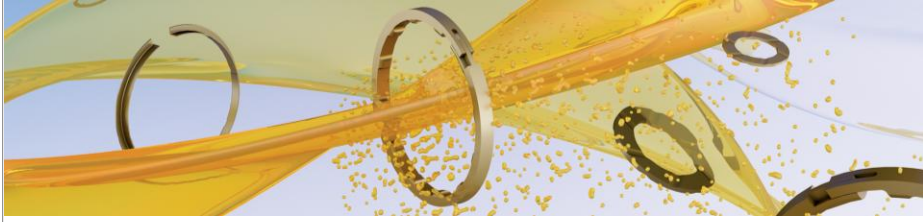
PAI GLon™ T44*

Technical Datasheet



PAI GLon™ T44 is a wear-resistant grade of polyamide-imide (PAI) resin that combines good mechanical properties with very good wear resistance.
Specialised for very demanding conditions it offers a low coefficient of friction and maintains excellent wear performance under both high-speed and high-pressure conditions up to 275°C (525°F).

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

Physical Properties	Typical Value	Unit	Test method
Density / Specific Gravity	1,59	g/cm³	ASTM D792
Water Absorption (24 h)	0,12	%	ASTM D570
Mechanical Properties	**Typical Value**	**Unit**	**Test method**
Tensile Modulus	14500 9700	MPa MPa	ASTM D638 ASTM D1708
Tensile Strength	94 110	MPa MPa	ASTM D638 ASTM D1708
Tensile Elongation	1,0 6,0	% %	ASTM D638 ASTM D1708
Flexural Modulus 23°C 232°C	 14800 10300	 MPa MPa	ASTM D790
Flexural Strength 23°C 232°C	 152 91	 MPa MPa	ASTM D790
Compressive Modulus	8600	MPa	ASTM D695
Compressive Strength	138	MPa	ASTM D695
Coefficient of Friction Dry: 0.25 m/s, 3.4 MPa Dry: 4 m/s, 0.215 MPa	 0,29 0,27	 - -	ASTM D3702
Wear Factor Dry: 0.25 m/s, 3.4 MPa Dry: 4 m/s, 0.2 MPa	 21,0 17,0	 $\frac{in^3 \times min^{-10}}{ft \times lb \times hr}$	ASTM D3702
Impact Notched Izod Unnotched Izod	 40 220	 $\frac{J}{m}$	 ASTM D256 ASTM D4812
Thermal Properties	**Typical Value**	**Unit**	**Test method**
Heat Deflection Temperature (HDT)	278	°C	ASTM D648 1,80 MPa
Coefficient of Linear Thermal Expansion (CLT)	14,0	$10^{-6} \times K^{-1}$	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™ T44 is a trademark of GAPI Technische Produkte GmbH and based on Torlon® (PAI) polymers. Torlon is a registered trademark of Syensqo Specialty Polymers.*

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