

DuPont Performance Polymers Zytel® HTN FR52G20NH BK337 Polyphthalamide (PPA)

Category : Polymer , Thermoplastic , Polyphthalamide (PPA) , Polyphthalamide (PPA), 20% Glass Fiber Reinforced

Material Notes:

Zytel® HTNFR52G20NH BK337 is a 20% glass reinforced, flame retardant, lubricated high performance polyamide resin. It is also a PPA resin and it uses a non-halogenated flame retardant. Information provided by DuPont Performance Polymers

Order this product through the following link:

http://www.lookpolymers.com/polymer_DuPont-Performance-Polymers-Zytel-HTN-FR52G20NH-BK337-Polyphthalamide-PPA.php

Physical Properties	Metric	English	Comments
Density	1.35 g/cc	0.0488 lb/in³	DAM; ISO 1183
Filler Content	20 %	20 %	DAM
Linear Mold Shrinkage, Flow	0.0030 cm/cm	0.0030 in/in	DAM; ISO 294-4
	@Thickness 2.00 mm	@Thickness 0.0787 in	
Linear Mold Shrinkage, Transverse	0.011 cm/cm	0.011 in/in	DAM; ISO 294-4
	@Thickness 2.00 mm	@Thickness 0.0787 in	

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	123 MPa	17800 psi	50%RH; ISO 527
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	135 MPa	19600 psi	DAM; ISO 527
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Tensile Stress	4.06 MPa	589 psi	50%RH; ISO 11403-1/-2
	@Strain 0.100 %, Temperature 150 °C	@Strain 0.100 %, Temperature 302 °F	
	4.48 MPa	650 psi	DAM; ISO 11403-1/-2
	@Strain 0.100 %, Temperature 150 °C	@Strain 0.100 %, Temperature 302 °F	
	4.84 MPa	702 psi	50%RH; ISO 11403-1/-2
	@Strain 0.100 %, Temperature 100 °C	@Strain 0.100 %, Temperature 212 °F	
	5.83 MPa	846 psi	DAM; ISO 11403-1/-2
	@Strain 0.100 %, Temperature 100 °C	@Strain 0.100 %, Temperature 212 °F	
	6.42 MPa	931 psi	

Mechanical Properties	Metric	English	50%RH; ISO 11403-1/-2 Comments
	@Strain 0.100 %, Temperature 60.0 °C	@Strain 0.100 %, Temperature 140 °F	
	7.74 MPa	1120 psi	
	@Strain 0.200 %, Temperature 150 °C	@Strain 0.200 %, Temperature 302 °F	50%RH; ISO 11403-1/-2
	8.03 MPa	1160 psi	
	@Strain 0.100 %, Temperature 80.0 °C	@Strain 0.100 %, Temperature 176 °F	DAM; ISO 11403-1/-2
	8.52 MPa	1240 psi	
	@Strain 0.100 %, Temperature 40.0 °C	@Strain 0.100 %, Temperature 104 °F	50%RH; ISO 11403-1/-2
	8.59 MPa	1250 psi	
	@Strain 0.200 %, Temperature 150 °C	@Strain 0.200 %, Temperature 302 °F	DAM; ISO 11403-1/-2
	8.69 MPa	1260 psi	
	@Strain 0.100 %, Temperature 60.0 °C	@Strain 0.100 %, Temperature 140 °F	DAM; ISO 11403-1/-2
	9.25 MPa	1340 psi	
	@Strain 0.100 %, Temperature 23.0 °C	@Strain 0.100 %, Temperature 73.4 °F	DAM; ISO 11403-1/-2
	9.29 MPa	1350 psi	
	@Strain 0.100 %, Temperature 23.0 °C	@Strain 0.100 %, Temperature 73.4 °F	50%RH; ISO 11403-1/-2
	9.36 MPa	1360 psi	
	@Strain 0.200 %, Temperature 100 °C	@Strain 0.200 %, Temperature 212 °F	50%RH; ISO 11403-1/-2
	10.29 MPa	1492 psi	
	@Strain 0.100 %, Temperature -40.0 °C	@Strain 0.100 %, Temperature -40.0 °F	DAM; ISO 11403-1/-2
	11.07 MPa	1606 psi	
	@Strain 0.300 %, Temperature 150 °C	@Strain 0.300 %, Temperature 302 °F	50%RH; ISO 11403-1/-2
	11.24 MPa	1630 psi	
	@Strain 0.200 %, Temperature 100 °C	@Strain 0.200 %, Temperature 212 °F	DAM; ISO 11403-1/-2
	12.37 MPa	1794 psi	
	@Strain 0.200 %, Temperature 60.0 °C	@Strain 0.200 %, Temperature 140 °F	50%RH; ISO 11403-1/-2

Mechanical Properties	MetricMPa	Englishpsi	Comments
	@Strain 0.300 %, Temperature 150 °C	@Strain 0.300 %, Temperature 302 °F	DAM; ISO 11403-1/-2
	13.53 MPa	1962 psi	
	@Strain 0.300 %, Temperature 100 °C	@Strain 0.300 %, Temperature 212 °F	50%RH; ISO 11403-1/-2
	14.54 MPa	2109 psi	
	@Strain 0.400 %, Temperature 150 °C	@Strain 0.400 %, Temperature 302 °F	50%RH; ISO 11403-1/-2
	15.44 MPa	2239 psi	
	@Strain 0.200 %, Temperature 80.0 °C	@Strain 0.200 %, Temperature 176 °F	DAM; ISO 11403-1/-2
	16.31 MPa	2366 psi	
	@Strain 0.400 %, Temperature 150 °C	@Strain 0.400 %, Temperature 302 °F	DAM; ISO 11403-1/-2
	16.5 MPa	2390 psi	
	@Strain 0.200 %, Temperature 40.0 °C	@Strain 0.200 %, Temperature 104 °F	50%RH; ISO 11403-1/-2
	16.51 MPa	2395 psi	
	@Strain 0.300 %, Temperature 100 °C	@Strain 0.300 %, Temperature 212 °F	DAM; ISO 11403-1/-2
	16.93 MPa	2455 psi	
	@Strain 0.200 %, Temperature 60.0 °C	@Strain 0.200 %, Temperature 140 °F	DAM; ISO 11403-1/-2
	17.68 MPa	2564 psi	
	@Strain 0.500 %, Temperature 150 °C	@Strain 0.500 %, Temperature 302 °F	50%RH; ISO 11403-1/-2
	17.87 MPa	2592 psi	
	@Strain 0.200 %, Temperature 23.0 °C	@Strain 0.200 %, Temperature 73.4 °F	50%RH; ISO 11403-1/-2
	17.89 MPa	2595 psi	
	@Strain 0.200 %, Temperature 23.0 °C	@Strain 0.200 %, Temperature 73.4 °F	DAM; ISO 11403-1/-2
	17.91 MPa	2598 psi	
	@Strain 0.400 %, Temperature 100 °C	@Strain 0.400 %, Temperature 212 °F	50%RH; ISO 11403-1/-2
	18.12 MPa	2628 psi	
			50%RH; ISO 11403-1/-2

Mechanical Properties	Metric @Strain 0.300 %, Temperature 60.0 °C	English @Strain 0.300 %, Temperature 140 °F	Comments
	19.7 MPa	2860 psi	
	@Strain 0.500 %, Temperature 150 °C	@Strain 0.500 %, Temperature 302 °F	DAM; ISO 11403-1/-2
	19.81 MPa	2873 psi	
	@Strain 0.200 %, Temperature -40.0 °C	@Strain 0.200 %, Temperature -40.0 °F	DAM; ISO 11403-1/-2
	20.61 MPa	2989 psi	
	@Strain 0.600 %, Temperature 150 °C	@Strain 0.600 %, Temperature 302 °F	50%RH; ISO 11403-1/-2
	21.72 MPa	3150 psi	
	@Strain 0.500 %, Temperature 100 °C	@Strain 0.500 %, Temperature 212 °F	50%RH; ISO 11403-1/-2
	22.17 MPa	3215 psi	
	@Strain 0.400 %, Temperature 100 °C	@Strain 0.400 %, Temperature 212 °F	DAM; ISO 11403-1/-2
	22.5 MPa	3260 psi	
	@Strain 0.300 %, Temperature 80.0 °C	@Strain 0.300 %, Temperature 176 °F	DAM; ISO 11403-1/-2
	22.87 MPa	3317 psi	
	@Strain 0.600 %, Temperature 150 °C	@Strain 0.600 %, Temperature 302 °F	DAM; ISO 11403-1/-2
	23.27 MPa	3375 psi	
	@Strain 0.700 %, Temperature 150 °C	@Strain 0.700 %, Temperature 302 °F	50%RH; ISO 11403-1/-2
	24.19 MPa	3508 psi	
	@Strain 0.400 %, Temperature 60.0 °C	@Strain 0.400 %, Temperature 140 °F	50%RH; ISO 11403-1/-2
	24.21 MPa	3511 psi	
	@Strain 0.300 %, Temperature 40.0 °C	@Strain 0.300 %, Temperature 104 °F	50%RH; ISO 11403-1/-2
	24.71 MPa	3584 psi	
	@Strain 0.300 %, Temperature 60.0 °C	@Strain 0.300 %, Temperature 140 °F	DAM; ISO 11403-1/-2
	25.3 MPa	3670 psi	
	@Strain 0.600 %, Temperature 100 °C	@Strain 0.600 %, Temperature 212 °F	50%RH; ISO 11403-1/-2

Mechanical Properties	25.78 MPa Metric	3739 psi English	Comments 50%RH; ISO 11403-1/-2
	@Strain 0.800 %, Temperature 150 °C	@Strain 0.800 %, Temperature 302 °F	
	25.83 MPa	3746 psi	
	@Strain 0.700 %, Temperature 150 °C	@Strain 0.700 %, Temperature 302 °F	DAM; ISO 11403-1/-2
	26.01 MPa	3772 psi	
	@Strain 0.300 %, Temperature 23.0 °C	@Strain 0.300 %, Temperature 73.4 °F	50%RH; ISO 11403-1/-2
	26.13 MPa	3790 psi	
	@Strain 0.300 %, Temperature 23.0 °C	@Strain 0.300 %, Temperature 73.4 °F	DAM; ISO 11403-1/-2
	27.0 MPa	3920 psi	
	@Strain 0.500 %, Temperature 100 °C	@Strain 0.500 %, Temperature 212 °F	DAM; ISO 11403-1/-2
	28.2 MPa	4090 psi	
	@Strain 0.900 %, Temperature 150 °C	@Strain 0.900 %, Temperature 302 °F	50%RH; ISO 11403-1/-2
	28.59 MPa	4147 psi	
	@Strain 0.800 %, Temperature 150 °C	@Strain 0.800 %, Temperature 302 °F	DAM; ISO 11403-1/-2
	28.7 MPa	4160 psi	
	@Strain 0.300 %, Temperature -40.0 °C	@Strain 0.300 %, Temperature -40.0 °F	DAM; ISO 11403-1/-2
	28.76 MPa	4171 psi	
	@Strain 0.700 %, Temperature 100 °C	@Strain 0.700 %, Temperature 212 °F	50%RH; ISO 11403-1/-2
	29.54 MPa	4284 psi	
	@Strain 0.500 %, Temperature 60.0 °C	@Strain 0.500 %, Temperature 140 °F	50%RH; ISO 11403-1/-2
	29.86 MPa	4331 psi	
	@Strain 0.400 %, Temperature 80.0 °C	@Strain 0.400 %, Temperature 176 °F	DAM; ISO 11403-1/-2
	30.47 MPa	4419 psi	
	@Strain 1.00 %, Temperature 150 °C	@Strain 1.00 %, Temperature 302 °F	50%RH; ISO 11403-1/-2
	31.22 MPa	4528 psi	
	@Strain 0.900 %,	@Strain 0.900 %,	DAM; ISO 11403-1/-2

Mechanical Properties	Temperature 150 °C	Temperature 302 °F	Comments
	Metric	English	
	31.5 MPa	4570 psi	
	@Strain 0.600 %, Temperature 100 °C	@Strain 0.600 %, Temperature 212 °F	DAM; ISO 11403-1/-2
	31.93 MPa	4631 psi	
	@Strain 0.800 %, Temperature 100 °C	@Strain 0.800 %, Temperature 212 °F	50%RH; ISO 11403-1/-2
	32.21 MPa	4672 psi	
	@Strain 0.400 %, Temperature 40.0 °C	@Strain 0.400 %, Temperature 104 °F	50%RH; ISO 11403-1/-2

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