

TECHNICAL DATA SHEET

Stanyl® TE373

Envalior
PA46

Processing

Injection molding

Heat stabilized or stable to heat

Features

Tribological grade

Special Characteristics

Product Text

Product Information

Heat Stabilized, Wear and Friction Modified

ISO 1043 PA46

Stanyl® TE373 is a friction-modified high heat polyamide that offers excellent wear & friction properties in combination with outstanding creep resistance, strength, stiffness and fatigue resistance especially at high temperatures in combination with cycle-time advantages and excellent flow.

Processing/Physical Characteristics	Value	Unit	Standard
Density of melt	1000	kg/m ³	
Thermal conductivity of melt	0.253	W/(m K)	
Spec. heat capacity of melt	2780	J/(kg K)	
Eff. thermal diffusivity	8.96E-8	m ² /s	
Mechanical Properties	Value	Unit	Standard
Tensile modulus	2800	MPa	ISO 527
Yield stress	85	MPa	ISO 527
Yield strain	10	%	ISO 527
Nominal strain at break	10	%	ISO 527
Poisson's ratio	0.35		ISO 527
Charpy impact strength, +23°C	150	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	105	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	5	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	4	kJ/m ²	ISO 179/1eA

Stanyl® TE373

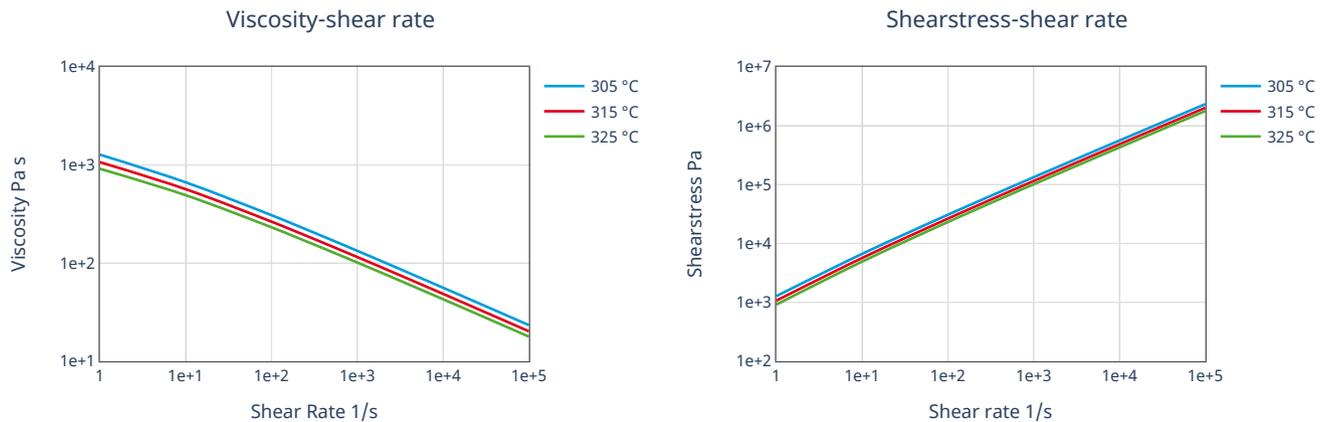
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Thermal Properties	Value	Unit	Standard
Melting temperature, 10°C/min	295	°C	ISO 11357-1/-3
Glass transition temperature, 10°C/min	75	°C	ISO 11357-1/-2
Temp. of deflection under load, 1.80 MPa	190	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	85	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	110	E-6/K	ISO 11359-1/-2

Other Properties	Value	Unit	Standard
Water absorption	12.4	%	Sim. to ISO 62
Humidity absorption	3.4	%	Sim. to ISO 62
Density	1170	kg/m ³	ISO 1183

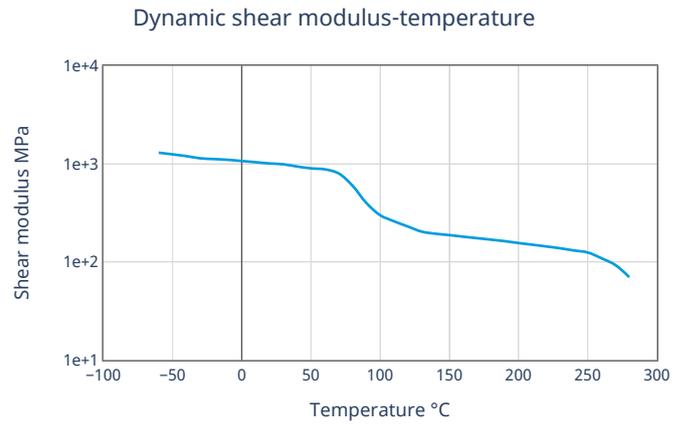
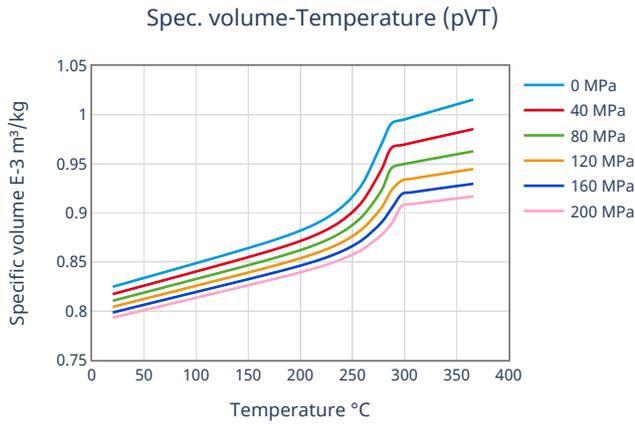
Material Specific Properties	Value	Unit	Standard
Viscosity number	180	cm ³ /g	ISO 307, 1157, 1628

Diagrams



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Processing 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