Versaflex™ CE 3120-40N

Thermoplastic Elastomer

Key Characteristics

Product Description			
Versaflex™ CE 3120-40N is targeted for consumer electronics gasket applications where low durometer, good seal and improved compression set are required. Versaflex™ CE 3120-40N can overmold to a variety of substrates including PC, ABS, PC/ABS, and Copolyester.			
General			
Material Status	• Commercial: Active		
Regional Availability	• Asia Pacific	• Europe	• North America
Features	• Specialty Grade		
Uses	• Consumer Applications • Electrical/Electronic Applications	• Gaskets • Overmolding	
RoHS Compliance	• RoHS Compliant		
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	0.920	0.920	ASTM D792
Molding Shrinkage - Flow	0.020 to 0.026 in/in	2.0 to 2.6 %	ASTM D955
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Stress [2, 3] (300% Strain, 73°F (23°C))	300 psi	2.07 MPa	ASTM D412
Tensile Strength [2, 3] (Break, 73°F (23°C))	504 psi	3.47 MPa	ASTM D412
Tensile Elongation [2, 3] (Break, 73°F (23°C))	580 %	580 %	ASTM D412
Compression Set (73°F (23°C))	22 %	22 %	ASTM D395
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Durometer Hardness (Shore A, 10 sec)	42	42	ASTM D2240
Fill Analysis	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Apparent Viscosity			ASTM D3835
392°F (200°C), 11200 sec^-1	11.7 Pa·s	11.7 Pa·s	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Rear Temperature	330 to 370 °F	166 to 188 °C
Middle Temperature	360 to 410 °F	182 to 210 °C
Front Temperature	370 to 440 °F	188 to 227 °C
Nozzle Temperature	380 to 440 °F	193 to 227 °C
Processing (Melt) Temp	370 to 430 °F	188 to 221 °C
Mold Temperature	70 to 90 °F	21 to 32 °C
Screw Speed	75 to 125 rpm	75 to 125 rpm

Injection Notes

Typical colorant letdown ratios are 50:1 to 25:1 - loading levels should be as low as possible to minimize the effect on adhesion. A high color match consistency can be obtained by the use of precolored compounds available from GLS. Concentrates based on PVC should not be used. The final determination of color concentrate suitability should be determined by customer trials. Contact GLS for more information on appropriate color concentrate base resins.

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

Versaflex CE 3120-40N should not be left in the barrel for extended idle periods (greater than 5 minutes).

Injection Speed: 1 to 5 in/sec
2nd Stage - Hold Pressure: 40% to 60% of Boost
Hold Time (Thick Part): 4 to 6 sec
Hold Time (Thin Part): 1 to 3 sec

Notes

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

[2] Die C

[3] 2 hr

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