

Non-biopersistent Special Purpose Fibers

Version 1.2

Revision Date 03/01/2016

Print Date 03/07/2016

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Trade name : Micro-Strand® 481

Manufacturer or supplier's details

Company : Johns Manville
Address : P.O. Box 5108
Denver, CO USA 80127
Telephone : +1 303-978-2000 8:00AM-5:00PM M-F
Emergency telephone : 1-800-424-9300 (Chemtrec, in English)
number

Prepared by : productsafety@jm.com

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Not a hazardous substance or mixture.

GHS Label element

Not a hazardous substance or mixture.

Other hazards

Temporary mechanical abrasion (itching) of skin, eyes and respiratory tract may occur upon exposure to fibers or dust during handling of this product and cannot occur unless there is direct contact.

Abrasion effects should subside after cessation of exposure.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**Chemical nature**

Glass Fiber Product

Hazardous components

Non-hazardous according to 29 CFR 1910.1200, when used as intended.

Relevant ingredients

Chemical Name	CAS-No.	Concentration (%)
Non-biopersistent (biosoluble) glass microfiber	Not Assigned	100 %

SECTION 4. FIRST AID MEASURES

General advice : Get medical attention if symptoms occur.

If inhaled : Move to fresh air.
If symptoms persist, call a physician.In case of skin contact : Take off all contaminated clothing immediately.
If on skin, rinse well with water.
Get medical attention if irritation develops and persists.In case of eye contact : In case of eye contact, remove contact lens and rinse
immediately with plenty of water, also under the eyelids, for at

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- least 15 minutes.
If eye irritation persists, consult a specialist.
- If swallowed : If symptoms persist, call a physician.
Rinse mouth with water to remove dust or fibers and drink plenty of water to help reduce irritation.
- Most important symptoms and effects, both acute and delayed : None known.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Avoid dust formation.
- Methods and materials for containment and cleaning up : Take up mechanically.
Pick up and arrange disposal without creating dust.

SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : Provide appropriate exhaust ventilation at places where dust is formed.
- Advice on safe handling : For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
- Conditions for safe storage : Keep in a dry, cool place.
- Materials to avoid : No materials to be especially mentioned.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Nuisance dust	Not Assigned	TWA (Total	15 mg/m3	OSHA

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		particulate)		
		TWA (Respirable fraction)	5 mg/m ³	OSHA

As a member of the North American Insulation Manufacturers Association (NAIMA), JM subscribes to the NAIMA Product Stewardship Program (NPSP). Under the NPSP, JM recommends that exposures be limited to the voluntary concentration of 1 f/cc TWA. The NPSP also includes work practice and respiratory protection recommendations. For more information, see NAIMA's Health and Safety Reference Library (website: <http://insulationinstitute.org/tools-resources/resource-library/health-safety/>) to find the Product Stewardship Program Pocket Folder (N052) and other Fact Sheets.

Personal protective equipment

- Respiratory protection : No personal respiratory protective equipment normally required.
When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
- Hand protection
- Remarks : For prolonged or repeated contact use protective gloves.
- Eye protection : Safety glasses
- Skin and body protection : Long sleeved clothing
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : solid
- Colour : colourless
- Odour : slight
- Odour Threshold : Not relevant
- pH : Not applicable
- Melting point/range : Not applicable
- Boiling point/boiling range : Not applicable
- Flash point : Not applicable
- Evaporation rate : Not applicable
- Flammability (solid, gas) : No data available
- Upper explosion limit : Not applicable
- Lower explosion limit : Not applicable
- Vapour pressure : Not applicable

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Relative vapour density	: Not applicable
Relative density	: No data available
Density	: Not applicable
Solubility(ies)	
Water solubility	: slightly soluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Thermal decomposition	: Not applicable
Viscosity	
Viscosity, dynamic	: Not applicable
Viscosity, kinematic	: Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No decomposition if stored and applied as directed.
Chemical stability	: No decomposition if stored and applied as directed.
Possibility of hazardous reactions	: Stable under recommended storage conditions. No hazards to be specially mentioned.
Conditions to avoid	: No data available

SECTION 11. TOXICOLOGICAL INFORMATION

IARC	No component 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 identified as a carcinogen or potential carcinogen by OSHA.
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Further information**Product:**

Remarks: Temporary mechanical abrasion (itching) of skin, eyes and respiratory tract may occur

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upon exposure to fibers or dust during handling of this product and cannot occur unless there is direct contact. Abrasion effects should subside after cessation of exposure. The Special Purpose Fibers used in these products were shown not to be biopersistent in an animal test (i.e., the fibers were biosoluble). Therefore, a classification as a carcinogen does not apply.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects**Product:**

Additional ecological information : Due to the properties of the product, a hazard to the environment may not be expected.

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Disposal of residual product : In accordance with local and national regulations.

SECTION 14. TRANSPORT INFORMATION**International transport regulations**

These products are not classified as dangerous goods according to international transport regulations.

SECTION 15. REGULATORY INFORMATION**TSCA list****EPCRA - Emergency Planning and Community Right-to-Know Act****CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

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This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

California Prop 65 : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

The components of this product are reported in the following inventories:

TSCA : On TSCA Inventory

DSL : All components of this product are on the Canadian DSL.

SECTION 16. OTHER INFORMATION**Further information**

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