

## PolyOne OnFlex™ S FR 40A-3S1841 Thermoplastic Elastomer (TPE)

Category : Polymer , Thermoplastic , Elastomer , TPE

### Material Notes:

OnFlex™-S FR thermoplastic elastomer compounds are based on hydrogenated styrenic block copolymers. This range of compounds are specially flame retarded with a highly effective, RoHS compliant halogen based flame retardant system. Furthermore, OnFlex™-S FR compounds offer excellent mechanical properties, good elevated temperature compression set performance, very 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-S-FR-40A-3S1841-Thermoplastic-Elastomer-TPE.php](http://www.lookpolymers.com/polymer_PolyOne-OnFlex-S-FR-40A-3S1841-Thermoplastic-Elastomer-TPE.php)

Physical Properties	Metric	English	Comments
Density	1.20 g/cc	0.0434 lb/in <sup>3</sup>	ISO 1183

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	40	40	ISO 868
Tensile Strength at Break	4.50 MPa	653 psi	ISO 37
Tensile Stress	1.10 MPa @Strain 100 %	160 psi @Strain 100 %	ISO 37
	3.10 MPa @Strain 300 %	450 psi @Strain 300 %	ISO 37
Elongation at Break	430 %	430 %	ISO 37
Tear Strength	18.0 kN/m	103 pli	ISO 34-1
Compression Set	14 % @Temperature 23.0 °C, Time 259000 sec	14 % @Temperature 73.4 °F, Time 72.0 hour	ISO 815
	27 % @Temperature 70.0 °C, Time 79200 sec	27 % @Temperature 158 °F, Time 22.0 hour	ISO 815
	47 % @Temperature 100 °C, Time 79200 sec	47 % @Temperature 212 °F, Time 22.0 hour	ISO 815

Thermal Properties	Metric	English	Comments
Flammability, UL94	V-0 @Thickness 1.50 mm	V-0 @Thickness 0.0591 in	UL 94

Thermal Properties	Metric	English	Comments
Glow Wire Test	960 °C @Thickness 2.00 mm	1760 °F @Thickness 0.0787 in	Flammability Index; IEC 60695-2-12

Processing Properties	Metric	English	Comments
Melt Temperature	200 - 220 °C	392 - 428 °F	
Mold Temperature	40.0 - 60.0 °C	104 - 140 °F	

Descriptive Properties	Value	Comments
Agency Ratings	UL QMFZ2 .E76261	
Features	Flame Retardant	
	Halogenated	
Forms	Pellets	
Generic Material	TPE	
Generic Material Type	Styrenic Thermoplastic Elastomer (TES)	
Generic Name	Thermoplastic Elastomer (TPE)	
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	
Uses	Automotive Applications	
	Business Equipment	
	Electrical/Electronic Applications	
	General Purpose	

Descriptive Properties	Industrial Applications Value	Comments
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## Contact Songhan Plastic Technology Co.,Ltd.

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