

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: 03-24-15

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: $C_4H_6O_2$ (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

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| 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

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|---|---|
| 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

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

Section 13 - DISPOSAL CONSIDERATIONS

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| 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

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| 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

SDS Contact: Metabolix, Inc.

Phone: (617) 492-0505