



Material Safety Data Sheet

Section 1 - Chemical Product and Company Identification

| | |
|---------------------------|--|
| Product: | Biobarrier Root Control System |
| Chemical Family: | Thermoplastic Polyolefin |
| Manufacturer Information: | Fiberweb, Inc 70 Old Hickory Blvd. Old Hickory, TN 37138 |
| Company Contact: | David Midget |
| Telephone Number: | 1-800-284-2780 (M-F 8am-5pm Central Time) |
| Emergency Phone Contact: | Chemtrec (24 Hours) |
| Emergency Phone Number: | 1-800-424-9300 |

Section 2 – Composition

| <u>CAS #</u> | <u>Component</u> | <u>Percent</u> |
|--------------|----------------------|----------------|
| 9003-07-0 | Polypropylene | >74.8% |
| Mixture | UV Stabilizer | <5% |
| 1582-09-8 | Trifluralin | <20% |
| Mixture | Pigment Masterbatch* | <0.5% |

*Contains Carbon Black (CAS # 1333-86-4) : <0.1%

Section 3 – Hazards Identification

Emergency Overview

Signs and symptoms of exposure: coughing or wheezing.

Route of Exposure-Skin

Possible irritant and may cause skin sensitization.

Route of Exposure-Eye

Possible irritant.

Route of Exposure -Ingestion

Not Applicable

Route of Exposure-Inhalation

Not expected to be a problem being that this product is an inert solid.

HMIS Ratings

Health: 0 Fire: 1 Reactivity: 0 Personal Protection: A

Hazard Scale: 0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe *=Chronic Hazard

Section 4 - First Aid Measures

First Aid-Skin

Wash affected area with soap and water.

First Aid-Eye

Rinse eyes with water for at least 15 minutes. If irritation persists, contact a physician.

First Aid-Ingestion

Minimal toxicity; no adverse effects expected.

First Aid-Inhalation

Not expected to be a problem being that this product is an inert solid.

First Aid-Notes to Physician

No health conditions aggravated by exposure are identified. Contact the poison control center if any problem occurs.

Section 5 - Fire Fighting Measures

Flash Point: >329°C(625°F)

Method Used: Not Applicable

Auto Ignition: >275°C(675°F)

Flammability Classification: Not Applicable

Lower Explosive Limit (%): Not Applicable

Upper Explosive Limit (%): Not Applicable

General Fire Hazards

Solid material may burn upon extended exposure to open flames.

Hazardous Combustion Products

Upon decomposition this product may emit carbon dioxide, carbon monoxide and/or low molecular weight hydrocarbons.

Extinguishing Media

Water spray, foam, carbon dioxide, or dry chemical

Fire Fighting Equipment/Instructions

As in any fire, wear a self-contained breathing apparatus and full protective gear.

NFPA Ratings

Health: 0 Fire: 1 Reactivity: 0

Hazard Scale: 0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

Section 6 - Accidental Release Measures

Containment Procedures

Sweep waste fabric into a pile.

Clean -Up Procedures

Sweep waste fabric into a waste container and recycle, incinerate or landfill in conformity with local disposal regulations.

Evacuation Procedures

Not Applicable

Special Procedures

None

Section 7 - Handling and Storage

Handling Procedures

Avoid exposure to heat, sparks or open flames.

Storage Procedures

Store material in cool (below 140°F) warehouse that is equipped with a sprinkler system.
Ensure product is not stacked too high.
Store product off the floor to prevent water damage.

Section 8 - Exposure Controls/Personal Protection

Component Exposure Limits

| Component | CAS | Exposure Limits |
|----------------------|-----------|--|
| Polypropylene | 9003-07-0 | ACGIH TLV-TWA: None Available OSHA PEL: None Available |
| UV Stabilizer | Mixture | ACGIH TLV-TWA: None Available OSHA PEL: None Available |
| Trifluralin | 1582-09-8 | ACGIH TLV-TWA: None Available OSHA PEL: None Available |
| Pigment Masterbatch* | Mixture | ACGIH TLV-TWA: 3.5mg/m ³ Total/Nuisance Dust OSHA PEL: 3.5mg/m ³ Total Dust |

*Based on Carbon Black (CAS # 1333-86-4)

Engineering Controls

Normal room ventilation is usually adequate.

Personal Protective Equipment

Personal Protective Equipment-Eyes/Face

None usually required

Personal Protective Equipment-Skin

None usually required

Personal Protective Equipment-Respiratory

None usually required

Personal Protective Equipment-General

Follow individual plant safety rules.

Section 9 - Physical & Chemical Properties

| | | | |
|--------------------------------------|-----------------|---------------------------|--------------------|
| Appearance: | Gray Fabric | Odor: | Aromatic (Solvent) |
| Physical State: | Solid | pH: | Not Applicable |
| *Vapor Pressure: | 13.7 mPa @ 25°C | Evaporation Rate: | Not Applicable |
| Boiling Point: | Not Applicable | *Melting Point: | >48.5°C |
| *Solubility (H₂O): | 0.2 ppm @ 25°C | Specific Gravity: | 0.88-0.99 |
| Vapor Density: | Not Applicable | Percent Volatiles: | NIL |
| Packing Density: | Not Applicable | | |

*Trifluralin (CAS # 1582-09-8)

Section 10 - Chemical Stability & Reactivity Information

Chemical Stability

Stable under ordinary conditions of use and storage.

Conditions to Avoid

Combustible when exposed to open flames. Avoid chlorine, fluorine, and other strong oxidizers.

Incompatibility

None Known

Hazardous Decomposition

Carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbon may be emitted upon decomposition.

Hazardous Polymerization

Will not occur.

Section 11 - Toxicological Information

Acute and Chronic Toxicity

General Product Information

No additional information.

Component Analysis

| Component | CAS | LD50/LC50 |
|---------------|-----------|---|
| Polypropylene | 9003-07-0 | Rat; <u>LD 50; Route: Intraperitoneal; Dose: >110mg/kg; Toxic Effects:</u> lacrimation; Sence organs and special sences-ptosis; Behavioral-convulsions or effect on seizure threshold; <u>Reference:</u> Yakuri to Chiryō. Pharmacology and Therapeutics 14:1109, 1986 <u>LD50; Route: Intravenous; Dose: >99kg/mg; Toxic Effects:</u> Behavioral-tremor; Lungs, Thorax, or Respiration-cyanosis; Nutritional and Gross Metabolic-body temperature decrease; <u>Reference:</u> Yakuri to Chiryō. Pharmacology and Therapeutics 14:1109, 1986. |
| Trfluralin | 1582-09-8 | Rat: <u>LD50; Route: Acute Oral Toxicity:</u> >4000 mg/kg Rabbit: <u>LD50; Route: Acute Dermal Toxicity:</u> >2000 mg/kg Rat: <u>LD50; Route: Acute Inhalation Toxicity:</u> LC50 (rat): >4.65 mg/L (4 hours) Skin Irritation: Mildly irritating (rabbit) Eye Irritation: Mildly irritation (rabbit) Sensitization: Mild sensitizer (guinea-pig) |

Carcinogenicity

General Product Information

Carbon black has been evaluated by IARC as possibly carcinogenic to humans (Group 2B). NIOSH recommends that only carbon black with PAH>.1% be suspected carcinogens. The ACGIH classifies carbon black as A4, Not Classifiable as Human Carcinogen.

Epidemiology

No information available.

Neurotoxicity

No information available.

Mutagenicity

No information available.

Teratogenicity

No information available.

Other Toxicological Information

Specific toxicity testing has not been performed on this product. Hazard evaluation is based on information from similar products, raw material data, and technical literature.

Section 12 - Ecological Information

Ecotoxicity

General product Information

Trifluralin (CAS # 1582-09-8) is very toxic to aquatic organisms, and may cause long-term adverse effects in the aquatic environment.

Environmental Fate

Trifluralin (CAS # 1582-09-8) has low mobility in soil and can be absorbed in soils with high organic content. Trifluralin (CAS # 1582-09-8) is moderately persistent in soil with a half-life time of approximately 45 days. Degradation is primarily via microorganisms.

Section 13 - Disposal Considerations

US EPA Waste Number & Descriptions

General Product Information

None identified.

Component Waste Numbers

No EPA Waste Numbers are applicable for this product's components

Disposal Instructions

Trifluralin (CAS # 1582-09-8) should be disposed of in a pesticide approved landfill or in a chemical incinerator equipped with scrubbers, in accordance with federal, state and local requirements.

Processing, use or contamination of this product may change the waste management options.

Section 14 - Transportation Information

Transportation Regulations

Product is not regulated for transportation.

Section 15 - Regulatory Information

US Federal Regulations

General Product Information

No additional information.

Component Analysis-Federal

| Component | CAS # | SARA 302 (40CFR355 Appx A) | SARA 313 (40CFR372.65) | CERCLA (40CFR302.4) |
|---------------------|-----------|-------------------------------|---------------------------|------------------------|
| Polypropylene | 9003-07-0 | No | No | No |
| UV Stabilizer | Mixture | No | No | No |
| Trifluralin | 1582-09-8 | No | Yes | Yes |
| Pigment Masterbatch | Mixture | No | No | No |

State Regulations

General Product Information

Other state regulations may apply. Check individual state requirements.

Component Analysis-State

The following components appear on one or more of the following state hazardous substances list:

| Component | CAS | CA | FL | MA | MN | NJ | PA |
|----------------------|-----------|-----|-----|-----|-----|-----|-----|
| Polypropylene | 9003-07-0 | No | No | No | No | No | No |
| UV Stabilizer | Mixture | UK | UK | UK | UK | UK | UK |
| Trifluralin | 1582-09-8 | No | Yes | Yes | No | Yes | Yes |
| Pigment Masterbatch* | Mixture | Yes | No | Yes | Yes | Yes | Yes |

*Based on Carbon Black (CAS # 1333-86-4) airborne, unbound particles of respirable size. However, the Carbon Black (CAS # 1333-86-4) used in this product is not expected to have airborne, unbound respirable particles.

UK = Unknown

Component Analysis-WHMIS IDL

The following components are knowingly identified under the Canadian Hazardous Products Act Ingredient Disclosure List.

| Component | CAS | Minimum Concentration |
|----------------------|---------|-----------------------|
| Pigment Masterbatch* | Mixture | 1% |

*Based on Carbon Black (CAS # 1333-86-4)

Additional Regulatory Information

Component Analysis-Inventory

| Component | CAS | TSCA | DSL/NDSL | EINECS |
|---------------------|-----------|------|----------|-------------|
| Polypropylene | 9003-07-0 | Yes | Yes | Yes (6-402) |
| UV Stabilizer | Mixture | Yes | Yes | Yes |
| Trifluralin | 1582-09-8 | Yes | Yes | Yes |
| Pigment Masterbatch | Mixture | Yes | Yes | Yes |

UK=Unknown

Section 16 - Other Information

Other Information

Material for this MSDS was taken from MSDS's for raw materials

MSDS History

Updated information and changed name 12/5/06

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This information and the product are furnished on the condition that the person receiving them shall make his or her own determination as to the suitability of the product for his particular purpose and on the condition that they assume the risk of his use thereof.

THIS PRODUCT IS CONSIDERED AN ARTICLE AND DOES NOT REQUIRE A MATERIAL SAFETY DATA SHEET (MSDS).

APPROVED BY: MICHAEL THOMASON