

DSM Stanyl® TE200F8 PA46-GF40

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

Material Notes:

40% Glass Reinforced, Heat Stabilized, for E&E applications

Order this product through the following link:

http://www.lookpolymers.com/polymer_DSM-Stanyl-TE200F8-PA46-GF40.php

Physical Properties	Metric	English	Comments
Density	1.51 g/cc	0.0546 lb/in ³	dry; ISO 1183
Moisture Absorption	2.20 %	2.20 %	Sim. To ISO 62
Linear Mold Shrinkage, Flow	0.0050 cm/cm	0.0050 in/in	Sim. To ISO 294-4
Linear Mold Shrinkage, Transverse	0.010 cm/cm	0.010 in/in	Sim. To ISO 294-4

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	140 MPa	20300 psi	cond; ISO 527-1/-2
	230 MPa	33400 psi	dry; ISO 527-1/-2
	100 MPa	14500 psi	ISO 527-1/-2
	@Temperature 200 °C	@Temperature 392 °F	
	105 MPa	15200 psi	ISO 527-1/-2
	@Temperature 180 °C	@Temperature 356 °F	
	115 MPa	16700 psi	ISO 527-1/-2
	@Temperature 160 °C	@Temperature 320 °F	
	130 MPa	18900 psi	ISO 527-1/-2
	@Temperature 120 °C	@Temperature 248 °F	
Elongation at Break	3.0 %	3.0 %	dry; ISO 527-1/-2
	6.0 %	6.0 %	cond; ISO 527-1/-2
	6.5 %	6.5 %	ISO 527-1/-2
	@Temperature 120 °C	@Temperature 248 °F	
	6.5 %	6.5 %	ISO 527-1/-2
	@Temperature 160 °C	@Temperature 320 °F	
	6.5 %	6.5 %	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	8.00 GPa	1160 ksi	cond; ISO 527-1/-2
	13.0 GPa	1890 ksi	dry; ISO 527-1/-2
	5.30 GPa	769 ksi	ISO 527-1/-2
	@Temperature 200 °C	@Temperature 392 °F	
	5.70 GPa	827 ksi	ISO 527-1/-2
	@Temperature 180 °C	@Temperature 356 °F	
	6.10 GPa	885 ksi	ISO 527-1/-2
	@Temperature 160 °C	@Temperature 320 °F	
	6.90 GPa	1000 ksi	ISO 527-1/-2
	@Temperature 120 °C	@Temperature 248 °F	
Flexural Modulus	7.00 GPa	1020 ksi	cond; ISO 178
	11.5 GPa	1670 ksi	dry; ISO 178
	5.20 GPa	754 ksi	ISO 178
	@Temperature 160 °C	@Temperature 320 °F	
	5.80 GPa	841 ksi	ISO 178
	@Temperature 120 °C	@Temperature 248 °F	
Izod Impact Resistance	1.20 J/cm ²	5.71 ft-lb/in ²	cond; ISO 180/1A
	@Temperature -40.0 °C	@Temperature -40.0 °F	
	1.20 J/cm ²	5.71 ft-lb/in ²	dry; 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 23.0 °C	@Temperature 73.4 °F	
	2.10 J/cm ²	9.99 ft-lb/in ²	cond; ISO 180/1A
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Charpy Impact Unnotched	7.50 J/cm ²	35.7 ft-lb/in ²	dry; ISO 179/1eU
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	8.50 J/cm ²	40.4 ft-lb/in ²	cond; ISO 179/1eU
	@Temperature -30.0 °C	@Temperature -22.0 °F	

Mechanical Properties	Metric	English	Comments
	@Temperature 23.0 °C	@Temperature 73.4 °F	dry; ISO 179/1eU
	10.0 J/cm ²	47.6 ft-lb/in ²	cond; ISO 179/1eU
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Charpy Impact, Notched	1.20 J/cm ²	5.71 ft-lb/in ²	cond; ISO 179/1eA
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	1.20 J/cm ²	5.71 ft-lb/in ²	dry; 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 23.0 °C	@Temperature 73.4 °F	
	2.10 J/cm ²	9.99 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	50.0 µm/m-°C	27.8 µin/in-°F	dry; ISO 11359-1/-2
Melting Point	295 °C	563 °F	10°C/min; ISO 11357-1/-3
Maximum Service Temperature, Air	159 °C	318 °F	5000 hours Thermal Index; IEC 60216/ISO 527-1/-2
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	
	HB	HB	dry; IEC 60695-11-10
	@Thickness 0.750 mm	@Thickness 0.0295 in	

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+12 ohm-cm	1.00e+12 ohm-cm	cond; IEC 60093
	>= 1.00e+15 ohm-cm	>= 1.00e+15 ohm-cm	dry; IEC 60093
Dielectric Strength	25.0 kV/mm	635 kV/in	cond; IEC 60243-1
	35.0 kV/mm	889 kV/in	dry; IEC 60243-1
Comparative Tracking Index	400 V	400 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