

# PYROFIL™ MR 70 12P

## Intermediate Modulus Carbon Fiber with Super High Strength Product Data Sheet

### Description

**PYROFIL™ MR 70 12P** is an innovative IM carbon fiber having strength of approx 7 GPa and modulus of approx 325 GPa. This high performance has been achieved by precise control of the carbon fiber microstructure resulting from MRC's ongoing thorough understanding of the whole manufacturing process from precursor through to finished carbon fiber. **PYROFIL™ MR70 12P** has been designed to be suitable for Aerospace components. It is also ideal for high-end Industrial, Marine and Sporting Goods applications such as Auto-Sport, premium golf shafts, racing bikes and other similar applications.

### Typical Fiber Properties

Fiber Properties	Typical Values
Strand Tensile Strength	7000 MPa (1010 ksi)
Strand Tensile Modulus	325 GPa (47 Msi)
Filament Density	1.82 g/cm <sup>3</sup>
Mass Per Unit Length	420 mg/m
Elongation	2.2%
Filament Count	12k (12,000)
Filament Diameter	5.0 μm

### Safety Precautions

It is recommended that customers should notice precautions for handling carbon fibers and operators should handle the material with clean wear, special gloves and eyeglasses to prevent from contacting the materials.

Safety Data Sheets (SDS) are prepared for all MITSUBISHI RAYON products and are available if required.

### For More Information

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The numbers of the above preliminary specifications are representative properties obtainable. Mitsubishi Rayon Co., Ltd. cannot accept responsibility for the misapplication of this products nor for their use under controlled conditions. Numerical values resulting from the application of this material are dependent on processing details. It is recommended that the users develop his/her own application techniques and generate data consistent with his/her specific applications and process.