



PAI GLon™ T43PF is a special wear-resistant grade of polyamide-imide (PAI) resin that combines the advantages of the standard GLon™ 43 with a PFAS-free formulation – also with excellent mechanical properties and a 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	1,48	g/cm ³	ASTM D792
Water Absorption (24 h)	0,29	%	ASTM D570
Mechanical Properties	Typical Value**	Unit	Test method
Tensile Modulus	6490 6220	MPa	ASTM D638 ASTM D1708
Tensile Strength	107	MPa	ASTM D638
Tensile Stress	154	MPa	ASTM D1708
Tensile Elongation	3,1	%	ASTM D638
Flexural Modulus			ASTM D790
23°C	6540	MPa	
232°C	4710	MPa	
Flexural Strength			ASTM D790
23°C	204	MPa	
232°C	106	MPa	
Compressive Modulus	5040	MPa	ASTM D695
Compressive Strength	157	MPa	ASTM D695
Coefficient of Friction			
Dry: 0.25 m/s, 3.4 MPa	0,33	-	ASTM D3702
Dry: 4 m/s, 0.2 MPa	0,41	-	
Lubricated: 0.25 m/s, 6.9 Mpa	0,20	-	
Lubricated: 4 m/s, 5.2 Mpa	0,05	-	
Wear Factor			ASTM D3702
Dry: 0.25 m/s, 3.4 MPa	16,0		
Dry: 4 m/s, 0.2 MPa	19,0	$in^3 \times min^{-10}$	
Lubricated: 0.25 m/s, 6.9 Mpa	11,0	$ft \times lb \times hr$	
Lubricated: 4 m/s, 5.2 Mpa	0,70		
Impact			
Notched Izod	58	$\frac{J}{m}$	ASTM D256
Unnotched Izod	382		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™ T43PF is a trademark of GAPI Technische Produkte GmbH and equivalent to Torlon® 4301PF (PAI). Torlon is a registered trademark of Syngene Specialty Polymers. **Preliminary Values, Product under development - Final values may differ.

2025

