OnFlex™ S F40A-3E1681 Gray SO2

Thermoplastic Elastomer

Key Characteristics

Product Description

OnFlex™-S F40A-3E1681 translucent SO2 is an easy processing, easy coloring purpose TPE designed for a wide variety of applications. High resistance against acids and bases and alcohols.

General		
Material Status	• Commercial: Active	
Regional Availability	• Europe	
Features	• General Purpose	• Good Processability
RoHS Compliance	• RoHS Compliant	
Forms	• Pellets	
Processing Method	• Injection Molding	

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density	0.880 g/cm³	0.880 g/cm³	ISO 1183
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Stress (Break, 73°F (23°C))	435 psi	3.00 MPa	ISO 37
Tensile Elongation (Break, 73°F (23°C))	350 %	350 %	ISO 37
Compression Set (158°F (70°C), 23 hr)	38 %	38 %	ISO 815
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Shore Hardness (Shore A, 10 sec)	40	40	ISO 48-4

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Rear Temperature	338 to 347 °F	170 to 175 °C
Middle Temperature	347 to 374 °F	175 to 190 °C
Front Temperature	374 to 428 °F	190 to 220 °C
Nozzle Temperature	383 to 428 °F	195 to 220 °C
Mold Temperature	86 to 122 °F	30 to 50 °C
Back Pressure [2]	290 to 1450 psi	2.00 to 10.0 MPa
Screw Speed	40 to 100 rpm	40 to 100 rpm

Injection Notes

Purge thoroughly before and after use of this product with a low (0.5 - 2.5 MFR) polyethylene (PE) or polypropylene (PP).

Drying is not Required

Injection Speed: 1 to 3 in/sec
1st Stage - Boost Pressure: 350 to 900 psi
2nd Stage - Hold Pressure: 30% of Boost
Hold Time (Thick Part): 3 to 10 sec
Hold Time (Thin Part): 1 to 3 sec

Notes

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

[2] If color masterbatches are used, higher back pressure is necessary.

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