

1. Identification

Product Name: MiniFIBERS Biodegradable Polyethylene Fibers
Synonyms: Polyolefin Fibers, Polyethylene Staple Fibers
Manufacturer: MiniFibers Inc.; 2923 Boones Creek Road; Johnson City, TN 37615 USA
Telephone: Information: (423) 282-4242 Emergency: (423) 282-4242
Date Prepared: November 2008

HMIS		
HEALTH		0
FLAMMABILITY		1
PHYSICAL HAZARD		0

2. Hazard Identification

This product is not hazardous under the criteria of U.S. Occupational Safety and Health Standard 29 CFR 1910 Subpart Z and United Nations GHS Parts 2, 3, and 4.

3. Composition / Information on Ingredients

Substance	CAS No.	EC No.	Concentration By Weight
Co-polymer of ethylene and octene-1	26221-73-8	-	>99%

4. Emergency & First Aid Measures

Routes of Exposure:

- Inhalation:** Inhalation of fibers or fiber dust may cause respiratory irritation. Move to fresh air if effects occur. Consult a physician if persistent coughing or other symptoms develop.
- Skin:** **If thermal burn, cool with water and seek immediate medical attention; do not attempt to peel fibers from skin.** Non-thermal contact with fibers may cause mechanical irritation of the skin. Wash off with soap and water, and consult a physician if symptoms develop.
- Skin Absorption:** A single prolonged skin exposure is not likely to result in the material being absorbed through the skin in harmful amounts.
- Eyes:** Fibers or fiber dust may cause irritation or scratch the surface of the eyes. Flush with water to remove particles; remove contact lenses if present part eyelids with fingers to ensure complete flushing. Consult a physician if persistent irritation or other symptoms develop.
- Ingestion:** Single dose oral toxicity is believed to be very low. Material is considered physiologically inert. Consult a physician if symptoms develop or if a large amount is swallowed.

Contaminated clothing does not need to be removed.

Personal protective equipment is not required for first-aid responders.

5. Fire Fighting Measures / Fire & Explosion Hazard Data

- Flash Point:** Data not available
- Flammable Limits:** Avoid temperatures above 300°C.
- Extinguishing Media:** Water, CO₂, dry chemicals, foam.
- Hazardous Combustion Products:** May include, but are not limited to, CO and CO₂.
- Unusual Fire & Explosion Hazards:** 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 compounds.
- Special Fire Fighting Procedures:** Avoid excessive inhalation of smoke or potential thermal decomposition products. Keep product cool by spraying with water. If outdoors, fight fire from an upwind position.
- Special Protective Equipment:** Due to potential decomposition of the polymer, firefighters should be equipped with positive pressure self-contained breathing apparatus (SCBA) and standard protective fire fighting clothing (helmet, eye protection, overalls, boots, and gloves) when fighting all indoor fires and any significant outdoor fires.



6. Accidental Release Measures / Steps to be Taken if Material is Released or Spilled

- Personal Precautions:** None needed.
- Environmental Precautions:** None needed.
- Methods for Cleanup:** Vacuum or sweep up and place in a standard disposal container. Avoid the use of air jets.

7. Precautions for Safe Handling & Storage

- Precautions for Safe Handling:** No special handling has been shown to be necessary.
- Conditions for Safe Storage:** Avoid overstacking to prevent collapse or breakage of the package. Do not store near flame or incompatible substances. Keep material dry and avoid exposure to excessive heat.
- Other Precautions:** Abraded material may form fibrous or particulate dust.

8. Exposure Control Measures / Personal Protection

- Exposure Guidelines:** Fiber dust should be considered a nuisance dust, i.e. particulates (not otherwise classified):
 ACGIH Threshold Limit Value: 10 mg/m³ total dust; 3-mg/m³ respirable dust
 OSHA Permissible Exposure Limit: 15 mg/m³ total dust; 5-mg/m³ respirable dust
- Engineering Controls:** Mechanical handling equipment can cause formation of dust and wads of loose filaments. Provide exhaust over processing machinery as required; local exhaust recommended to reduce exposure to fiber dust.
- Specific Personal Protective Equipment:**
 - Respiratory:** For operations where inhalation exposure can occur, a NIOSH approved dust mask/respirator is recommended. Full face mask with organic vapor canister is recommended when decomposed material is present.
 - Eye:** Use of eye protection is recommended in accordance with accepted industry safety procedures when

Hand:	handling fibers and yarns.
Skin/Other:	Protective gloves not required.
Work/Hygienic Practices:	Not required.
	Maintain good housekeeping; dust layers or loose fibers should not be permitted to accumulate in order to avoid any potential for dust explosion hazards. Avoid the use of air jets to blow off equipment; use vacuums instead.

9. Physical & Chemical Properties / Characteristics

Chemical Formula:	C ₂ H ₄	Flash Point:	No data available	Solubility:	Not soluble
Appearance:	White solid	Evaporation Rate:	Does not apply	Partition Coefficient:	No data available
Odor:	No odor	Flammability:	Non-flammable	Auto-Ignition Temp:	No data available
pH:	No data available	Vapor Pressure:	Does not apply	Decomposition Temp:	No data available
Melting Point:	120°C	Vapor Density:	Does not apply	Viscosity:	Does not apply
Boiling Point:	Does not apply	Specific Gravity:	0.91-0.97 g/cm ³		

10. Stability & Reactivity Data

Reactivity:	Data not available.
Stability:	Stable under normal conditions.
Hazardous Polymerization:	Will not occur.
Conditions to Avoid:	Excessive heat should be avoided. Temperatures above 300°C will release combustible gases.
Incompatible Materials:	None known.
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 alcohols in limited quantities.

11. Toxicological Information / Health Hazard Data

Health Hazards (Acute and Chronic):	No data available.
Carcinogenicity:	
NTP:	Not listed.
IARC:	3 - Not classifiable as to its carcinogenicity to humans.
OSHA:	Not regulated.
Signs and Symptoms of Exposure:	No data available.
Medical Conditions Aggravated by Exposure:	Some individuals, e.g. with asthma or bronchitis, are likely to be intolerant of high concentrations of airborne fibers or fiber dust when processing.

12. Ecological Information

Toxicity:	No data available.
Persistence and Degradability:	No data available.
Bioaccumulative Potential:	No data available.
Mobility in Soil:	No data available.

13. Disposal Considerations

Waste Disposal Method:	Ensure that this material or products made from this material are cooled below 190°C before storing or discarding. Dispose of in accordance with all applicable governmental regulations for non-hazardous solid waste. Disposal via septic or sewage systems is not recommended. Recycling of corrugated packaging is encouraged where possible. Other packaging may be disposed of with product. Standard disposal containers are acceptable.
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14. Transport Information

Proper Shipping Name:	Polyethylene Staple Fiber	U.S. DOT:	Not regulated.
U.S. NMFC Item Number:	68310	ICAO/IATA:	Not regulated.
HTC Number:	5503.90	IMDG:	Not regulated.
U.N. Number:	None	Canada TDG:	Not regulated.

15. Regulatory Information

International:		Federal (U.S.):	
Canada: DSL/NDSL: Included on the Canadian Domestic Substance List.		EPA: Not regulated.	
Canada: WHMIS: Not a controlled product.		OSHA: Not hazardous under the criteria of Occupational Safety and Health Standard 29 CFR 1910 Subpart Z.	
Europe: Not classified as dangerous according to Directive 1999/45/EC.		State:	
UN: Does not appear on the Dangerous Goods List.		CA: Proposition 65: Does not contain chemicals known to the State of California to cause cancer or reproductive toxicity.	

16. Other Information

This MSDS has been prepared in compliance with United States OSHA Hazard Communication Standard 29 CFR 1910.1200 and the United Nations Globally Harmonized System for the Classification and Labeling of Chemicals.

Disclaimer: To the best of our knowledge, the information contained herein is accurate. However, we cannot assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of the suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.