

EnviroCure Liner

PATENT PENDING

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	• EnviroCure Liner
Trade Name	• AFI-001
Company	• United Felts, 450 College Drive, Martinsville, VA 24112
Company Contact	• Mark Chandler
Company Phone	• 276-656-1904
Emergency	• 276-656-1904

2. HAZARDS IDENTIFICATION

<i>Appearance</i>	• White
<i>Physical state</i>	• Solid
<i>Odor</i>	• Faint
Classification	• No need for classification according to GHS criteria for this product.
Signal Word	• Not classified.
Hazard Statement	• If small particles are generated during further processing, handling or by other means, may form combustible dust concentrations in air.
Precautionary Statement - Prevention	• Avoid prolonged or repeated eye/skin contact.
Precautionary Statement - Disposal	• Dispose in accordance with local, state and federal regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%
Polyethylene Terephthalate	25038-59-9	60 - 80
Ethylene Alpha-olefin resin	Proprietary	3 - 15
Ethylene Copolymer	Mixture	1 - 8
Polyamide	25038-54-4	< 4
Titanium Dioxide	13463-67-7	< 3

One or more of the ingredients have been claimed as trade secret under the OSHA Hazard Communication Standard. The hazards of this (these) ingredient(s), if any, are given on this SDS.

This product may have been produced with Titanium Dioxide. Titanium Dioxide is not water soluble and is encapsulated. It is not extracted or released in normal processing. Therefore, Titanium in this material does not represent a hazard in normal handling, processing use and disposal.

3. COMPOSITION/INFORMATION ON INGREDIENTS (CONTINUED)

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if applicable are listed in Section 8.

4. FIRST AID MEASURES

Description of First Aid Measures	
<i>General advice</i>	<ul style="list-style-type: none"> • If exposed or concerned: Get medical advice/attention.
<i>Eye contact</i>	<ul style="list-style-type: none"> • Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<i>Skin contact</i>	<ul style="list-style-type: none"> • Product is not expected to be hazardous by skin contact. Should irritation occur, rinse with water.
<i>Inhalation</i>	<ul style="list-style-type: none"> • If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.
<i>Ingestion</i>	<ul style="list-style-type: none"> • Not a probable route of exposure.
Indication of any immediate medical attention and special treatment needed	
<i>Notes to Physician</i>	<ul style="list-style-type: none"> • No specific advice. Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media	<ul style="list-style-type: none"> • Dry chemical • Carbon dioxide (CO₂) • Water spray (fog) • <i>or</i> Regular foam
Unsuitable Extinguishing Media	<ul style="list-style-type: none"> • Do not use a solid water stream as it may scatter and spread the fire.
Special Hazards arising from the Chemical	<ul style="list-style-type: none"> • Product presents a low hazard under usual industrial or commercial use. However, if a processing step results in a significant amount of airborne fibers, a dust-air explosive mixture may form.
Hazardous Combustion Products	<ul style="list-style-type: none"> • Hazardous combustion products produced consist of carbon dioxide, carbon monoxide, various hydrocarbon fragments as well as thick smoke.
Protective Equipment and Precautions for Firefighters	<ul style="list-style-type: none"> • As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

ENVIROCURE LINER SAFETY DATA SHEET



6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	<ul style="list-style-type: none"> Observe precautions from other sections.
Environmental precautions	<ul style="list-style-type: none"> Not applicable.
Methods and material for containment and cleaning up	<ul style="list-style-type: none"> Not applicable.

7. HANDLING AND STORAGE

Precautions for safe handling	
<i>Advice on safe handling</i>	<ul style="list-style-type: none"> Use care in handling and storage. Avoid breathing dust created by grinding or cutting. Dust generated from grinding or cutting may be explosive if in sufficient concentration with an ignition source. Dust deposits should not be allowed to accumulate on surfaces because of the potential for secondary explosions.
Conditions for safe storage, including any incompatibilities	
<i>Storage conditions</i>	<ul style="list-style-type: none"> No special storage requirements.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines	If a component is disclosed in Section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.		
Chemical Name	ACGIH TLV	OSHA PEL	OSHA PEL IDLH
<ul style="list-style-type: none"> Titanium Dioxide 13463-67-7 	<ul style="list-style-type: none"> TTWA: 10 mg/m³ 	<ul style="list-style-type: none"> TWA: 15 mg/m³ total dust (Vacated) TWA: 10 mg/m³ total dust 	<ul style="list-style-type: none"> IDLH: 5000 mg/m³ TWA: 2.4 mg/m³ CIB 63 fine TWA: 0.3 mg/m³ CIB 63 ultrafine, including engineered nanoscale
Appropriate Engineering Controls			
<i>Engineering controls</i>	<ul style="list-style-type: none"> Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. 		

ENVIROCURE LINER SAFETY DATA SHEET



8. EXPOSURE CONTROLS/PERSONAL PROTECTION (CONTINUED)

Individual protection measures, such as personal protective equipment	
<i>Eye/Face protection</i>	<ul style="list-style-type: none"> To minimize the risk of injury to the eyes and face, always wear eye and face protection when the fiber products are cut, chopped or manipulated in other similar handling methods. Select and use eye and face protection when a risk assessment indicates this is necessary to avoid exposure to dusts.
<i>Skin and body protection</i>	<ul style="list-style-type: none"> Wear suitable protective clothing. If the material is heated, wear gloves to protect against thermal burns.
<i>Respiratory protection</i>	<ul style="list-style-type: none"> Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Under normal use conditions, respirator is not usually required. A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
<i>General hygiene considerations</i>	<ul style="list-style-type: none"> Wash hands, forearms and face thoroughly after handling products, before eating, smoking and using the lavatory and at the end of the working period.

9. PHYSICAL & CHEMICAL PROPERTIES

Information on basic physical and chemical properties	
<i>Physical state</i>	<ul style="list-style-type: none"> Solid - Polyurethane coated liner
<i>Appearance</i>	<ul style="list-style-type: none"> Folded flat liner
<i>Color</i>	<ul style="list-style-type: none"> White
<i>Odor</i>	<ul style="list-style-type: none"> Faint
Property	Values
<i>pH</i>	<ul style="list-style-type: none"> Not determined.
<i>Melting point</i>	<ul style="list-style-type: none"> 419 - 572 °F (215 - 300 °C)
<i>Boiling point</i>	<ul style="list-style-type: none"> Not applicable.
<i>Flash point</i>	<ul style="list-style-type: none"> Not applicable. Combustible dust.
<i>Evaporation rate</i>	<ul style="list-style-type: none"> Not determined.
<i>Flammability (solid, gas)</i>	<ul style="list-style-type: none"> Not determined.
<i>Upper flammability or explosive limits in air</i>	<ul style="list-style-type: none"> Not available.
<i>Lower flammability or explosive limits in air</i>	<ul style="list-style-type: none"> Not available.
<i>Vapor pressure</i>	<ul style="list-style-type: none"> Negligible.
<i>Vapor density</i>	<ul style="list-style-type: none"> Not determined.
<i>Relative density (Water=1)</i>	<ul style="list-style-type: none"> >1
<i>Water solubility</i>	<ul style="list-style-type: none"> Negligible.

ENVIROCURE LINER SAFETY DATA SHEET



9. PHYSICAL & CHEMICAL PROPERTIES (CONTINUED)

Property	Values
<i>Solubility in other solvents</i>	<ul style="list-style-type: none">• Not determined.
<i>Partition coefficient</i>	<ul style="list-style-type: none">• Not determined.
<i>Auto ignition temperature</i>	<ul style="list-style-type: none">• Not determined.
<i>Decomposition temperature</i>	<ul style="list-style-type: none">• Not determined.
<i>Kinematic viscosity</i>	<ul style="list-style-type: none">• Not determined.
<i>Dynamic viscosity</i>	<ul style="list-style-type: none">• Not determined.
<i>Explosive properties</i>	<ul style="list-style-type: none">• Not determined.
<i>Oxidizing properties</i>	<ul style="list-style-type: none">• Not determined.

10. STABILITY & REACTIVITY

<i>Reactivity</i>	<ul style="list-style-type: none">• Not reactive under normal conditions.
<i>Chemical stability</i>	<ul style="list-style-type: none">• Stable under recommended storage conditions.
<i>Possibility of hazardous reactions</i>	<ul style="list-style-type: none">• None under normal processing.
<i>Conditions to avoid</i>	<ul style="list-style-type: none">• Keep away from heat, sparks, and flame - combustible when exposed to open flames.
<i>Incompatible materials</i>	<ul style="list-style-type: none">• Reactive or incompatible with the following materials: oxidizing materials.
<i>Hazardous decomposition product(s)</i>	<ul style="list-style-type: none">• Thermal decomposition products can include carbon dioxide, carbon monoxide and various hydrocarbon fragments.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure				
<i>Eye contact</i>	• Low hazard of exposure under normal use.			
<i>Skin contact</i>	• Low hazard of exposure under normal use.			
<i>Inhalation</i>	• Low hazard of exposure under normal use.			
<i>Ingestion</i>	• Low ingestion hazard.			
Component Information				
Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50	
• Titanium dioxide 13463-67-7	• > 10000 mg/kg (Rat)	• > 10000 mg/kg (Rabbit)	• -	
Symptoms related to the physical, chemical and toxicological characteristics				
<i>Symptoms</i>	• Please see section 4 of this SDS for symptoms.			
Delayed and immediate effects as well as chronic effects from short and long-term exposure				
<i>Skin corrosion/irritation</i>	• Exposure to dust may cause mechanical irritation.			
<i>Serious eye damage/eye irritation</i>	• Exposure to dust may cause mechanical irritation. Excessive concentrations of nuisance dust in the workplace may reduce visibility and may cause unpleasant deposits in eyes.			
<i>Carcinogenicity</i>	• Titanium Dioxide (airborne particles of respirable size) is a listed carcinogen by IARC (2B). Titanium Dioxide used in products of this material is not believed to have the potential to become of respirable size.			
Chemical Name	ACGIH	IARC	NTP	OSHA
• Titanium Dioxide 13463-67-7		• Group 2B		• X

Legend:

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2A - Probably Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

NTP (National Toxicology Program)

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

ENVIROCURE LINER SAFETY DATA SHEET



11. TOXICOLOGICAL INFORMATION (CONTINUED)

<i>Reproductive toxicity</i>	<ul style="list-style-type: none">Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.
<i>STOT - single exposure</i>	<ul style="list-style-type: none">Evaluation of available data suggests that this material is not an STOT-SE toxicant.
<i>STOT - repeated exposure</i>	<ul style="list-style-type: none">Contains a component(s) that is/are not expected to be bioavailable due to the physical state of the material under normal handling and processing conditions.
<i>Aspiration hazard</i>	<ul style="list-style-type: none">Based on physical properties, not likely to be an aspiration hazard.

12. ECOLOGICAL INFORMATION

Ecotoxicity	<ul style="list-style-type: none">Not acutely toxic to aquatic life by GHS criteria.
Persistence/Degradability	<ul style="list-style-type: none">Not determined.
Bioaccumulation	<ul style="list-style-type: none">There is no data for this product.
Mobility	<ul style="list-style-type: none">Insoluble solid.
Other Adverse Effects	<ul style="list-style-type: none">Not determined.

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods	
<i>Disposal of wastes</i>	<ul style="list-style-type: none">Disposal should be in accordance with applicable regional, national and local laws and regulations.
<i>Contaminated packaging</i>	<ul style="list-style-type: none">Disposal should be in accordance with applicable regional, national and local laws and regulations.

Notes: This product is not a RCRA characteristically hazardous or listed hazardous waste. Dispose of according to state or local laws, which may be more restrictive than federal laws or regulations. Used product may be altered or contaminated, creating different disposal considerations.

14. TRANSPORT INFORMATION

Note: This product is not defined as a hazardous material under U.S. Department of Transportation (DOT) 49 CFR 172, or by Transport Canada “Transportation of Dangerous Goods” regulations. Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT	
<i>UN/ID No</i>	• Not applicable.
<i>Proper shipping name</i>	• Not applicable.
<i>Hazard class</i>	• Not applicable.
<i>Packing group</i>	• Not applicable.
IATA	
<i>UN number</i>	• Not regulated.
<i>Proper shipping name</i>	• Not regulated.
<i>Transport hazard class(es)</i>	• Not regulated.
<i>Packing group</i>	• Not regulated.
IMDG	
<i>UN number</i>	• Not regulated.
<i>Proper shipping name</i>	• Not regulated.
<i>Transport hazard class(es)</i>	• Not regulated.
<i>Packing group</i>	• Not regulated.
<i>Marine pollutant</i>	• This material does not meet the definition of a marine pollutant.

15. REGULATORY INFORMATION

Product as supplied, is an article under TSCA. The fiber may have been produced with titanium dioxide. This substance, as present in this material, is not water soluble and is encapsulated in the polymer. Titanium dioxide is not extracted or released in normal processing and handling. Therefore, this compound is not expected to present a hazard in normal handling, processing, use and disposal.

International Inventories

Chemical name	TSCA	TSCA Inventory Status	DSL/ NDSL	EINECS/ ELINCS	ENCS	IECSC	KECL	PICCS	AICS
<i>PET (Polyethylene Terephthalate)</i>	X	Active	X	X	X	X	X	X	X
<i>Titanium Dioxide</i>	X	Active	X	X	X	X	X	X	X
<i>Polyamide</i>	X	Active	X	X	X	X	X	X	X

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

ENVIROCURE LINER SAFETY DATA SHEET



15. REGULATORY INFORMATION (CONTINUED)

US Federal Regulations

CERCLA

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
• None Listed			

SARA 313

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
• None Listed			

CWA (Clean Water Act)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
• None Listed				

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
• Titanium dioxide - 13463-67-7	• Carcinogen

Carcinogen, initial date 9/2/11 (airborne, unbound particles of respirable size)

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
• <i>Titanium Dioxide</i> 13463-67-7	X	X	X

16. OTHER INFORMATION

NFPA	Health Hazards	Flammability	Instability	Special Hazards
	1	1	0	Not determined
HMIS	Health Hazards	Flammability	Physical hazards	Personal Protection
	1	1	0	Not determined
Issue Date:	09-Mar-2022			
Revision Date:	26-May-2024			
Revision Note:	New SDS			
Disclaimer	<ul style="list-style-type: none"> The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. 			