

DuPont Performance Polymers Hytrel® HTR5612BK TPC-ET (Unverified Data**)

Category : Polymer , Thermoplastic , Elastomer, TPE , Polyester, TP , Polyester Thermoplastic Elastomer

Material Notes:

Hytrel® HTR5612BK HTR5612BK is designed for blow molding or processing techniques requiring high melt viscosity. It has nominal durometer hardness of 54D, is pigmented black with fine particle size carbon black, and contains a general purpose stabilizer. Information provided by DuPont Performance Polymers

Order this product through the following link:

http://www.lookpolymers.com/polymer_DuPont-Performance-Polymers-Hytrel-HTR5612BK-TPC-ET-nbspUnverified-Data.php

Physical Properties	Metric	English	Comments
Density	1.16 g/cc	0.0419 lb/in ³	ISO 1183
Water Absorption	0.20 %	0.20 %	Equilibrium 50%RH; ISO 62
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	0.60 %	0.60 %	Saturation, immersed; ISO 62
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	0.40 %	0.40 %	Saturation, immersed; ISO 62, Similar to
	@Thickness 1.00 mm, Temperature 23.0 °C	@Thickness 0.0394 in, Temperature 73.4 °F	
Linear Mold Shrinkage, Flow	0.012 cm/cm	0.012 in/in	ISO 294-4
	@Thickness 2.00 mm	@Thickness 0.0787 in	
Linear Mold Shrinkage, Transverse	0.015 cm/cm	0.015 in/in	ISO 294-4
	@Thickness 2.00 mm	@Thickness 0.0787 in	
Melt Flow	2.9 g/10 min	2.9 g/10 min	ISO 1133
	@Load 2.16 kg, Temperature 230 °C	@Load 4.76 lb, Temperature 446 °F	
	9.6 g/10 min	9.6 g/10 min	ISO 1133
	@Load 5.00 kg, Temperature 230 °C	@Load 11.0 lb, Temperature 446 °F	

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	48	48	ISO 868
	@Time 15.0 sec	@Time 0.00417 hour	
	54	54	ISO 868
	@Time 1.00 sec	@Time 0.000278 hour	

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	@Temperature 23.0 °C	@Temperature 73.4 °F	ISO 527 (1BA bar)
Tensile Stress	5.10 MPa @Strain 5.00 %, Temperature 23.0 °C	740 psi @Strain 5.00 %, Temperature 73.4 °F	ISO 527 (1BA bar)
	8.30 MPa @Strain 10.0 %, Temperature 23.0 °C	1200 psi @Strain 10.0 %, Temperature 73.4 °F	ISO 527 (1BA bar)
	14.1 MPa @Strain 50.0 %, Temperature 23.0 °C	2050 psi @Strain 50.0 %, Temperature 73.4 °F	ISO 527 (1BA bar)
Elongation at Break	>= 50 % @Temperature 23.0 °C	>= 50 % @Temperature 73.4 °F	nominal; ISO 527 (1BA bar)
	440 % @Temperature 23.0 °C	440 % @Temperature 73.4 °F	ISO 527 (1BA bar)
	540 % @Temperature 23.0 °C	540 % @Temperature 73.4 °F	nominal; ISO 527 (1BA bar)
Tensile Modulus	0.114 GPa @Temperature 23.0 °C	16.5 ksi @Temperature 73.4 °F	ISO 527
Charpy Impact Unnotched	NB @Temperature -30.0 °C	NB @Temperature -22.0 °F	ISO 179/1eU
	NB @Temperature 23.0 °C	NB @Temperature 73.4 °F	ISO 179/1eU
Charpy Impact, Notched	15.7 J/cm² @Temperature -40.0 °C	74.7 ft-lb/in² @Temperature -40.0 °F	partial break; ISO 179/1eA
	NB @Temperature 23.0 °C	NB @Temperature 73.4 °F	ISO 179/1eA

Thermal Properties	Metric	English	Comments
Melting Point	200 °C	392 °F	10°C/min; ISO 11357-1/-3
Deflection Temperature at 0.46 MPa (66 psi)	53.0 °C	127 °F	ISO 75-1/-2
Flammability, UL94	HB	HB	IEC 60695-11-10

Thermal Properties	@Thickness 1.50 mm Metric	@Thickness 0.0591 in English	Comments
	HB	HB	IEC 60695-11-10
	@Thickness 3.00 mm	@Thickness 0.118 in	
	HB	HB	UL94
	@Thickness 1.50 mm	@Thickness 0.0591 in	
	HB	HB	UL94
	@Thickness 3.00 mm	@Thickness 0.118 in	

Processing Properties	Metric	English	Comments
Melt Temperature	230 °C	446 °F	Optimum; Blow Molding
	230 °C	446 °F	Optimum; Injection Molding
Mold Temperature	45.0 °C	113 °F	optimum; Injection Molding
Drying Temperature	110 °C	230 °F	Blow Molding
	110 °C	230 °F	Injection Molding
Dry Time	2.00 - 4.00 hour	2.00 - 4.00 hour	Injection Molding
	3.00 - 4.00 hour	3.00 - 4.00 hour	Blow Molding
Moisture Content	0.020 %	0.020 %	Blow Molding
	0.080 %	0.080 %	Injection Molding

Descriptive Properties	Value	Comments
Generic	TPC-ET	
Material Status	Current	
Part Marking Code	>TPC-ET<	ISO 11469
Product Category	Blow Moldable Resins	
	High Performance Hytrel®® Resins	
	Unreinforced Resins	
Resin Identification	TPC-ET	ISO 1043

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