

PolyOne OnFlex™ HFFR 315-01 Thermoplastic Elastomer (TPE)

Category : Polymer , Thermoplastic , Elastomer, TPE

Material Notes:

OnFlex™ HFFR 315-01 a is non-halogen flame retardant material designed for flexible power cord insulation, cable jackets, and ribbon cables. New Product. Commercial specifications have not been established. - Non-halogen flame retardantPurge thoroughly before and after use of this product with a low flow (0.5 - 2.5 MFR) polyethylene (PE) or polypropylene (PP).Information provided by PolyOne

Order this product through the following link:

http://www.lookpolymers.com/polymer_PolyOne-OnFlex-HFFR-315-01-Thermoplastic-Elastomer-TPE.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.01 g/cc	1.01 g/cc	ASTM D792
Viscosity	26900 cP	26900 cP	ASTM D3835
	@Shear Rate 11200 1/s, Temperature 200 °C	@Shear Rate 11200 1/s, Temperature 392 °F	
	1.86e+6 cP	1.86e+6 cP	ASTM D3835
	@Shear Rate 67.0 1/s, Temperature 200 °C	@Shear Rate 67.0 1/s, Temperature 392 °F	
Maximum Moisture Content	0.020	0.020	
Deformation	42 %	42 %	2000g; UL 1581
	@Temperature 150 °C	@Temperature 302 °F	

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	75	75	10 sec; ASTM D2240
Tensile Strength at Break	20.7 MPa	3000 psi	UL 1581
	13.4 MPa @Temperature 23.0 °C	1940 psi @Temperature 73.4 °F	Die C2 hr; ASTM D412
Elongation at Break	250 %	250 %	UL 1581
	220 % @Temperature 23.0 °C	220 % @Temperature 73.4 °F	Die C2 hr; ASTM D412
Tear Strength	41.3 kN/m	236 pli	ASTM D624

Thermal Properties	Metric	English	Comments
Brittleness Temperature	-40.0 °C	-40.0 °F	ASTM D746

Electrical Properties	Metric	English	Comments
Volume Resistivity	2.90e+15 ohm-cm	2.90e+15 ohm-cm	50%RH, ASTM D257-07; ASTM D257
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Dielectric Strength	51.0 kV/mm	1300 kV/in	50% RH, ASTM D149-97a(04); ASTM D149
	@Thickness 0.533 mm, Temperature 23.0 °C	@Thickness 0.0210 in, Temperature 73.4 °F	

Processing Properties	Metric	English	Comments
Zone 1	180 - 190 °C	356 - 374 °F	
Zone 2	200 - 210 °C	392 - 410 °F	
Zone 3	210 - 220 °C	410 - 428 °F	
Zone 4	210 - 220 °C	410 - 428 °F	
Die Temperature	210 - 220 °C	410 - 428 °F	
Drying Temperature	70.0 °C	158 °F	
Dry Time	2.00 - 3.00 hour	2.00 - 3.00 hour	

Descriptive Properties	Value	Comments
Aging Resistance	100%	UL 1581; 136°C; Thermal aging tensile retention168hrs
	85%	UL 1581; 136°C; Thermal aging elongation retension168hrs
Appearance	Black	
Features	Flame Retardant	
Forms	Pellets	
Generic Material	TPE	
Generic Name	Thermoplastic Elastomer (TPE)	
Manufacturer / Supplier	GLS Thermoplastic Elastomers	
Processing Method	Extrusion	
Regional Availability	Africa & Middle East	
	Asia Pacific	
	Europe	
	North America	

Descriptive Properties	Value	Comments
Uses	Cable Jacketing	
	Flexible Cord Insulation	
	Flexible Cord Jacketing	
	Wire & Cable Applications	
VW-1	pass	UL 1581

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