

## THE THERMOPLASTIC FIBRE OF CHOICE FOR DEMANDING ENVIRONMENTS

**MADE WITH VICTREX™ PEEK POLYMER** 



# FIBRE SOLUTIONS WITH EXTREME PERFORMANCE

Across multiple industries there's an increasing need for fibre solutions that can resist abrasion and chemical attack, at elevated temperatures. ZYEX™ FIBRES provide this durability and strength with a product range that can operate in extreme and demanding environments.

As the number one PEEK expert and with over 35 years of experience, Victrex is focused on innovating PEEK-based forms and parts to meet the challenges of extreme environments. We work with customers across industry sectors, including manufacturing, aerospace and automotive, to provide high performance fibres which meet their specific application requirements.

# FIBRE OF CHOICE FOR THE TOUGHEST ENVIRONMENTS

Produced from VICTREX<sup>™</sup> PEEK polymer, one of the highest performing thermoplastics, ZYEX FIBRES have the strength and reliability needed for use in applications in the toughest environments.

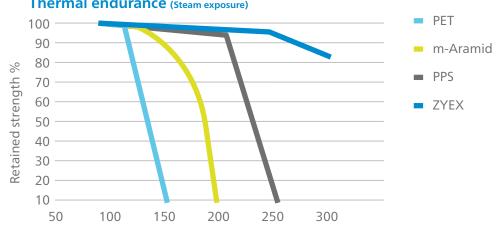
Thermal endurance – continuous operating range from -60°c to 260°c

Abrasion resistance – especially at extreme temperatures

%

**Chemical resilience** – in a wide variety of aggressive conditions

High purity - particularly important where sanitation is needed



### Thermal endurance (Steam exposure)



## PEEK PERFORMANCE FOR YOUR APPLICATIONS

ZYEX FIBRES are available as:



Monofilament – available in various diameters from 0.07mm to 2.00mm and colours

Multifilament – variety of decitex and filament count yarns from 75f15 (68/15) to 1230f72 (1107/72). Intermingled, twisted, textured and dyed products are possible



**Staple fibre** – from 3.3 decitex (40mm cut length) to 13 (80mm). Finer fibres and other cut lengths available



**Short cut** – 2.0 decitex (3mm cut length) to 3.9 (12mm). Good for paper processes and composite reinforcement

ZYEX FIBRES can be woven, braided, knitted, twisted and needled with conventional equipment and technology.

# SHAPING THE MOST DEMANDING APPLICATIONS

Victrex produces ZYEX<sup>™</sup> FIBRES for use in diverse applications, ranging from monofils for braided electrical cable protection and noise suppression fabrics for jet engines, to fuel filters for cars and open mesh conveyors, or multifils for narrow woven industrial tapes and patented monofils for strings required within the leisure industry.

### **PROCESS BELTING**



### Wide or narrow woven belts and joins

- Extended belt lifetime potential; low creep, abrasion and hydrolysis resistance
- Extreme operating conditions (thermal, chemical and mechanical)
- High purity for use in food contact
- Excellent surface release (non-stick)

### FILTRATION



### Filtration mesh fabrics and sewing threads

- Wide range of mesh openings
- Chemical resistance
- Dimensional stability and toughness
- Easy overmoulding

### CABLE PROTECTION

### LEISURE



## Scratch resistant monofilaments

- Wide operating temperature range (high and low)
- Lightweight replacing metal or fluoropolymers
- Inherently flame
  retardant and low
  smoke toxicity
- Multiple colours available for identification purposes



## Musical instrument and racquet strings

- Good tensile properties, stretch and recovery
- Excellent tension holding (low creep)
- Environmental stability (moisture and temperature)



### Confidence Through Reliable, Proven and Cost-Effective Material Solutions

## 35+ years

of collaboration with market leaders along the value chain

**700+** people waking up every day focusing on PEEK

**40** countries served by Victrex across our markets

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As a global high-performance polymer solutions provider, Victrex serves more than 40 geographies worldwide across the automotive, aerospace, medical, electronics, industrial and energy markets. VICTREX™ PEEK is regarded as one of the highest performing engineering thermoplastics in the world, and is used by leading companies to develop fuel-efficient automobiles and aeroplanes, advanced medical devices, next generation technology and tools for the harshest environments.

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