

Product Texts

Aramid fibre reinforced, Wear and Friction Modified

ISO 1043 (PA46+PTFE)-AF

Stanyl® TS271A1 is a aramid-reinforced friction-modified high heat polyamide that offers extremely low abrasion for gear & bushing applications

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	2800 / -	MPa	ISO 527
^[C] Stress at break	90 / -	MPa	ISO 527
^[C] Strain at break	13 / -	%	ISO 527
^[C] Charpy notched impact strength, +23°C	6 / -	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	295 / *	°C	ISO 11357-1/-3
^[C] Glass transition temperature, 10°C/min	75 / *	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	200 / *	°C	ISO 75-1/-2

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	10.5 / *	%	Sim. to ISO 62
^[C] Humidity absorption	2.9 / *	%	Sim. to ISO 62
^[C] Density	1270 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics

Processing

Injection Molding

Regional Availability

North America, Europe, Asia Pacific

Features

Tribologic Grade

Other text information

Injection molding

- [Injection Molding Recommendations](#)
- [Hot runner recommendations for molding high heat performance Engineering Materials](#)
- [Steel recommendations for molds screws and barrels](#)
- [Supporting document for Stanyl quality processing](#)
- [Trouble shooting guideline for injection molding](#)