

DSM Stanyl® TS200F10 PA46-GF50

Category : Polymer , Thermoplastic , Nylon , Nylon 46 , Nylon 46, Glass Fiber Reinforced

Material Notes:

50% Glass Reinforced

Order this product through the following link:

http://www.lookpolymers.com/polymer_DSM-Stanyl-TS200F10-PA46-GF50.php

Physical Properties	Metric	English	Comments
Density	1.62 g/cc	0.0585 lb/in ³	dry; ISO 1183
Moisture Absorption	1.85 %	1.85 %	Sim. To ISO 62
Linear Mold Shrinkage, Flow	0.0040 cm/cm	0.0040 in/in	Sim. To ISO 294-4
Linear Mold Shrinkage, Transverse	0.0090 cm/cm	0.0090 in/in	Sim. To ISO 294-4

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	160 MPa	23200 psi	cond; ISO 527-1/-2
	250 MPa	36300 psi	dry; ISO 527-1/-2
	100 MPa	14500 psi	ISO 527-1/-2
	@Temperature 200 °C	@Temperature 392 °F	
	110 MPa	16000 psi	ISO 527-1/-2
	@Temperature 180 °C	@Temperature 356 °F	
	120 MPa	17400 psi	ISO 527-1/-2
	@Temperature 160 °C	@Temperature 320 °F	
	140 MPa	20300 psi	ISO 527-1/-2
	@Temperature 120 °C	@Temperature 248 °F	
Elongation at Break	2.7 %	2.7 %	dry; ISO 527-1/-2
	5.0 %	5.0 %	cond; ISO 527-1/-2
	5.0 %	5.0 %	ISO 527-1/-2
	@Temperature 120 °C	@Temperature 248 °F	
	5.0 %	5.0 %	ISO 527-1/-2
	@Temperature 160 °C	@Temperature 320 °F	
	5.0 %	5.0 %	ISO 527-1/-2
	@Temperature 180 °C	@Temperature 356 °F	

Mechanical Properties	Metric	English	Comments
	@Temperature 200 °C	@Temperature 392 °F	ISO 527-1/-2
Tensile Modulus	10.0 GPa	1450 ksi	cond; ISO 527-1/-2
	16.0 GPa	2320 ksi	dry; ISO 527-1/-2
	6.60 GPa	957 ksi	ISO 527-1/-2
	@Temperature 200 °C	@Temperature 392 °F	
	7.00 GPa	1020 ksi	ISO 527-1/-2
	@Temperature 180 °C	@Temperature 356 °F	
	7.40 GPa	1070 ksi	ISO 527-1/-2
	@Temperature 160 °C	@Temperature 320 °F	
	8.20 GPa	1190 ksi	ISO 527-1/-2
	@Temperature 120 °C	@Temperature 248 °F	
Flexural Modulus	9.00 GPa	1310 ksi	cond; ISO 178
	14.0 GPa	2030 ksi	dry; ISO 178
	6.50 GPa	943 ksi	ISO 178
	@Temperature 160 °C	@Temperature 320 °F	
	7.30 GPa	1060 ksi	ISO 178
	@Temperature 120 °C	@Temperature 248 °F	
Izod Impact Resistance	1.40 J/cm ²	6.66 ft-lb/in ²	cond; ISO 180/1A
	@Temperature -40.0 °C	@Temperature -40.0 °F	
	1.40 J/cm ²	6.66 ft-lb/in ²	dry; ISO 180/1A
	@Temperature -40.0 °C	@Temperature -40.0 °F	
	1.60 J/cm ²	7.61 ft-lb/in ²	dry; ISO 180/1A
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	2.40 J/cm ²	11.4 ft-lb/in ²	cond; ISO 180/1A
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Charpy Impact Unnotched	9.00 J/cm ²	42.8 ft-lb/in ²	dry; ISO 179/1eU
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	10.0 J/cm ²	47.6 ft-lb/in ²	dry; ISO 179/1eU
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Mechanical Properties	Metric	English	Comments
	@Temperature -30.0 °C	@Temperature -22.0 °F	cond; ISO 179/1eU
	11.0 J/cm ²	52.3 ft-lb/in ²	cond; ISO 179/1eU
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Charpy Impact, Notched	1.40 J/cm ²	6.66 ft-lb/in ²	cond; ISO 179/1eA
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	1.40 J/cm ²	6.66 ft-lb/in ²	dry; ISO 179/1eA
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	1.60 J/cm ²	7.61 ft-lb/in ²	dry; ISO 179/1eA
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	2.40 J/cm ²	11.4 ft-lb/in ²	cond; ISO 179/1eA
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	25.0 µm/m-°C	13.9 µin/in-°F	dry; ISO 11359-1/-2
CTE, linear, Transverse to Flow	40.0 µm/m-°C	22.2 µin/in-°F	dry; ISO 11359-1/-2
Melting Point	295 °C	563 °F	10°C/min; ISO 11357-1/-3
Deflection Temperature at 1.8 MPa (264 psi)	290 °C	554 °F	dry; ISO 75-1/-2
Flammability, UL94	HB	HB	dry; IEC 60695-11-10
	@Thickness 1.50 mm	@Thickness 0.0591 in	

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+10 ohm-cm	1.00e+10 ohm-cm	cond; IEC 60093
	1.00e+14 ohm-cm	1.00e+14 ohm-cm	dry; IEC 60093
Dielectric Strength	20.0 kV/mm	508 kV/in	cond; IEC 60243-1
	30.0 kV/mm	762 kV/in	dry; IEC 60243-1
Comparative Tracking Index	300 V	300 V	dry; IEC 60112

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China