

SAFETY DATA SHEET

E-Staple®/Biodegradable Anchoring Staple

Section 1 - CHEMICAL, PRODUCT AND COMPANY IDENTIFICATION			
Manufacturer Information: Metabolix, Inc. 21 Erie Street Cambridge, MA 02139 Office Phone #: (617) 492-0505	Supplier Information: American Excelsior Company 850 Avenue H East Arlington, TX 76011 Office Phone #: (817) 385-3500		
Chemical Name: Blend	SDS Origination Date: 03-01-06		
Synonyms: None	Last Revision Date: 02-05-18		
Internal Product Codes: 078			
Product Use: Anchor for erosion control blankets.			

Section 2 - HAZARDS IDENTIFICATION	
Product Overview: Product is a 100% biodegradable staple.	
GHS LABEL:	Signal word: WARNING
Potential Health Effects:	
Eyes	Data Not Available.
Skin	Data Not Available.
Ingestion	Data Not Available.
Inhalation	Data Not Available.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS		
Components	CAS Number	% Weight
Polyhydroxybutyric Acid Copolymers and Mineral Filler	N/A	100%

Section 4 - FIRST AID MEASURES	
Eyes:	No Special Requirement.
Skin:	No Special Requirement.
Ingestion:	No Special Requirement.
Inhalation:	No Special Requirement.
Notes to Physician:	None.

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Section 5 - FIRE FIGHTING MEASURES

Flash Point: N/A
Method Used: N/A
Upper Flammable Limit (UFL): N/A
Lower Flammable Limit (LFL): N/A
Auto Ignition: N/A
Flammability Classification: N/A
Rate of Burning: N/A

Extinguishing Media:
Water Spray, Carbon Dioxide, Dry Chemical Powder, or Appropriate Foam.

Special Fire Fighting Procedures: None.

Section 6 - ACCIDENTAL RELEASE MEASURES

Containment Procedures: N/A

Clean-Up Procedures: N/A

Evacuation Procedures: N/A

Special Instructions: N/A

Section 7 - HANDLING AND STORAGE

Procedures for Handling: Good industrial practice in housekeeping and personal hygiene should be followed. Minimize dust.

Recommended Storage Methods: Good storage stability, but avoid extremes of temperature and humidity. Recommended shelf life is two years.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines: No special equipment required.

Section 9 - PHYSICAL & CHEMICAL PROPERTIES

Appearance: Tan Granules	Odor: Mild
Physical State: Solid	Molecular Weight: $\approx >100,000$ (by GPC)
Chemical Formula: C ₄ H ₆ O ₂ (repeat unit)	Melting Point: 100° – 190° C
Boiling Point: N/A	Freezing Point: N/A

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Section 10 - CHEMICAL STABILITY & REACTIVITY INFORMATION

Chemical Stability:	Stable.
Incompatibility:	Strong oxidizing agents and strong acids.
Hazardous Decomposition Products:	Carbon monoxide and carbon dioxide.
Hazardous Polymerization:	Hazardous polymerization will not occur.

Section 11 - TOXICOLOGICAL INFORMATION

Acute Toxicity/Target Organ Information:	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Epidemiology:	No data available for this product.
Carcinogenicity:	No data available for this product.
Reproductive Toxicity:	No data available for this product.
Neurotoxicity:	No data available for this product.
Mutagenicity:	No data available for this product.
Other Information	No data available for this product.

Section 12 - ECOLOGICAL INFORMATION

Ecotoxicity:	No data available for this product.
Environmental Fate:	100 % of the product is composed of biodegradable components.

Section 13 - DISPOSAL CONSIDERATIONS

US EPA Waste Number & Descriptions:	No special requirements.
Disposal Instructions:	Dispose of waste material in accordance with all applicable Federal, State, or provincial and local environmental regulations.

Section 14 - TRANSPORTATION INFORMATION

DOT Information:	
Shipping Name:	Not regulated as a hazardous material.
Hazard Class:	Not regulated.
UN/NA #:	Not regulated.
Packing Group:	Not regulated.
Label(s) Required:	None.
Additional Shipping Information:	None.
International Transportation Regulations:	Not regulated as dangerous goods.

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Section 15 - REGULATORY INFORMATION

US Federal Regulations: N/A

State Regulations: N/A

Other Regulations: N/A

Section 16 - OTHER INFORMATION

This information is believed to be correct, however, Metabolix, Inc. makes no representations as to its comprehensiveness or accuracy. Individuals receiving this information must use independent judgment to determine its appropriateness for a particular purpose. Metabolix, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.

Key/Legend:

DOT	Department of Transportation
EPA	Environmental Protection Agency
GPC	Gel Permeation Chromatography
N/A	Not Applicable or Not Available
NFPA	National Fire Protection Association
HMIS	Hazard Materials Information System

HMIS Ratings: Health: N/A, Fire: N/A, Reactivity: N/A, Personal Protection: N/A

NFPA Ratings: Health: N/A, Fire: N/A, Reactivity: N/A, Other: N/A

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