

Section 1: Identification of the Substance/Mixture and of the Company/Undertaking**1.1 Product Identifier**

Product Names • Varamix and Aramid (Poly-paraphenyleneterephthalamide)

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified use(s) • Reinforcement fiber for manufactured rubber goods.

1.3 Details of the supplier of the safety data sheet

Manufacturer • Finite Fiber
1374 Markle St.
Akron, OH 44306
United States

1.4 Emergency telephone number

Manufacturer 330-773-6654

Section 2: Hazards Identification**2.1 Classification of the Substance or Mixture**

- This product is not classified as hazardous or flammable. Refer to the recommendations regarding the other products present on the site.

Preparation classification:

- None known

Section 3 - Composition/Information on Ingredients**3.1 Chemical nature** • Polymer, fibers**3.2 Other substances with occupational exposure limits:**

CAS	WEIGHT %	NAME
26125-61-1	>30	Poly-(para-phenylene-terephthalamide)

3.3 Additional information

Fiber Finish • The fiber product pulp itself is not toxic. If the product is intended for special applications, e.g. in the food industry, please consult the manufacturer prior to application. So far no impairment of health has become known in cases where the product has been used for its intended application. In cases where the product is heat-treated at temperatures of between 130 and 190 °C, the applied fiber finish may evaporate or decompose. If water is used for further treatment, the waste water generated by the process must be treated in a water purification plant in compliance with local regulations.

Residual solvents • None

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Section 4 - First Aid Measures**4.1 Description of first aid measures**

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| Inhalation | • Move to fresh air. Get medical attention immediately if symptoms occur. |
| Skin | • If skin irritation occurs, wash thoroughly with soap and water.. |
| Eye | • Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist. |
| Ingestion | • Clean mouth with water and afterwards drink plenty of water. |

4.2 Notes to physician

- Treat symptomatically.

4.3 Protection of first-aiders

- Use personal protective equipment. Do not breathe dust.

Section 5 - Firefighting Measures**5.1 Flammable properties**

- Not flammable.

5.2 Flash point

- Not applicable.

5.3 Extinguishing media

Suitable Extinguishing Media • Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media • None known.

Extinguishing Media

5.4 Hazardous combustion products

Carbon oxides, Nitrogen oxides (NO x), Volatile organic compounds, Hydrogen cyanide.

5.5 Explosion data

Sensitivity to Mechanical Impact • None.

Sensitivity to Static Discharge • None.

5.6 Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA	Health Hazard 0	Flammability 0	Instability 0	Physical and Chemical Hazards -
HMIS	Health Hazard 0	Flammability 0	Physical Hazard 0	Personal Precautions X

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Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

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|----------------------|--|
| Personal Precautions | • Do not breathe dust. |
| Emergency Procedures | • No emergency procedures are expected to be necessary if material is used under ordinary conditions as recommended. Use normal clean up procedures. |

6.2 Environmental precautions

- Should not be released into the environment.

6.3 Methods and material for containment and cleaning up

- Prevent further leakage or spillage if safe to do so.
- Avoid dust formation. Sweep up and shovel into suitable containers for disposal.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

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| Handling | • Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Avoid dust formation. |
|----------|--|

7.2 Conditions for safe storage, including any incompatibilities

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|---------|--|
| Storage | • Incompatible with strong acids and bases. Keep away from direct sunlight. All bobbins, storage cartons and bales must be stored in compliance with the relevant regulations and in accordance with good handling and storage practice. |
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Section 8 - Exposure Controls/Personal Protection

8.1 Exposure guidelines

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|---------------------------|---|
| Exposure Limits | • This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies. |
| Other Exposure Guidelines | • Exposure Limits: p-Aramid fibers as such are not subject to any exposure regulation. p-Aramid respirable fiber-shaped particulates (RFP) may be released from pulp, cut-fiber and staple fiber or may be formed during abrasive processing of p-Aramid and it is recommended to keep these levels below 1 RFP (Respirable Fiber Particulates) per cm ³ of air. |

8.2 Exposure controls

- | | |
|-------------------------------|--|
| Engineering Measures/Controls | • Showers, Eyewash stations, Ventilation systems |
|-------------------------------|--|

Personal Protective Equipment

- | | |
|-------------|--|
| Respiratory | • In case of insufficient ventilation wear suitable respiratory equipment. This is required in cases where a maximum concentration of 1 RFP/ml of air is exceeded. |
| Eye/Face | • Generally not required when manually handling yarn. |
| Hand | • None. Slight skin irritation has been observed in isolated cases: Protective gloves. |
| Skin/Body | • Long sleeved clothing. |
| Filter Type | • P2 |

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- Hygiene measures
- Handle in accordance with good industrial hygiene and safety practice. During the processing and application of the fibers, small amounts of dust (including dust particles of respirable size) may be given off. A health risk caused by the inhalation of p-Aramid dust particles does not exist if our safety instructions are observed. Fiber fly, dust and decomposition products of the fiber finishes must be avoided by ensuring adequate extraction and ventilation. Factory safety regulations must be strictly observed.

Section 9 - Physical and Chemical Properties

Physical state @20°C	Solid
Appearance	Dry: Pulp, fibers / Wet: flakes
Color	Yellow
Odor	Odorless
pH	Wet: 6 - 9
Melting/freezing point	Decomposes
Boiling point/boiling range	Not applicable
Flash point	Not applicable
Evaporation rate	Not applicable
Flammability (solid, gas)	Not applicable
Flammability Limits in Air	Not applicable
Vapor pressure	Not applicable
Vapor density	Not relevant
Relative density	No information available
Solubility	
Water solubility	Negligible
Solubility in other solvents	Strong Sulfuric acid
Partition coefficient (n-octanol/water)	Not applicable
Autoignition temperature	Not applicable
Decomposition temperature	>500 °C
Viscosity, dynamic	Not applicable
Explosive properties	Not explosive
Oxidizing Properties	Not relevant
Density	1.44 g/cm ³

Section 10: Stability and Reactivity

10.1 Chemical stability

- Stable under normal conditions.

10.2 Materials to avoid

- Strong acids, strong bases.

10.3 Conditions to avoid

- Exposure to UV-rays. Temperatures above 500 °C. To avoid thermal decomposition, do not overheat. Avoid contact with strong acids and bases.

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10.4 Hazardous decomposition products

- Carbon monoxide (CO), Carbon dioxide (CO₂), Organic materials, Hydrogen cyanide.

10.5 Hazardous polymerization

- Stable under normal conditions.

Section 11 - Toxicological Information

11.1 Acute toxicity

Product Information

- Product does not present an acute toxicity hazard based on known or supplied information.

Chemical Name	LD50 Oral	LD50	Dermal	LC50 Inhalation
Poly-(para-phenylene-terephthalamide)	> 7500 mg/kg (Rat)			

11.2 Chronic toxicity

Chronic Toxicity

- Respirable p-aramid fiber has been classified by the International Agency for Research on Cancer (IARC) as not classifiable as to carcinogenicity to humans (Group 3). Based on animal studies, long-term exposures to high doses of respirable fibers could lead to pulmonary inflammation and chronic lung disease.

Carcinogenicity

- The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Poly-(para-phenylene-terephthalamide)		Group3		

Legend IARC: (International Agency for Research on Cancer) Group 3 - Not Classifiable as to Carcinogenicity in Humans

Target Organ Effects • Skin, Respiratory system.

Section 12 - Ecological Information

12.1 Ecotoxicity

- Contains no substances known to be hazardous for the environment.

12.2 Persistence and degradability

- Not readily biodegradable.

12.3 Bioaccumulative potential

- Not applicable.

Section 13 - Disposal Considerations

13.1 Waste disposal methods

Product waste

- This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

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Contaminated
packaging

- Empty containers should be taken to an approved waste handling site for recycling or disposal.

Section 14 - Transport Information

14.1 DOT

- Not regulated.

14.2 TDG

- Not regulated.

14.2 MEX

- Not regulated.

Section 15 - Regulatory Information

15.1 International inventories

TSCA • Complies

DSL • Complies

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

15.2 Federal regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

15.3 SARA 311/312 hazardous categorization

Acute Health Hazard • No

Chronic Health Hazard • No

Fire Hazard • No

Sudden Release of
Pressure Hazard • No

Reactive Hazard • No

15.4 Clean water act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

15.5 CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

15.6 State regulations

California Proposition 65 • This product does not contain any Proposition 65 chemicals.

15.7 U.S. state right-to-know regulations

This product does not contain any substances regulated by state right-to-know regulations.

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15.8 International regulations

Canada

- This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

15.9 WHMIS hazard class

D2B Toxic materials

Section 16 - Other Information

Last Revision Date

- 20/November/2015

Preparation Date

- 20/November/2015

Disclaimer/Statement of

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