Safety Data Sheet

Section 1 - Chemical Product and Company Identification

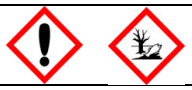
Product:	Biobarrier Root Control System
EPA Registration No.:	59823-1
Chemical Family:	Thermoplastic Polyolefin
Manufacturer Information:	Fiberweb, Inc 70 Old Hickory Blvd. Old Hickory, TN 37138
Company Contact:	Jim Reynolds
Telephone Number:	1-615-847-7501 (8AM-5PM M-F Central Time)
Emergency Phone Contact:	Chemtrec (24 Hours)
Emergency Phone Number:	1-800-424-9300

Section 2 – Hazards Identification

Irritant
Hazardous to the Aquatic Environment

Emergency Overview
Signs and symptoms of exposure: coughing or wheezing.
Route of Exposure-Skin
Irritant and may cause skin sensitization.
Route of Exposure-Eye
Irritant. Causes moderate eye irritation.
Route of Exposure –Ingestion
Harmful if swallowed
Route of Exposure-Inhalation
Harmful if inhaled
HMIS Ratings
Health: 1 Fire: 1 Reactivity: 0 Personal Protection: A
Hazard Scale: 0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe
*=Chronic Hazard

Section 3 – Composition

CAS#	Component	Percent
9003-07-0	Polypropylene*	>20%
9002-88-4	Polyethylene	<45%
1582-09-8 	Trifluralin	<20%
1333-86-4	Carbon Black	<15%

*Contains Pigment Masterbatch: <1%; UV Stabilizer: <3%

Section 4 - First Aid Measures

First Aid-Skin
Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

First Aid-Eye
Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye.

First Aid-Ingestion
Call a poison control center or doctor immediately for treatment advice. Sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

First Aid-Inhalation
Move person to fresh air. If person is not breathing, call 911 or ambulance, then give artificial respiration, preferably mouth-to-mouth. Call a poison control center or doctor for treatment advice.

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: Not Applicable **Method Used**: Not Applicable
Auto Ignition: Not Applicable **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: 1 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.
Use care in stacking and storing to avoid damage to product.

Storage Procedures
Store material away from direct sunlight in a cool (below 60°C), dry warehouse that is equipped with a sprinkler system.
Ensure product is not stacked too high.
To prevent water damage, store product off the floor.
Avoid direct exposure to UV light.
Avoid exposure to corrosive substances.
Limit exposure to petroleum powered engine exhaust.

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
Polyethylene	9002-88-4	ACGIH TLV-TWA: None Available OSHA PEL: None Available
Trifluralin	1582-09-8	ACGIH TLV-TWA: None Available OSHA PEL: None Available
Carbon Black	1333-86-4	ACGIH TLV-TWA: 3.5mg/m^3 Total/Nuisance Dust OSHA PEL: 3.5mg/m^3 Total Dust

Engineering Controls
Normal room ventilation is usually adequate.

Personal Protective Equipment
Personal Protective Equipment-Eyes/Face
None usually required
Personal Protective Equipment-Skin
Wear long sleeved shirt, long pants, shoes, socks and chemical resistant gloves such as or made of any waterproof material.
Personal Protective Equipment-Respiratory
None usually required
Personal Protective Equipment-General
Follow individual plant safety rules.

Section 9 - Physical & Chemical Properties

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

*Based on Trifluralin (CAS# 1582-09-8)

Section 10 - Chemical Stability & Reactivity Information

Chemical Stability
Under ordinary conditions of use and storage the product is stable.

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#	LD_{50}/LC_{50}
Polypropylene	9003-07-0	No information available
Polyethylene	9002-88-4	No information available
Trifluralin	1582-09-8	Rat: LD_{50}: Route: Acute Oral Toxicity: >4000 mg/kg Rabbit: LD_{50}: Route: Acute Dermal Toxicity: >2000 mg/kg Rat: LD_{50}: Route: Acute Inhalation Toxicity: LC_{50} (rat): >4.65 mg/L (4 hours) Skin Irritation: Mildly irritating (rabbit) Eye Irritation: Mildly irritation (rabbit) Sensitization: Mild sensitizer (guinea-pig)
Carbon Black	1333-86-4	No information available

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
Polyethylene	9002-88-4	No	No	No
Trifluralin	1582-09-8	No	Yes	Yes
Carbon Black	1333-86-4	No	No	No

UK= Unknown

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 Prop 65	FL	MA	MN	NJ	PA
Polypropylene	9003-07-0	Yes*	No	No	No	No	No
Polyethylene	9002-88-4	No	No	No	No	No	No
Trifluralin	1582-09-8	No	Yes	Yes	No	Yes	Yes
Carbon Black	1333-86-4	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
Carbon Black	1333-86-4	1%

Additional Regulatory Information

Component Analysis-Inventory

Component	CAS#	TSCA	DSL/NDSL	EINECS
Polypropylene	9003-07-0	Yes	Yes	Yes (6-402)
Polyethylene	9002-88-4	Yes	Yes	Yes
Trifluralin	1582-09-8	Yes	Yes	Yes
Carbon Black	1333-86-4	Yes	Yes	Yes

Section 16 - Other Information

Other Information

Material for this SDS was taken from SDSs for raw materials.

SDS History

Updated information and changed name 12/5/06; Updated formatting 06/21/07; Change contact name 8/13/07; Updated contact information and date 2/09/09; Updated information 9/8/10; Updated formulation 11/15/10; Updated Component Analysis – State in Section 15 on 8/3/11; Updated information to GHS compliant 6-7-13.

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REVIEWED BY: Dustin Darnall