High Performance

PEEK Granules

BIEGLO GmbH

Founded in 2011, BIEGLO GmbH is a Hamburg-based distributor of high-performance polymers. Through our international network of suppliers and customers and in partnership with U.S. subsidiary BARplast LLC (TX), we offer PEEK and other PAEKs (PEKK, PEK, PK, etc.), ultra-high-temperature resins (Thermosetting and Thermoplastic Polyimide, PBI and PAI) and a wide range of additives, masterbatches. This range of products is sold as powders, granules, semi-finished and finished parts. Tailored material solutions and hands-on technical support are provided to the demanding converter in aerospace, automotive, electronics, mechanical engineering and beyond.

PEEK (Polyetheretherketone)

A high-performance, semi-crystalline thermoplastic known for its outstanding mechanical, thermal and chemical resistance properties. It is the material of choice when replacing metal with a lightweight, durable polymer solution and widely used in demanding industries such as medical, aerospace and electronics.

- Versatile high-performance polymer with easy machinability and high strength-to-weigth ratio used in thrust washers, sealing rings, insulators, structural parts and electrical & electronic components
- Corrosion-resistant and inert to hydrocarbon
- Excellent flame resistance UL94 V0

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PEEK Granules

Virgin PEEK Product Range – Tailored for Versatility

BIEGLO has imported PEEK from China since 2012 and sells Zhejiang PFLUON's PEEK materials in Europe for e-mobility, aerospace and industrial applications.
PFLUON is a company dedicated to R&D and production of high performance polymer and specializing in polyether-ether-ketone (PEEK). PFLUON offer five core viscosities and custom compounds, delivering a glass-transition temperature of 143 °C, a melting point of 343 °C, continuous use up to 260 °C and a UL94 V-0 flame rating.

PFLUON unfilled / virgin PEEK

Properties	Test Standard	Test Conditions	Unit	8000G	8100G	8200G	8800G	8900G
Mechanical properties								
Tensile strength	ISO 527	Yield, 23°C	Mpa	95	96	98	100	105
Elongation at break	ISO 527	Breakage, 23°C	%	40	40	35	25	25
Impact strength	ISO 179/leA	Notched	$kJ.m^{-2}$	9	8	7	5	4
Physical properties								
MVR	ISO 1133	380°C/5kg	cm^3/10 min.	-	11	20	70	120

Recycled PEEK - The sustainable and economical alternative

reduces the carbon footprint of finished PEEK parts

Dexnyl© R-PEEK 143G

- Melt-filtered and re-granulated PEEK
- Passed through a metal detector
- High-quality post-industrial grade without noticeable changes in color or viscosity.
- Tg of 143°C (289°F)
- Large volume available

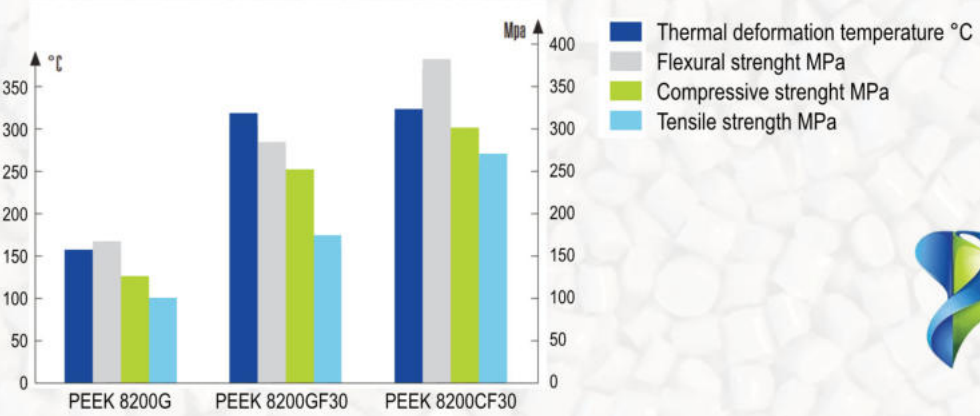
Dexnyl© R-PEEK HFG82

- High-flow R-PEEK designed for injection molding
- Passed through a metal detector

PEEK Compounds

PEEK Functional Compounds

contain a 40–80 % PEEK matrix and additives as glass or carbon fibre, PTFE/CF/Graphite 10-10-10 and other fillers. PEEK compounds boost stiffness and wear resistance while staying fully injection-mouldable.



PFLUON ADVANCED MATERIALS

PEEK Blends

AURUM® Mitsui Chemicals

AURUM™ PL6200 – Polyimide-PEEK Blend

benchmark with a 245 °C glass-transition, retaining high modulus and low creep far beyond PEEK's range. The PFAS-free resin injection-moulds or extrudes into lightweight, heat-resistant bearings, seals and electronic insulation.

Celazole® PBI T-Series

pbi PERFORMANCE PRODUCTS

Celazole® T-Series – PBI-PEEK Blend

pushing heat-deflection to 320-330 °C, just below PEEK's melt point. Their PBI synergy lifts modulus, strength, wear and creep resistance over neat PEEK, powering high-load parts.

PEEK Colour Compounds

If grey is not your colour BIEGLO will match your RAL or Pantone.

Recycled PEEK Compounds

Quality-assured R-PEEK granules (also glass-/carbon-reinforced) cut cost and carbon foot print while retaining PEEK's mechanical, chemical and thermal profile - ideal for price-sensitive, non-critical parts.

Fiber, Additives and Masterbatch for PEEK

Compounders and extremely demanding customers produce their own PEEK compounds to improve temperature resistance, friction and wear performance. BIEGLO offers special fibers and additives, that resist high melt temperature.

S-2 Glass fiber (type 553), chopped

AGY GLASS FIBER INNOVATION

- Chopped glass fiber with superior mechanical and thermal properties compared to standard E-glass.
- Withstand melt temperatures above 420°C thanks to a special sizing

Aramid and Thermosetting Polyimide (PI-s) Fibers, chopped

- high-strength, heat-resistant synthetic fibers known for excellent durability and impact resistance.
- Low flammability, non-conductive and chemically resistant

Thermosetting Polyimide (PI-s) Powder

- Various recycled and virgin grades

NOWE™ VC-201 (Aromatic thermosetting Copolyesters)

ATSP Innovations

- High thermal stability (decomposition > 450 °C)
- Low dielectric constant
- Excellent dimensional stability and creep resistance
- Improves temperature and wear resistance.

PEEK Colour-Masterbatch

You can colour PEEK without compromising performance

- Dexnyl® PEEK MB Black
- Various Pantone/RAL code on demand
- Add 3–8 % masterbatch to your natural PEEK

BIEGLO also sells the complete PEEK shapes portfolio: extruded and thermoformable sheets, carbon-reinforced composite laminates, UD tapes and prepregs, semi-finished rods, tubes, films and fibres, as well as finished parts. So you can source every shape and format from a single partner.

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