Material Safety Data Sheet

Date last revised: June 3, 2002

I. General Information	
Chemical Name & Synonyms: Polyethylene fiber.	**Trade Name & Synonyms**: FSI 0101 and 0102 series
Chemical Family: Polyolefin fiber.	**Formula:** See "Ingredients" section.
Proper DOT Shipping Name: Polyethylene fiber	**DOT Hazard Classification**: Non-hazardous
Manufacturer: Fiber Science, Inc.	**Manufacturer's Phone Number**: (321) 726-6327
Manufacturer's Address: 2855 Kirby Ave., NE, Suite #4, Palm Bay, Florida 32905	**24 Hour Emergency Phone Number:** (989) 636-4400

II. Ingredients		
Principal Components	**Percent**	**Threshold Limit Value (units)**
Co-polymer of ethylene and octene-1. CAS 026221-73-8	>99	Not Applicable.
Not hazardous as defined in 29 CFR1910.1200		

III. Physical Data	
Boiling Point (°F): Not applicable	**Specific Gravity (H_2O=1):** 0.91 to 0.97
Vapor Pressure (mm Hg.): Not applicable	**Percent Volatile by Volume (%):** Not Established.
Vapor Density (Air=1): Not Applicable.	**Evaporation Rate**: Not applicable.
Solubility in Water: Insoluble.	**Melting Point:** 120ºC (248ºF).
Appearance & Odor: Solid fiber. Could have a slight mild odor caused by topical application of fiber finish.	

IV. Fire & Explosion Hazard Data		
Flash Point (Test Method): Not Applicable.	**Auto Ignition Temperature**: Not applicable.	
Flammable Limits: Avoid temperatures above 300 C	**LFL**: Not applicable.	**UFL**: Not applicable.
Extinguishing Media: Any cooling or oxygen excluding method. Water, Synthetic Foam (including AFFFF Type) or protein foams, CO_2, or Dry Chemical may be used. Alcohol resistant foams (ATC Type) may also function.		
Special Fire Fighting Procedure: Due to potential decomposition of the polymer, Firefighters should be equipped with positive pressure, self contained breathing apparatus (SCBA) and protective fire fighting clothing (fire fighting helmet, coat, pants, boots and gloves).		
Unusual Fire & Explosion Hazards: Soak thoroughly with water to cool and prevent re-ignition. Dense smoke is emitted when burned without sufficient oxygen. Under fire conditions, polymers decompose. The smoke may contain polymer fragments of varying composition in addition to unidentified toxic and/or irritating components. Hazardous combustion by-products may include, and are not limited to, carbon monoxide, carbon dioxide.		

V. Health Hazard Data

OSHA Permissible Exposure Limit: Not an established value.	**ACGIH Threshold Limit Value**: No established value, product is inert.
Carcinogen-NTP Program: Not an established value.	**Carcinogen-IARC Program:** Not an established value..

Symptoms of Exposure:
EYE CONTACT: Yarn or dust may cause irritation or corneal injury due to mechanical action.
SKIN CONTACT: Essentially non-irritating to skin, Mechanical injury only.
SKIN ABSORPTION: A single prolonged skin exposure is not likely to result in material being absorbed through skin in harmful amounts.
INGESTION: May cause choking if yarn is swallowed. Single dose oral toxicity is believed to be very low. Material is considered physiologically inert.
INHALATION: Vapors are unlikely due to physical properties. Single exposure to dust or filaments is not likely to be hazardous.

Primary Route(s) of Entry: Skin contact, Inhalation. Under normal circumstances, material is solid and inert. Abraded material may form fibrous or particulate dust.

Emergency First Aid:
EYES: Irrigate immediately with water for at least 5 minutes. Mechanical irritation only.
SKIN: Wash off dust, particulate and loose filaments with flowing water or shower. Should molten material contact skin, cool affected area with water and exclude air. Treat for burn.
INGESTION: No adverse effects anticipated by this route of exposure incidental to proper industrial handling.
INHALATION: No adverse effects anticipated by this route of exposure incidental to proper industrial handling. If a problem develops, remove person to fresh air and supply oxygen if necessary.
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VI. Reactivity Data

Stability	X	Stable	**Conditions to avoid**: Temperatures above 300ºC (572°F) will release combustible gases.
		Unstable	
Incompatibility			**Materials to avoid**: None.
Hazardous Polymerization		May Occur	**Conditions to avoid**:
	X	Will not occur	

Hazardous Decomposition Products: Decomposition products depend upon temperature, other materials present and air supply. During thermal processing, this material can degrade to produce trace hydrocarbons, aldehydes, organic acids and alcohol's in limited quantities. Complete combustion results in carbon dioxide and water.

VII. Environmental Protection Procedures

Spill Response: Sweep up or vacuum in dry waste container and discard.

Waste Disposal Method: Ensure that this material or products made from this material are cooled below 190ºC (374ºF) before storing or discarding. Bury in landfill or burn in approved incinerator in accordance with local, state and federal regulations.

VIII. Special Protection Information	
Eye Protection: Use of eye protection is recommended in accordance with accepted industry safety procedures when handling fibers and yarns.	**Skin Protection**: Normal clothing should be adequate for most processing applications.
Respiratory Protection (Specific Type): Full face mask with organic vapor canister is recommended when decomposed material is present. Otherwise none required.	**Ventilation Recommended**: Provide exhaust over processing machinery as required.
Other Protection:	

IX. Special Precautions
Hygienic Practices in Handling & Storage: Keep material dry, in sealed bags, and avoid exposure to excessive heat.
Precautions for Repair & Maintenance of Contaminated Equipment: Mechanical handling equipment can cause formation of dust and wads of loose filaments. Maintain good housekeeping. Dust layers or loose filaments should not be permitted to accumulate in order to avoid any potential for dust explosion hazards.
Other Precautions: Avoid contact with eyes. Ensure that this material, or products made from this material, are cooled below 190ºC (374ºF) before storing or discarding

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