

MIRALON[®] Yarn

Product Description

MIRALON[®] Yarn products are carbon-based fibers that can be used in a variety of applications to lightweight and provide enhanced mechanical and electrical performance. These yarns are composed of millions of aligned filaments of structured carbon. Unlike conventional carbon fibers, the internal carbon structures transfer load by van der Waals forces, not covalent bonds. This results in yarns that are laterally flexible, fatigue, and impact resistant, but are stiff, strong, and both thermally and electrically conductive in the axial direction.

Features

- Fatigue resistant
- High strength; ability to stitch, weave, braid
- Highly flexible
- Electrically conductive
- Lightweight
- Thermally conductive

Typical Physical Properties*

Property	Roving	High Strength Single Ply	High Strength 2-ply
Linear density, Tex (g/km)	12.5	10	20
Equivalent Diameter (μm)	380 (flat ribbon, ~700 x 200 μm)	140 (flat ribbon, ~400 x 50 μm)	200
Specific electrical conductivity (Scm ² /g @ 20°C)	3310	11000	11000
Tenacity (N/Tex)	0.6	1.8	1.4
Tensile strength (MPa)	66	1200	900
Tensile modulus (GPa)	4	80	45
Strain at break (%)	25	3	3

*Unless otherwise stated, the data was compiled from typical production batches using standard test methods. These are typical values only and do not constitute a product specification.

Storage

MIRALON[®] Yarn should be stored in a cool, dry place, in their original package.

Precautionary Statement

Huntsman Advanced Materials Americas LLC maintains up-to-date Safety Data Sheets (SDS) on all of its products. These sheets contain pertinent information that you may need to protect your employees and customers against any known health or safety hazards associated with our products. Users should review the latest SDS to determine possible health hazards and appropriate precautions to implement prior to using this material.

First Aid!

Refer to SDS as mentioned above.

KEEP OUT OF REACH OF CHILDREN

FOR PROFESSIONAL AND INDUSTRIAL USE ONLY

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