

Product Name	MiniFIBERS Lyocell		
Revision Number	01	Revision Date	24 July 2024
		Issue Date	02/06/2023

SECTION 1. IDENTIFICATION

Product Name	MiniFIBERS Lyocell
Product Code	RALYC
Synonyms	None

Recommended Use	Various applications in textiles and non-wovens
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

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Common Name	CAS #	Concentration (%w/w)
Cellulosic man-made fiber by Lyocell production technology)	Lyocell	9004-34-6	>98

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REMARKS

Fiber may contain approximately 1% Titanium Dioxide (CAS 13463-67-7). The Titanium Dioxide is bound within the fiber matrix. Fiber may contain up to 1% of finish and contains water in balance with the ambient air.

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.
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)	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 (CO ₂)
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.
Hazardous combustion products	May consist of carbon monoxide and/or carbon dioxide gases and other organic decomposition products.
Further information	Minimize dust generation and accumulation
Special protective equipment	Wear approved positive pressure self-contained breathing 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
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	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/m ³ 15 mg/m ³	Respirable fraction Total dust
ACGIH	Type	Value	Form
Dust	TWA	10 mg/m ³	Inhalable particles
ACGIH TLV	Type	Value	Form
Dust	TWA	3 mg/m ³	Respirable particles

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
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PERSONAL PROTECTIVE EQUIPMENT

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
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	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	odorless
Odor threshold	Not applicable
pH	Not available
Melting point/range	Not applicable
Freezing point	Not applicable
Boiling point/range (760 mmHg)	Not volatile
Flash point	Not applicable
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 applicable
Relative vapor density (air = 1)	Not applicable
Relative density (water = 1)	1.5 g/cm ³
Water solubility	Insoluble
Partition coefficient: n-octanol/water	Not applicable
Auto-ignition temperature	460°C/860°F (in acc. To DIN 51794)
Decomposition temperature	>175°C
Viscosity	Not applicable
Explosive properties	Not explosive
Oxidizing properties	Not oxidizing

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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 Stable at 115°C up to one hour. At higher temperatures or when longer exposure fiber will turn yellowish. Long lasting exposure to light will cause some discoloration and decrease tenacity.
Incompatible materials	Caustic soda of 8-10% concentration at room temperature, and hot or concentrated acids.
Hazardous decomposition products	Decomposition products may include, but not limited to, carbon monoxide (CO) and carbon dioxide (CO ₂), and several organic decomposition products.

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)

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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. Any Titanium Dioxide is bound within fiber matrix.
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
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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 and compostable 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 BODY OF WATER. Dispose of in accordance with federal, state, and local regulations. Note that this information applies to the material as manufactured;
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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 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not regulated as a dangerous good Note: Consult IMO regulations before transporting ocean bulk
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 Proposition 65	California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): Based on our knowledge of raw materials or supplier declarations chemicals known to the State of California to cause cancer or reproductive toxicity are not present at levels greater than 100 ppm. For more information go to www.P65Warnings.ca.gov Any Titanium Dioxide is bound within the fiber matrix and not airborne nor respirable.
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U.S. FEDERAL REGULATIONS

TSCA	This product is considered an article and is not subject to TSCA requirements
SARA 302 Extremely hazardous substance	Not listed

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

INTERNATIONAL REGULATIONS

REACH	According to Article 3(3) fibers can be defined as articles not requiring registration
Canadian DSL/NDSL	Cellulose and TiO2 listed on DSL

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

DOT	US Department of Transportation
GHS	Global Harmonized System
HTS	Harmonized Tariff Schedule
IARC	International Agency for the Research of Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
MARPOL	International Convention for the Prevention of Pollution from Ships
NTP	National Toxicology Program
OSHA	US Safety and Health Act
RCRA	Resource Conservation and Recovery Act
REACH	Regulation (EC) No 1907/2006 of the European Parliament and the Council covering the Registration, Evaluation, Authorization and Restriction of Chemicals
SARA	Superfund Amendment and Reauthorization Act
SDS	Safety Data Sheet
STOT	Specific Target Organ Toxicity
TSCA	US Toxic Substance Control Act

REVISION DATE

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This is a new SDS.

07-24-2024 Section 15: Removed reference to 21 CFR 1910.1200, Clarified Canadian DSL/NDSL listing

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.

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.