

LCP FILAMENT YARN

Multiple Grades and Specifications
for Advanced Applications

High Temperature Resistance,
Excellent Chemical Stability,
Outstanding Dimensional Stability



High
Temperature
Resistance



Excellent
Chemical
Stability



High Strength
& Modulus



Low
Moisture
Absorption



Dimensional
Stability



*Stronger Materials
Broader Possibilities*

Product Introduction

LCP (Liquid Crystal Polymer) filament yarn is a high-performance super engineering fiber featuring ultra-high temperature resistance, excellent chemical stability, very low moisture absorption and outstanding dimensional stability. It maintains superior mechanical properties in harsh environments and is widely used in high-temperature electrical insulation, aerospace, automotive, industrial filtration and advanced composite applications.

Available Specifications

Fineness Range

**440-1670 dtex
(≈ 400-1500 Denier)**

Other specifications
on request.



Type / Grade

Standard Grade
High Tenacity (HT)

Ultra High Modulus
(UM)

Other grades
on request.

Filament Count

Customized according
to application
(e.g. 100f-2000f+)



Typical Technical Data (Reference)

Property	Standard Grade (VECTRAN™)	High Tenacity (HT)	Ultra High Modulus (UM)	Test Method
Linear Density (dtex)	440-1670	440-1670	440-1670	Kuraray TDS / ASTM D885
Filament Type	Continuous Filament	Continuous Filament	Continuous Filament	-
Tensile Strength (cN/dtex)	≥ 21	≥ 24	≥ 19	ASTM D2256
Tensile Modulus (cN/dtex)	≥ 490	≥ 520	≥ 740	ASTM D2256
Elongation at Break (%)	1.5-3.0	3.6	2.3	ASTM D2256
Heat Resistance (Long Term)	≥ 250°C	≥ 260°C	≥ 260°C	-
Melting Point (°C)	~ 320-335	~ 320-335	~ 320-335	DSC
Limiting Oxygen Index (LOI)	~ 30	~ 30	~ 30	ASTM D2863
Moisture Regain (%)	≤ 0.1	≤ 0.1	≤ 0.1	ASTM D570
Color	Natural (golden beige, others on request)			-

Note: The above data are typical values for reference only. Final values are subject to our factory's official TDS.

Key Features

- ✓ Ultra-high temperature resistance (up to 300°C)
- ✓ Excellent chemical and solvent resistance
- ✓ High strength and high modulus
- ✓ Very low moisture absorption (≤ 0.1%)
- ✓ Outstanding dimensional stability
- ✓ Good electrical insulation properties
- ✓ Customizable specifications
- ✓ Samples available
- ✓ Global supply

*Your Reliable
Material Partner*

Application Areas



Aerospace & Aviation

High-temperature components, electrical insulation, lightweight structures



Automotive

High-temperature parts, electrical insulation, lightweight composites



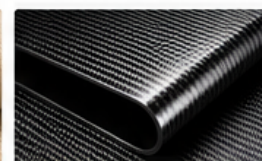
Electrical Insulation

Cables, wires, insulating tapes, high-temperature electrical materials



Industrial Filtration

Filter bags, filter cloth, high-temperature filtration



Advanced Composites

High-performance composites, structural reinforcement

