Determination of acute and chronic toxicity for plantago/psyllium has not been established by various Federal Agencies.

The following information serves as evidence that the use of plantago/psyllium as a tackifier to **not** be an environmental concern.

- Plantago/psyllium seed husk is used as a dietary aid for digestive purposes and is directly consumed by humans without toxic affects. Plantago/psyllium is considered by the EPA to pose little or no risk to humans or the environment. A1993 report from the Federation of American Societies for Experimental Biology's (FASEB) Life Sciences Research Office determined that psyllium is safe at levels up to 25 g per day.

Plantago/psyllium is listed as an acceptable stabilizer and food additive on the Generally Recognized as Safe (GRAS) list by the Food and Drug Administration.

Item 5- Composition of ingredients including chemical formulation.

Ecology Controls M-Binder- 100% Psyllium husk

Protein Content:	~1.62%
Ash Content:	~2.70%
Fiber Content:	~4.00%
PH of 1% solution:	~6.8%
Settleable solids:	~5.00%

Ecology Control M-Binder is a 100% organic biodegradable dry muciloid powder concentrate that is non-toxic, non-corrosive, and non-crystalline.

Ecology Control M-Binder conforms to the requirements of the State of California Department of Transportation Standard Specifications for “Stabilizing Emulsion” Section 20-2.07 and 20-2.11.

Sincerely yours,
 Ecology Controls/ S&S Seeds, Inc

Gilbert Barajas

Sales – Logistics coordinator
 S & S Seeds, Inc.



Ecology Controls
c/o S&S SEEDS

EXHIBIT 1

P.O. Box 1275
Carpinteria, CA 93014-1275
Ph: 805/684-0436 Fax: 805/684-

Ecology Controls M-Binder
Material Safety Data Sheet

I Product Identification

1. **Trade Name:** Ecology Control M-Binder
2. **Chemical Name, Common Names:** Organic Plant and seed concentrate
3. **Manufacturer or Distributor Name:** *Ecology Controls c/o S&S SEEDS*
4. **Address:** *P.O. Box 1275, Carpinteria, CA 93013*
5. **Business Phone:** *805/684-0436*
6. **Date this Materials Safety Data Sheet was prepared** 11/1/13

II Hazardous Ingredients: Chemical Name, Cas No., ACGIH. (TLV) OSHA (PEL)

No toxic chemicals subject to reporting requirements of the OSHA Hazard Communication Standard are present.

III Physical Properties

1. **Vapor Density (air = 1):** N/A
2. **Specific Gravity:** > 1
3. **Solubility in Water:** Negligible
4. **Vapor Pressure, mmHg at 20° C:** N/A
5. **Evaporation Rate (Butyl Acetate = 1):** N/A
6. **Melting Point or Range, °F:** Not Established
7. **Boiling Point or Range, °F:** N/A
8. **Appearance and Odor:** Tan, powdered material. No odor.
9. **How to detect this substance (warning properties of substance as a gas, vapor, dust, or mist):**
Airborne dust may be irritating to eyes and respiratory tract.

IV Fire and Explosion Hazard Data

1. **Flash Point, °F (method):** N/A
2. **Autoignition Temperature, °F:** Not established
3. **Flammable Limits in Air, volume %:** Lower: N/A Upper: N/A
4. **Fire Extinguishing Materials:** Water and carbon dioxide
5. **Special Fire Fighting Procedures:** None
6. **Unusual Fire and Explosion Hazards:** This material is combustible. Airborne dust may explode when in contact with an ignition source.

V Health Hazard Information

1. **Symptoms of Overexposure for Each Potential Route of Exposure:**
 - a. **Inhaled:** Inhalation of this product's dust may cause irritation of upper respiratory tract
 - b. **Contact with Skin and Eyes:** None Known

- c. **Absorbed Through Skin: No**
 - d. **Swallowed: No available data**
- 2. **Health Effects or Risks from Exposure:**
 - a. **Acute: Irritation of upper respiratory tract**
 - b. **Chronic: Irritation of upper respiratory tract**
 - 3. **First Aid: Emergency Procedures**
 - a. **Eye Contact: If product's dust gets into the eyes, flush with water for at least 15 minutes. If irritation persists, contact a physician.**
 - b. **Skin Contact: Wash and soap and water**
 - c. **Inhaled: Move exposed person to fresh air and perform artificial respiration. Call physician.**
 - d. **Swallowed: If symptoms arise, call physician.**
 - 4. **Suspected Cancer Agent? X No: This product's ingredients are not found in the lists. Federal OSHA NTP IARC CAL/OSHA**
 - 5. **Medical Conditions Aggravated by Exposure: Respiratory conditions and eye conditions**

VI Reactivity Data

- 1. **Stability: Stable**
- 2. **Conditions to avoid: heat, flame, sparks, and other ignition sources. This product is combustible.**
- 3. **Incompatibility (Materials to Avoid): Strong oxidizing agents.**
- 4. **Hazardous Decomposition Products (Including combustion products): Carbon monoxide and partially oxygenated hydrocarbons.**
- 5. **Hazardous Polymerization: Will not occur.**
- 6. **Conditions to avoid: None**

VIII. Spill, Leak and Disposal Procedures

- 1. **Spill Response Procedures (Including Employee Protection Measures): Sweep up dust. Keep away from sources of heat, flame, sparks or other ignition sources.**
- 2. **Preparing Wastes for Disposal: Can be disposed with normal domestic waste.**

IX. Special Handling Information

- 1. **Ventilation and Engineering Controls: General ventilation should be adequate under normal use conditions.**
- 2. **Respiratory Protection: If airborne dust concentration causes irritation or discomfort, use a NIOSH approved respirator.**
- 3. **Eye Protection: Goggles**
- 4. **Gloves: Normal work gloves should be adequate**
- 5. **Other Clothing and Equipment: Normal work attire**
- 6. **Work Practices, Hygienic Practices: Avoid inhalation of dust.**
- 7. **Other Handling and Storage Requirement: Store in sealed containers. Keep away from sources of ignition.**

ECOLOGY CONTROLS M-BINDER MULCH TACKIFIER-SOIL STABILIZER

WHAT IS ECOLOGY CONTROLS M-BINDER?

Ecology controls M-Binder is composed of the finely ground outer coating of a seed. Nature has designed this protective coating to perpetuate this particular species. The plant produces a seed head which eventually drops to the ground. Moisture dampens the muciloid outer coating enough to fasten or stick the seed to the ground until germination starts.

Ecology Controls has selected this particular material for use as a tackifier in hydroseeding after many years of research. Ecology Controls M-Binder utilizes the natural property of the muciloid coating for the exact purpose nature intended: to bind seed and soil together until germination and growth begin.

FEATURES:

- o • COST EFFECTIVE-increases plant density and seed retention
- o IMPROVES-slurry suspension and slurry flow
- o . DURABLE-forms a firm, resilient, rewettable membrane which fastens seed to soil surface
- o EASY-to handle, easy to apply and easy to cleanup
- o SAFE-all organic-non-toxic, non-corrosive for animals and plant material
- o VERSATILE-used for Dust Abatement, Hydroseeding, Straw and Fiber Tackifying

USAGE:

Ecology Controls M-Binder may be applied as a dry powder or as a wet slurry to dry or wet surfaces. It does not require set-up or drying time because when wet it is a heavy muciloid material and when dry it is a firm but rewettable membrane. It may even be applied during rain.

Ecology Controls M-Binder, whether used alone as a dust control product, or in combination with straw, fibers, seed and fertilizers in hydroseeding keeps materials where you want them.

PROVEN RESULTS:

In a test of seven stabilizers by University of California at Davis (Agronomy progress report #49, Ag Experiment Station) Ecology Controls M-Binder proved to be superior in seed retention, promoting germination and controlling erosion.

GENERAL APPLICATION RATES:*

M-Binder: 80-200 lbs.
 Water: as required for slurry flow
 Wood or Paper Fiber: as specified
 Seed: as specified

TECHNICAL SPECIFICATIONS:

Protein content 1.62
 Ash content 2.70
 Fiber 4.00
 PH of 1% solution 6.80
 Settleable SolidS 5.00

*Rates vary depending on job site-consult your Ecology Controls
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8. Protective Measures During Maintenance of Contaminated Equipment: N/A

N/A = Not Applicable

PACKAGING INFORMATION:

Packed in 50 lb. polywoven-lined paper bags with loading instructions on the bag. All palletized shipments shrink wrapped and banded (2000 lbs./pallet).