OnFlex™ S HF 60A-3S1982

Thermoplastic Elastomer

Key Characteristics

Product Description			
OnFlex™-S HF thermoplastic elastomer compounds are based on hydrogenated styrenic block copolymers. This range of compounds utilize a unique, patent pending halogen free flame retardancy system. Furthermore, OnFlex™-S HF compounds offer good mechanical properties, compliance with UL94 V-0, good LOI values, wide hardness range, good processability, and excellent UV stability.			
General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	
Features	• Flame Retardant		
Uses	• Automotive Applications • Business Equipment	• Electrical/Electronic Applications • General Purpose	• Industrial Applications
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density	1.09 g/cm³	1.09 g/cm³	ISO 1183
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Stress (100% Strain)	247 psi	1.70 MPa	ISO 37
Tensile Stress (300% Strain)	363 psi	2.50 MPa	ISO 37
Tensile Stress (Break)	435 psi	3.00 MPa	ISO 37
Tensile Elongation (Break)	400 %	400 %	ISO 37
Tear Strength	120 lbf/in	21 kN/m	ISO 34-1
Compression Set			ISO 815
73°F (23°C), 72 hr	17 %	17 %	
158°F (70°C), 22 hr	47 %	47 %	
212°F (100°C), 22 hr	82 %	82 %	
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Shore Hardness (Shore A)	60	60	ISO 868
Electrical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Comparative Tracking Index	550 V	550 V	IEC 60112
Flammability	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Flame Rating (0.06 in (1.5 mm))	V-0	V-0	UL 94
Glow Wire Flammability Index			IEC 60695-2-12
0.08 in (2.0 mm)	1760 °F	960 °C	
Glow Wire Ignition Temperature			IEC 60695-2-13
0.08 in (2.0 mm)	1340 °F	725 °C	
Oxygen Index	37 %	37 %	ISO 4589-2
Additional Information	**Typical Value (English)**	**Typical Value (SI)**	
Generic Material Type	Styrenic Thermoplastic Elastomer (TES)	Styrenic Thermoplastic Elastomer (TES)	

Properties are measured using injection molded plaques.

Copyright ©, 2016 PolyOne Corporation. PolyOne makes no representations, guarantees, or warranties of any kind with respect to the Information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the Information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as "typical" or stated without a range do not state minimum or maximum properties; consult your sales representative for property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the Information. PolyOne makes no warranties or guarantees respecting suitability of either PolyOne's products or the Information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the Information and/or use or handling of any product. POLYONE MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the Information or products reflected by the Information. This data sheet shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	176 °F	80.0 °C
Drying Time	2.0 hr	2.0 hr
Processing (Melt) Temp	320 to 356 °F	160 to 180 °C
Mold Temperature	86.0 to 122 °F	30.0 to 50.0 °C
Injection Rate	Moderate-Fast	Moderate-Fast

Notes

[1] Typical values are not to be construed as specifications.

CONTACT INFORMATION

Americas

United States - Avon Lake
+1 440 930 1000

United States - McHenry
+1 815 385 8500

Asia

China - Guangzhou
+86 20 8732 7260

China - Shenzhen
+86 755 2969 2888

China - Suzhou
+86 512 6823 24 38

China - Suzhou
+86 512 6265 2600

Hong Kong -
+852 2690 5332

Taiwan - Yonghe City,
+886 9396 99740, +886 2929 1849

Europe

Germany - Gaggenau
+49 7225 6802 0

Spain - Barbastro (Huesca)
+34 974 310 314

Beyond Polymers.

Better Business Solutions. SM

www.polyone.com

PolyOne Americas
33587 Walker Road
Avon Lake, Ohio 44012
United States
+1 440 930 1000
+1 866 POLYONE

PolyOne Asia
No. 88 Guoshoujing Road
Z.J Hi-tech Park, Pudong
Shanghai, 201203, China
+86 21 5080 1188

PolyOne Europe
6 Giällewee
+352 269 050 35

Copyright ©, 2016 PolyOne Corporation. PolyOne makes no representations, guarantees, or warranties of any kind with respect to the Information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the Information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as “typical” or stated without a range do not state minimum or maximum properties; consult your sales representative for property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the Information. PolyOne makes no warranties or guarantees respecting suitability of either PolyOne’s products or the Information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the Information and/or use or handling of any product. POLYONE MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the Information or products reflected by the Information. This data sheet shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.