

PolyOne OnFlex™ HT 40A-3S2131 Thermoplastic Elastomer (TPE)

Category : Polymer , Thermoplastic , Elastomer, TPE

Material Notes:

OnFlex™ HT thermoplastic elastomer compounds are based on hydrogenated styrenic block copolymers. This range of compounds is specially formulated to deliver very good compression set performance at elevated temperatures and a high heat resistance. Furthermore, OnFlex™ HT compounds are in compliance with EN 681-2 and offer excellent mechanical properties, a wide hardness range and good processability. Properties are measured using injection molded plaques. Information provided by PolyOne

Order this product through the following link:

http://www.lookpolymers.com/polymer_PolyOne-OnFlex-HT-40A-3S2131-Thermoplastic-Elastomer-TPE.php

Physical Properties	Metric	English	Comments
Density	1.00 g/cc	0.0361 lb/in³	ISO 1183

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	50	50	IRHD; ISO 48
	40	40	Injection Molded; DIN 53505
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Tensile Strength at Break	4.50 MPa	653 psi	200 mm/min Flow; DIN 53504
	@Thickness 2.00 mm, Temperature 23.0 °C	@Thickness 0.0787 in, Temperature 73.4 °F	
	7.80 MPa	1130 psi	200 mm/min Across Flow; DIN 53504
	@Thickness 2.00 mm, Temperature 23.0 °C	@Thickness 0.0787 in, Temperature 73.4 °F	
Elongation at Break	620 %	620 %	200 mm/min Flow; DIN 53504
	@Thickness 2.00 mm, Temperature 23.0 °C	@Thickness 0.0787 in, Temperature 73.4 °F	
	790 %	790 %	200 mm/min Across Flow; DIN 53504
	@Thickness 2.00 mm, Temperature 23.0 °C	@Thickness 0.0787 in, Temperature 73.4 °F	
Compression Set	12 %	12 %	ISO 815
	@Temperature 23.0 °C, Time 259000 sec	@Temperature 73.4 °F, Time 72.0 hour	
	28 %	28 %	ISO 815
	@Temperature 70.0 °C, Time 79200 sec	@Temperature 158 °F, Time 22.0 hour	
	45 %	45 %	

Mechanical Properties	Metric @Temperature 100 °C, Time 79200 sec	English @Temperature 212 °F, Time 22.0 hour	ISO 815 Comments
	45 %	45 %	
	@Temperature -10.0 °C, Time 79200 sec	@Temperature 14.0 °F, Time 22.0 hour	ISO 815
	46 %	46 %	
	@Temperature 125 °C, Time 79200 sec	@Temperature 257 °F, Time 22.0 hour	ISO 815
	52 %	52 %	
	@Temperature -10.0 °C, Time 259000 sec	@Temperature 14.0 °F, Time 72.0 hour	ISO 815
	70 %	70 %	
	@Temperature 150 °C, Time 79200 sec	@Temperature 302 °F, Time 22.0 hour	ISO 815

Processing Properties	Metric	English	Comments
Melt Temperature	180 - 220 °C	356 - 428 °F	
Mold Temperature	30.0 - 60.0 °C	86.0 - 140 °F	

Descriptive Properties	Value	Comments
Change in Shore Hardness in Air	-1 Shore A	DIN 53505; Shore A, 70°C, 168 hr
Change in Tensile Strain at Break in Air	-4%	DIN 53504; 70°C, 168 hr, 2.00 mm
Change in Tensile Strength in Air	-9%	DIN 53504; 70°C, 168 hr, 2.00 mm
Change in Volume	0.06%	ISO 1817; 70°C, 168 hr, in Water
	20%	ISO 1817; 70°C, 72 hr, in ASTM #1 Oil

Features	High Heat Resistance
	Low Compression Set
	Ozone Resistant
Forms	Pellets
Generic Material	TPE
Generic Material Type	Styrenic Thermoplastic Elastomer (TES)
Generic Name	Thermoplastic Elastomer (TPE)

Descriptive Properties	Value	Comments
Injection Rate	Fast	
Manufacturer / Supplier	GLS Thermoplastic Elastomers	
Processing Method	Injection Molding	
Regional Availability	Africa & Middle East	
	Asia Pacific	
	Europe	
	North America	
	South America	
RoHS Compliance	RoHS Compliant	
Stress Relaxation	15%	ISO 3384; 23°C; 168hrs, 25% compression, Method A
	28%	ISO 3384; 23°C; 100d, 25% compression, Method A
Uses	Pipe Seals	

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