# OnFlex<sup>™</sup> S FR 50A-3S1831

### Thermoplastic Elastomer

PolyOne Corporation

#### Message:

OnFlex<sup>™</sup>-S FR thermoplastic elastomer polymer is mixed with hydrogenated styrene block copolymer. This series of polymers have high-efficiency halogen-based flame retardant systems that comply with the RoHS Directive on Restricting the Use of Certain Hazardous Substances in Electrical and Electronic Equipment, so they are especially flame retardant. And, OnFlex<sup>™</sup>-S FR polymer has excellent mechanical properties, good high temperature compression performance and processability, and a wide range of hardness.

General Information					
UL YellowCard	E76261-587822				
Features	Halogenated				
	Flame retardancy				
Uses	Electrical/Electronic Applications				
	Industrial application				
	Application in Automobile Field				
	Business equipment				
	General				
Agency Ratings	UL QMFZ2 .E76261				
RoHS Compliance	RoHS compliance				
Forms	Particle				
Processing Method	Injection molding				
Physical	Nominal Value	Unit	Test Method		
Density	1.20	g/cm³	ISO 1183		
Hardness	Nominal Value	Unit	Test Method		
Durometer Hardness (Shore A)	50		ISO 868		
Elastomers	Nominal Value	Unit	Test Method		
Tensile Stress			ISO 37		
100% strain	1.50	MPa	ISO 37		
300% strain	3.60	MPa	ISO 37		
Tensile Stress (Break)	6.00	MPa	ISO 37		
Tensile Elongation (Break)	510	%	ISO 37		
Tear Strength	23	kN/m	ISO 34-1		
Compression Set			ISO 815		
23°C, 72 hr	10	%	ISO 815		
70°C, 22 hr	27	%	ISO 815		
100°C, 22 hr	44	%	ISO 815		
Flammability	Nominal Value	Unit	Test Method		
Flame Rating (1.50 mm)	V-0		UL 94		

Glow Wire Flammability Index (2.00 mm)	960	°C	IEC 60695-2-12
Oxygen Index	27	%	ISO 4589-2
Additional Information	Nominal Value		
General Material Type	Styrene thermoplastic elastomers (TES)		
各项属性值是采用注射模制基板测量得出.			
Injection	Nominal Value	Unit	
Processing (Melt) Temp	200 - 220	°C	
Mold Temperature	40.0 - 60.0	°C	
Injection Rate	Fast		

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#### Recommended distributors for this material

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