High Performace

Additives for High Performance Polymers

Improve Tribology and Heat Resistance

Tg=427°C

Celazole® PBI
(Polybenzimidazole)

HDT=330°C

Dexnyl® PI-s
(Virgin Thermosetting Polyimide)

Dexnyl® r-PI-s
(Recycled Thermosetting Polyimide)

HDT=300°C

NOWE™
(Aromatic thermosetting Copolyesters)

Tg=245°C

AURUM™
(Thermoplastic Polyimide)

Tg=144°C

CoPEEK
(Polyetheretherketone)

PBI,Copolyester, PI and PEEK as additives in compounds can increase the temperature resistance and improve the friction & wear performance.

Applications of compounds with various additives can be included but not limited to valve seals, packing sets, piston rings, ring seals, pump seals and bearings.

Performance measurement of different proportions of PTFE and Dexnyl© PI8010_56

PTFE+PI(%)	Hardness (Shore D)	Friction coefficient	Abrasion loss(%)
100+0	54	/	/
95+5	57	0.10	0.10
90+10	59	0.11	0.03
80+20	62	0.11	0.02

BIEGLO GmbH
Bahrenfelder Str. 242
22765 Hamburg, Germany

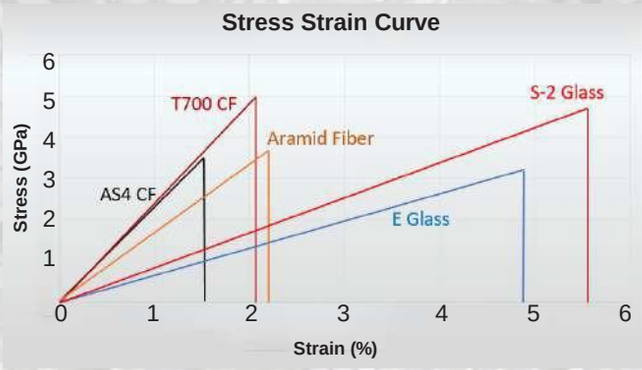
+49 40 4011 30000
info@bieglo.com

www.polyimide-shop.com

Chopped Fibres for High Performance Polymers

Glass fiber: S-2 Glass® Chop 553

The sizing 553 is specially designed for high temperature plastics. With perfect Processability & Compatibility It is suited for Compounding of High Temperature Polymers such as PEEK, TPI, PEI, PA66 and PA12.



S-2 Glass has low coloration properties compared to E-Glass. which appears light green and effects the color of compounds.

The excellent performance of S-2 Glass are also reflected in the physical properties.

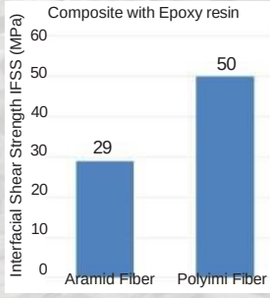
Thermosetting PI fiber

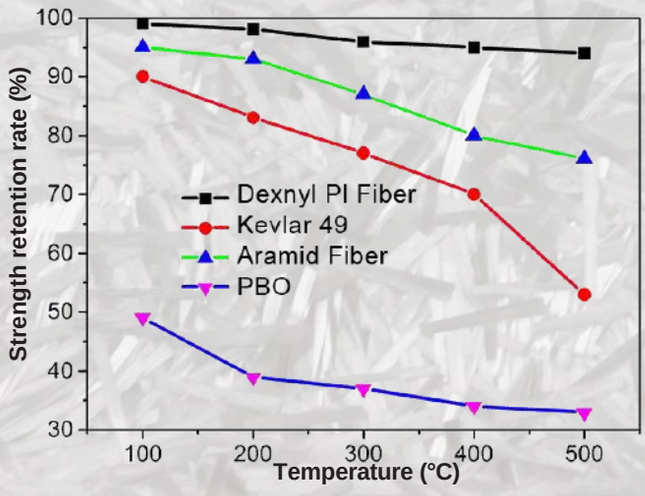
Polyimide (PI) has a wide operating temperature range: -269°C to 350°C.

PI fibers can maintain high strength at high temperatures, which no other organic fiber can achieve.

In the composites with Epoxy resin, PI exhibits higher interfacial shear strength than Aramid Fiber.

PI maintains high strength retention rate and elongation retention rate at high temperature.





BIEGLO GmbH
Bahrenfelder Str. 242
22765 Hamburg, Germany

+49 40 4011 30000
info@bieglo.com

www.polyimide-shop.com