

### 1. Identification

**Product Name:** MiniFIBERS Polyvinyl Alcohol Fibers  
**Synonyms:** PVOH, PVA, PVAI  
**Manufacturer:** MiniFibers Inc.; 2923 Boones Creek Road; Johnson City, TN 37615 USA  
**Telephone:** Information: (423) 282-4242 Emergency: (423) 282-4242  
**Date Prepared:** September 2010

HMIS		
HEALTH	0	0
FLAMMABILITY	1	0
PHYSICAL HAZARD	0	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
Polyvinyl Alcohol	9002-89-5		>95%
Water			1-5%
Dimethyl Sulfoxide	67-68-5		<1%

### 4. Emergency & First Aid Measures

**Routes of Exposure:**

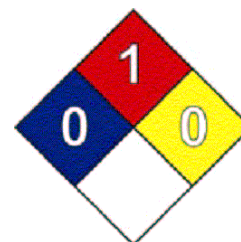
- Inhalation:** Gargle, move to fresh air, and seek medical advice.
- Skin:** **If thermal burn, cool with water and seek immediate medical attention; do not attempt to peel fibers from skin.** Wash off with plenty of water, and seek medical advice if symptoms develop.
- Skin Absorption:** A single prolonged skin exposure is not likely to result in the material being absorbed through the skin in harmful amounts.
- Eyes:** Flush with clean water to remove particles; remove contact lenses if present and part eyelids with fingers to ensure complete flushing; and seek medical advice.
- Ingestion:** Induce vomiting and seek medical advice.

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:** >200°C
- Flammable Limits:** °C
- Extinguishing Media:** Water, dry chemicals.
- Hazardous Combustion Products:** May include, but are not limited to, CO and CO<sub>2</sub>.
- Unusual Fire & Explosion Hazards:** None known.
- 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. Store away from moisture, high temperature, and humidity.
- Other Precautions:** None

### 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/m<sup>3</sup> total dust; 3-mg/m<sup>3</sup> respirable dust  
OSHA Permissible Exposure Limit: 15 mg/m<sup>3</sup> total dust; 5-mg/m<sup>3</sup> respirable dust
- Engineering Controls:** 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.
  - Eye:** For operations where eye contact can occur, eye protection such as goggles or safety glasses is recommended.
  - Hand:** Protective gloves are recommended.
  - Skin/Other:** Not required.
- Work/Hygienic Practices:** Maintain good housekeeping to control dust accumulations. Avoid the use of air jets to blow

off equipment; use vacuums instead.

**9. Physical & Chemical Properties / Characteristics**

<b>Chemical Formula:</b> $(\text{CH}_2\text{CH})_n\text{—OH}$	<b>Flash Point:</b> >200°C	<b>Solubility:</b> Rarely soluble
<b>Appearance:</b> White or ivory solid	<b>Evaporation Rate:</b> Does not apply	<b>Partition Coefficient:</b> No data available
<b>Odor:</b> No odor	<b>Flammability:</b> Slightly flammable	<b>Auto-Ignition Temp:</b> 440°C
<b>pH:</b> No data available	<b>Vapor Pressure:</b> Does not apply	<b>Decomposition Temp:</b> >200°C
<b>Melting Point:</b> ~245°C	<b>Vapor Density:</b> Does not apply	<b>Viscosity:</b> Does not apply
<b>Boiling Point:</b> Does not apply	<b>Specific Gravity:</b> 1.3 g/cm <sup>3</sup>	

**10. Stability & Reactivity Data**

<b>Reactivity:</b>	Data not available.
<b>Stability:</b>	Stable under normal conditions.
<b>Hazardous Polymerization:</b>	Will not occur.
<b>Conditions to Avoid:</b>	Temperatures above 200°C.
<b>Incompatible Materials:</b>	None known.
<b>Hazardous Decomposition Products:</b>	None anticipated under normal or recommended handling and storage conditions.

**11. Toxicological Information / Health Hazard Data**

<b>Health Hazards (Acute and Chronic):</b>	Sub-chronic toxicity: 1ml hypodermic injection with PVA concentration of 5% for 25 days showed evidence of hypertension and enlargement of kidneys, liver, and heart.
<b>Carcinogenicity:</b>	Carcinogenic effects have not been observed in testing of rats.
<b>NTP:</b>	Not listed.
<b>IARC:</b>	3 - Not classifiable as to its carcinogenicity to humans.
<b>OSHA:</b>	Not regulated.
<b>Signs and Symptoms of Exposure:</b>	No data available.
<b>Medical Conditions Aggravated by Exposure:</b>	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**

<b>Toxicity:</b>	No data available.
<b>Persistence and Degradability:</b>	This material does not biodegrade in water at normal temperatures, but has been shown to biodegrade in sludge with pseudomonas bacteria.
<b>Bioaccumulative Potential:</b>	This material is classified as not bioaccumulative in the human body.
<b>Mobility in Soil:</b>	No data available.

**13. Disposal Considerations**

<b>Waste Disposal Method:</b>	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**

<b>Proper Shipping Name:</b>	PVA Staple Fibers	<b>U.S. DOT:</b>	Not regulated.
<b>U.S. NMFC Item Number:</b>	68310	<b>ICAO/IATA:</b>	Not regulated.
<b>HTC Number:</b>	5503.90	<b>IMDG:</b>	Not regulated.
<b>U.N. Number:</b>	None	<b>Canada TDG:</b>	Not regulated.

**15. Regulatory Information**

<b>International:</b>	<b>Federal (U.S.):</b>
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.	<b>State:</b>
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.