Product Name	MiniFIBERS Rayon		
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SECTION 1. IDENTIFICATION

Product Name	MiniFIBERS Rayon
Product Code	RAFLN, RAFLT, RATCD, RATRI, RAFSC, and Others
Synonyms	Viscose

Recommended Use	Rayon fibers are intended for use in medical, hygienic, textile and non-textile end-uses depending on the grade supplied
Restrictions on Use	None known.

COMPANY IDENTIFICATION

MiniFIBERS, Inc. 2923 Boones Creek Rd Johnson City, TN 37615 (423) 282-4242

TRANSPORTATION EMERGENCY PHONE NUMBERS

(423) 282-4242

SECTION 2. HAZARD IDENTIFICATION

GHS CLASSIFICATION IN ACCORDANCE WITH 29 CFR 1910.1200

Combustible Dust

LABEL ELEMENTS

Signal Word	Warning
Hazard Statement(s)	May form combustible dust concentrations in the air
Precautionary Statement(s)	Prevent dust accumulation to minimize explosion hazard. Material can accumulate static charges which may cause ignition. Keep away from heat/sparks/open flames/hot surfaces. Keep container tightly closed. Handle in accordance with good industrial hygiene and safety practices
Pictogram	No pictogram

OTHER HAZARDS

Not applicable

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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Common Name	CAS#	Concentration (%w/w)
Cellulose – regenerated	Viscose, Rayon	68442-85-3	84-98
Water	Water	7732-18-5	2-16
Lubricant		Proprietary	0-1%

REMARKS

None

SECTION 4. FIRST AID MEASURES

GENERAL INFORMATION

No hazards which require special first aid measures

Inhalation	Move to fresh air. If symptoms persist, contact physician.
Skin contact	Wash off with soap and water. If symptoms persist, contact physician. Cool skin rapidly with cold water after contact with molten material. Do not peel solidified product off the skin. Burns must be treated by a physician.
Eye contact	In case of contact with eyes, remove contact lens if present, rinse immediately with plenty of water and seek medical advice.
Ingestion	Wash out mouth immediately. Seek medical attention
Most important symptoms and effects (acute and delayed)	Molten product can cause serious burns. Dusts may irritate the respiratory tract, skin and eyes. May cause allergic skin disorders in sensitive individuals.
Note to physician	Treat symptomatically

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture. Water spray, dry chemical, or carbon dioxide (CO2)
Unsuitable extinguishing media	Do not use water jet as an extinguisher
Specific hazards during fire fighting	Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in presence of an ignition source is a potential dust explosion hazard. Molten polymer tends to flow or drip and may propagate fire.
Hazardous combustion products	May consist of carbon monoxide and/or carbon dioxide gases
Further information	Minimize dust generation and accumulation

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Special protective equipment	Wear approved positive pressure self-contained breathing
Special protective equipment	apparatus in addition to standard firefighting gear

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, emergency procedures	Keep unnecessary personnel away. Use only non-sparking tools. Dust deposits should not be allowed on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Dust mask and goggles are recommended to prevent possible irritation from airborne fibers.
Environmental precautions	Avoid releases to the environment
Methods and materials for containment and clean-up	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Vacuum or sweep up and place in a standard disposal container. Minimize dust generation.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling	Minimize dust generation and accumulation Keep away from heat and sources of ignition
Advice on safe handling	Wash thoroughly after handling Use only in areas provided with ventilation Minimize dust generation and accumulation
Conditions for safe storage	Avoid over-stacking Keep in properly labeled containers Do not store near strong oxidizing agents and direct sunlight

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

INGREDIENTS WITH WORKPLACE CONTROL PARAMETERS

US OSHA	Type	Value	Form
Dust	TWA	3 mg/m3	Respirable fraction
		15 mg/m3	Total dust
ACGIH	Туре	Value	Form
Dust	TWA	10 mg/m3	Inhalable particles
ACGIH TLV	Туре	Value	Form
Dust	TWA	3 mg/m3	Respirable particles

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Note: Limits/standards shown for guidance only. Follow applicable regulations.

Engineering Measures	Good general ventilation should be used. Ventilation rates should match to conditions. Maintain airborne levels to
	acceptable level

PERSONAL PROTECTIVE EQUIPMENT

ZHOOTWIZT NOTZOTIVE ZQON WIZT		
Respiratory protection	Use respiratory protection when there is the potential to exceed the exposure limit. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort, have been experienced or where indicated by your risk assessment process.	
Eye protection	Wear safety glasses (with side shields). If there is a potential for exposure to particles which could cause eye discomfort, wear goggles.	
Hand protection	No special requirements	
Skin and body protection	Wear suitable protective clothing	
Protective measures	Ensure eye flushing systems and safety showers are located close to the working spaces.	
General hygiene considerations	Observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Practice good housekeeping.	

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White or off-white fibers
Odor	Slight sulfuric odor
Odor threshold	Not applicable
рН	Not available
Melting point/range	Not applicable
Freezing point	Not applicable
Boiling point/range (760 mmHg)	Not applicable
Flash point	Not available
Evaporation rate	Not applicable
Flammability (solid, gas)	Non-flammable
Upper flammability/upper explosion limit	Not determined
Lower flammability/lower explosion limit	Not determined
Vapor pressure	Not appliable
Relative vapor density (air = 1)	Not applicable

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Relative density (water = 1)	1.53 g/cm ³
Water solubility	Insoluable
Partition coefficient: n-octanol/water	Not applicable
Auto-ignition temperature	400°C/752°F
Decomposition temperature	Not determined
Viscosity	Not applicable
Explosive properties	Not explosive
Oxidizing properties	Not oxidizing

SECTION 10. STABILITY AND REACTIVITY

Reactivity	Not classified as reactivity hazard
Chemical stability	Stable under normal conditions
Possibility of hazardous reactions	Stable
Conditions to avoid	Minimize dust generation and accumulation
Incompatible materials	Not applicable
Hazardous decomposition products	Decomposition products may include, but not limited to, carbon monoxide (CO) and carbon dioxide (CO2)

SECTION 11. TOXICOLOGY INFORMATION

INFORMATION ON LIKELY ROUTES OF EXPOSURE

Product	
Inhalation	Remarks: Fibers or fiber dust may irritate respiratory system
Skin contact	Remarks: Dust or powder may irritate the skin
Eye contact	Remarks: Fibers or fiber dust may irritate eyes
Ingestion	Remarks: No specific data

ACUTE TOXICITY

Not expected to be acutely toxic

SKIN CORROSION/IRRITATION

Remarks Prolonged skin contact may cause temporary irritation	
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SERIOUS EYE DAMAGE/EYE IRRITATION

Remarks	Direct contact with eyes may cause temporary irritation
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RESPIRATORY OR SKIN SENSITIZATION

Remarks	Not classified based on available information
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STOT (SINGLE EXPOSURE)

Remarks	No data available
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STOT (REPEAT EXPOSURE)

Remarks No data available	
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ASPIRATION TOXICITY

Remarks No data available	
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CARCINOGENICITY

Product	
Remarks	
IARC	3 Not classified as to carcinogenicity to humans No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC
OSHA	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens
NTP	No ingredient on this product present at levels greater than or equal to 0.01% is identified as a known or anticipated carcinogen by NTP

REPRODUCTIVE TOXICITY

Remarks	No relevant data found
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MUTAGENICITY

Remarks	No relevant data found

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicological information appears in this section when such data is available.

GENERAL INFORMATION

No known evidence of adverse effects on the environment.

PERSISTENCE AND DEGRADABILITY

Cellulose fibers are biodegradable under conditions which encourage the growth of microorganisms

SECTION 13. DISPOSAL CONSIDERATIONS

DISPOSAL METHODS

Waste from residues	DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY
waste from residues	BODY OF WATER.

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Dispose of in accordance with federal, state, and local regulations.
Note that this information applies to the material as manufactured;
processing, use, or contamination may make this information
inappropriate, inaccurate, or incomplete.

SECTION 14. TRANSPORTATION INFORMATION

DOT	Not regulated as a dangerous good
IMO-IMDG	Not regulated as a dangerous good
Transport in bulk according	Note: Consult IMO regulations before transporting ocean bulk
to Annex II of MARPOL	
73/78 and the IBC Code	
ICAO/IATA	Not regulated as a dangerous good

This information is not intended to convey all specific regulator or operational requirements/information related to this product. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of this material.

HTS CODE:

5504.10

NMFC ITEM NUMBER:

68310

SECTION 15. REGULATORY INFORMATION

U.S. STATE REGULATIONS

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): Does not contain chemicals known to the State of California to cause cancer or reproductive toxicity. For more
information go to www.P65Warnings.ca.gov

U.S. FEDERAL REGULATIONS

20 CFR 1910.1200	This product is an article and, as such, is not subject to the OSHA Hazard Communication Standard.	
TSCA	This product is considered an article and is not subject to TSCA requirements	
SARA 302 Extremely hazardous	Not listed	

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SARA 311/312 Hazardous	Yes	
chemical	Classified hazard categories: Combustible dust	
SARA 313	Not regulated	
(TRI Reporting)		

INTERNATIONAL REGULATIONS

REACH	According to Article 3(3) fibers can be defined as articles not requiring registration	
Canadian DSL/NDSL	All components are listed or exempt	

SECTION 16. OTHER INFORMATION

OTHER INFORMATION

Refer to NFPA 654. Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling.

FULL TEXT OF OTHER ABBREVIATIONS

Add any additional abbreviations and text to table based on content

US Department of Transportation
Global Harmonized System
Harmonized Tariff Schedule
International Agency for the Research of Cancer
International Air Transport Association
International Civil Aviation Organization
International Maritime Dangerous Goods
International Maritime Organization
International Convention for the Prevention of Pollution from Ships
National Toxicology Program
US Safety and Health Act
Resource Conservation and Recovery Act
Regulation (ECO) No 1907/2006 of the European Parliament and the Council covering the Registration, Evaluation, Authorization and Restriction of Chemicals
Superfund Amendment and Reauthorization Act
Safety Data Sheet
Specific Target Organ Toxicity
US Toxic Substance Control Act

REVISION DATE

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09-28-2023 Updated Section 3 to account for potential application of cutting lubricant.

INFORMATION SOURCE AND REFERENCES

This SDS is based on information provided by suppliers and internal references within our company.

Information related to REACH and articles: ECHA. (2017). Guidance on requirements for substances in articles. Version 4. <u>Link</u>

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of this publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered warranty or quality specification. The information relates only to the specified 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.