Stanyl® TS272A1

(PA46+PTFE)-AF — Envalior

Product Texts

Aramid fibre reinforced, Wear and Friction Modified

ISO 1043 (PA46+PTFE)-AF

Stanyl® TS272A1 is a aramid-reinforced friction-modified high heat polyamide that offers extremely low abrasion for gear & bushing applications

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
[C] Molding shrinkage, parallel	**2.2 / ***	%	ISO 294-4, 2577
[C] Molding shrinkage, normal	**2.2 / ***	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**2800 / 1100**	MPa	ISO 527
[C] Yield stress	*** / 50**	MPa	ISO 527
[C] Yield strain	*** / 28**	%	ISO 527
[C] Nominal strain at break	*** / >50**	%	ISO 527
[C] Stress at break	**80 / ***	MPa	ISO 527
[C] Strain at break	**16 / ***	%	ISO 527
[C] Charpy impact strength, +23°C	**87 / N**	kJ/m²	ISO 179/1eU
[C] Charpy impact strength, -30°C	**60 / 63**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**5 / 5**	kJ/m²	ISO 179/1eA
[C] Charpy notched impact strength, -30°C	**3 / 3**	kJ/m²	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	**160 / ***	°C	ISO 75-1/-2

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
[C] Water absorption	**11.3 / ***	%	Sim. to ISO 62
[C] Humidity absorption	**3 / ***	%	Sim. to ISO 62
[C] Density	**1260 / -**	kg/m³	ISO 1183

[C]: CAMPUS

Characteristics

Processing
Injection Molding

Features
Tribologic Grade

Special Characteristics
Heat stabilized or stable to heat

Regional Availability
North America, Europe, Asia Pacific

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