


SAFETY DATA SHEET

**E-Staple®/Biodegradable Anchoring Staple**

Section 1 - CHEMICAL, PRODUCT AND COMPANY IDENTIFICATION			
<b>Manufacturer Information:</b> <b>Metabolix, Inc.</b> 21 Erie Street Cambridge, MA 02139 Office Phone #: (617) 492-0505	<b>Supplier Information:</b> <b>American Excelsior Company</b> 850 Avenue H East Arlington, TX 76011 Office Phone #: (817) 385-3500		
<b>Chemical Name:</b> Blend <b>Synonyms:</b> None <b>Internal Product Codes:</b> 078	<b>SDS Origination Date:</b> 03-01-06 <b>Last Revision Date:</b> 03-24-15		
<b>Product Use:</b> Anchor for erosion control blankets.			

Section 2 - HAZARDS IDENTIFICATION	
<b>Product Overview:</b> Product is a 100% biodegradable staple.	
<b>GHS LABEL:</b> 	<b>Signal word: WARNING</b>
<b>Potential Health Effects:</b>	
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	
<b>Eyes:</b>	No Special Requirement.
<b>Skin:</b>	No Special Requirement.
<b>Ingestion:</b>	No Special Requirement.
<b>Inhalation:</b>	No Special Requirement.
<b>Notes to Physician:</b>	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

<b>Appearance:</b> Tan Granules	<b>Odor:</b> Mild
<b>Physical State:</b> Solid	<b>Molecular Weight:</b> $\approx >100,000$ (by GPC)
<b>Chemical Formula:</b> $C_4H_6O_2$ (repeat unit)	<b>Melting Point:</b> $100^\circ - 190^\circ C$
<b>Boiling Point:</b> N/A	<b>Freezing Point:</b> N/A

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### Section 10 - CHEMICAL STABILITY & REACTIVITY INFORMATION

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

### Section 11 - TOXICOLOGICAL INFORMATION

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

### Section 12 - ECOLOGICAL INFORMATION

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

### Section 13 - DISPOSAL CONSIDERATIONS

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

### Section 14 - TRANSPORTATION INFORMATION

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

## E-Staple®/Biodegradable Anchoring Staple

### 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

**SDS Contact:** Metabolix, Inc.

**Phone:** (617) 492-0505