TER Plastics POLYMER GROUP

DSM

Stanyl® TE373
PA46
DSM Engineering Plastics

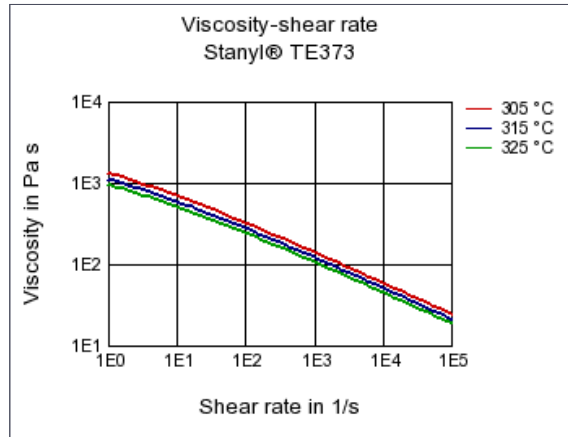### Product Texts

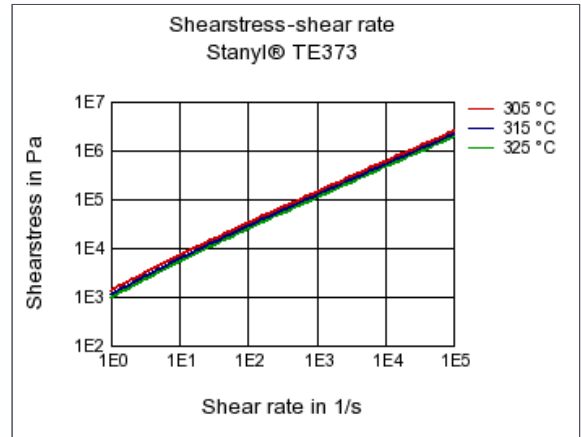Heat Stabilized, Wear and Friction Modified

ISO 1043 PA46

Stanyl website

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	2800 / 1000	MPa	ISO 527-1/-2
Yield stress	85 / 50	MPa	ISO 527-1/-2
Yield strain	10 / 20	%	ISO 527-1/-2
Nominal strain at break	10 / 15	%	ISO 527-1/-2
Charpy impact strength (+23°C)	150 / N	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	105 / 120	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	5 / 10	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	4 / 4	kJ/m²	ISO 179/1eA

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
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	dry / cond	Unit	Test Standard
ISO Data			
Water absorption	12.4 / *	%	Sim. to ISO 62
Humidity absorption	3.4 / *	%	Sim. to ISO 62
Density	1170 / -	kg/m³	ISO 1183

Material specific properties	dry / cond	Unit	Test Standard
ISO Data			
Viscosity number	180 / *	cm³/g	ISO 307, 1157, 1628

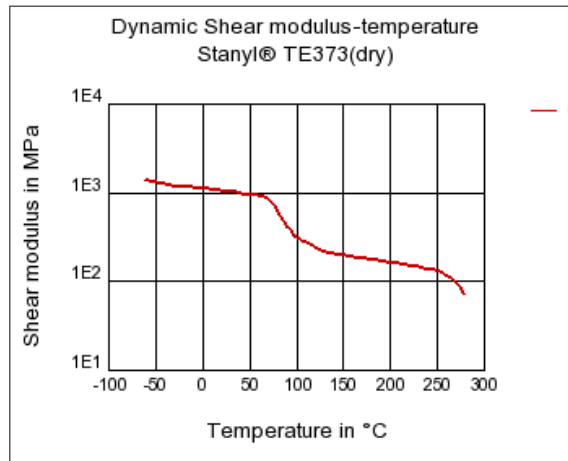| Rheological calculation properties	Value	Unit	Test Standard
ISO Data			
Density of melt	1000	kg/m³	-
Thermal conductivity of melt	0.253	W/(m K)	-
Spec. heat capacity of melt	2780	J/(kg K)	-
Eff. thermal diffusivity	8.96E-8	m²/s	-

Diagrams

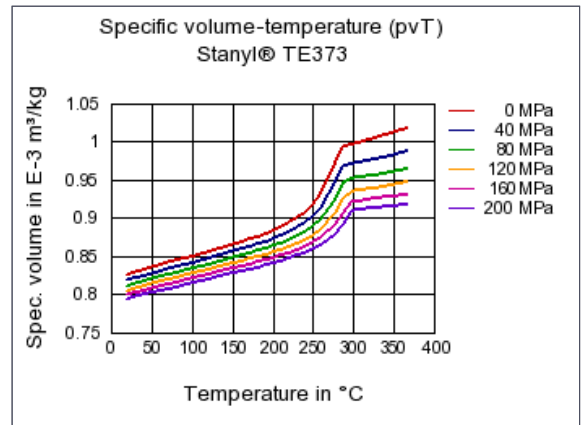**Viscosity-shear rate**

Shearstress-shear rate

Dynamic Shear modulus-temperature

Specific volume-temperature (pvT)

Characteristics

Processing
Injection Molding

Special Characteristics
Heat stabilized or stable to heat

Other text information

Injection Molding
Injection Molding Recommendations