

PAI GLon™ T43 is a wear-resistant grade of polyamide-imide (PAI) resin that combines excellent mechanical properties with good wear resistance.

It offers high flexural and compressive strength, a low coefficient of friction, and maintains good wear performance under both high-speed and high-pressure conditions up to 275°C (525°F).

Typical applications include thrust washers, bushings and bearings, wear rings, cams, and other parts requiring high strength at elevated temperatures and wear resistance.

Physical Properties	Typical Value	Unit	Test method
Density / Specific Gravity	1,46	g/cm³	ASTM D792
Water Absorption (24 h)	0,28	%	ASTM D570
Mechanical Properties	Typical Value	Unit	Test method
Tensile Modulus	6830 6550	MPa MPa	ASTM D638 ASTM D1708
Tensile Strength	113	MPa	ASTM D638
Tensile Stress	163	MPa	ASTM D1708
Tensile Elongation	3,3	%	ASTM D638
Flexural Modulus 23°C 232°C	6890 4960	MPa MPa	ASTM D790
Flexural Strength 23°C 232°C	215 112	MPa MPa	ASTM D790
Compressive Modulus	5310	MPa	ASTM D695
Compressive Strength	166	MPa	ASTM D695
Coefficient of Friction Dry: 0.25 m/s, 3.4 MPa Dry: 4 m/s, 0.2 MPa Lubricated: 0.25 m/s, 6.9 Mpa Lubricated: 4 m/s, 5.2 Mpa	0,31 0,39 0,18 0,03	- - -	ASTM D3702
Wear Factor Dry: 0.25 m/s, 3.4 MPa Dry: 4 m/s, 0.2 MPa Lubricated: 0.25 m/s, 6.9 Mpa Lubricated: 4 m/s, 5.2 Mpa	14,0 17,0 9,00 0,40	$\frac{in^3 \times min^{-10}}{ft \times lb \times hr}$	ASTM D3702
Impact Notched Izod Unnotched Izod	64 410	$\frac{J}{m}$	ASTM D256 ASTM D4812
Thermal Properties	Typical Value	Unit	Test method
Heat Deflection Temperature (HDT)	279	°C	ASTM D648 1,80 MPa
Coefficient of Linear Thermal Expansion (CLT)	25,0	$10^{-6} \times K^{-1}$	ASTM D696

Typical properties: Mentioned values are not to be construed as specifications. Properties of final parts may differ due to shape and process related variations. *PAI GLon * T43 is a trademark of GAPI Technische Produkte GmbH and equivalent to Torlon * 4301 (PAI). Torlon is a registered trademark of Syensgo Specialty Polymers.



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