

Product and Material Brands Reference Guide



**OUR MARKETS** 

Aerospace & Defense | Agriculture | Chemical Processing | Industrial Operations | Life Sciences | Oil & Gas | Semiconductor

# **Our Brand Journey**

For more than 150 years, Greene Tweed has developed materials and engineered high-performance solutions that have enhanced the safety and performance of critical applications in many industries.

Our product and material brands are on commercial aircraft, in oil and gas wells, enable semiconductor chip manufacturing, and are used to deliver high-speed data communications.





# **CHEMRAZ® FFKM**

- Perfluoroelastomer (FFKM)
- Used primarily in o-rings and other sealing elements; other applications include boots for connectors
- Characterized as having the highest chemical compatibility & temperature resistance of all elastomers, up to 615°F/324°C

#### FLUORAZ® FEPM

- · Tetrafluoroethylene propylene (FEPM)
- · Primarily used as o-rings & other sealing elements
- Excellent chemical resistance against acids and bases and steam temperatures up to 450°F/232°C

# **FUSION® FKM**

- Fluorocarbon elastomer (FKM)
- Used primarily as o-rings & other sealing elements; other applications include boot kits for connectors
- Used in a wide variety of markets for chemical compatibility & temperatures up to 450°F/232°C

#### **XYFLUOR®**

- Proprietary fluorinated elastomer
- · Primarily used in seals & other sealing elements
- Features excellent low-temperature capability up to -76°F/-60°C

# ARLON® PAEK, PEEK, PEK, PEKKEK

- Polyaryletherketone (PAEK) family of thermoplastics, including polyetheretherketone (PEEK), polyetherketone (PEK), PEKKEK, & cross-linked PEEK
- Used for machined parts, including backup rings
- Used for chemical compatibility & temperature requirements; also used in high-pressure environments
- · Additives can include carbon fiber, glass fiber, graphite

# **AVALON® PTFE**

- Family of fluoropolymer thermoplastic materials including polytetrafluoroethylene (PTFE)
- Used for machined parts, including "jackets" for spring-energized seals
- Offers near universal compatibility & temperature range; some grades have been optimized to minimize friction
- Additives can include carbon fiber, glass fiber, graphite





#### **AR® ABRASION RESISTANT COMPOSITES**

- Polyetheretherketone (PEEK), polytetrafluoroethylene (PTFE)-based line of composites
- Used as a metal replacement in rotating equipment, e.g., pumps
- Allows increased reliability and efficiency in operations; excellent chemical compatibility properties

#### **ONX®**

- Perfluoroalkoxy polymers (PFA)-based line of thermoplastic composites
- Withstands strong acid chemistries at high temperatures
- Component sizes up to 20 inches in diameter can be accommodated

# **ORTHTEK®**

- Polyetheretherketone (PEEK) polymer matrix with high fiber reinforcement content
- · High strength and low weight
- Corrosion resistant
- · Dimensional stability for steam or autoclave sterilization

## XYCOMP® DLFTM

- Polyetherimide (PEI) and polyetheretherketone (PEEK)-based composites
- Carbon discontinuous long fiber (DLF) filled thermoplastic composite parts
- · Used for structural metal replacement parts
- Ideal for chemical compatibility and high temperatures
- · Optimal in parts consolidation for assembly

# WR® WEAR RESISTANT COMPOSITES

- Polyetheretherketone (PEEK) and fluoropolymer (PFA)-based line of composites
- Used as a metal replacement in rotating equipment, e.g., pumps
- Excellent wear and friction properties along with superior non-galling and non-seizing performance and exceptional chemical resistance.

#### **ENDURO® LF10**

- · Polytetrafluoroethylene (PTFE)-based coating
- Applied to elastomeric, thermoplastic, or metal components to improve performance
- · Reduces sticking force between component interfaces
- Reduces wear caused by friction
- · Excellent conformality for complex surfaces
- · Changes surfaces from hydrophilic to hydrophobic



# **SEAL-CONNECT®**

- Electrical Connectors: Used in downhole drilling tools for dependable and reliable performance in HPHT conditions. Available in Arlon®; can be paired with Chemraz® and Fusion™ o-rings or boot kits. Other o-ring materials available upon request.
- Fiber Optic Connectors: Adapters, connectors, dust caps, and feedthroughs for use in critical applications, including wellhead outlets and rotary joints in wind turbines

Contact Greene Tweed to learn more about our product and material brands.

# **OUR BRAND PROMISE.**

Partnership.
Deep Understanding.
Discovery.
Innovation.



## **Greene Tweed**

1684 South Broad Street | PO Box 1307 | Lansdale PA 19446 USA Phone: +1.215.256.9521 | Fax: +1.215.256.0189 | Toll Free: 1.800.220.4733 | www.gtweed.com

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