Versaflex™ SP 2820-55N

Thermoplastic Elastomer

Key Characteristics

Product Description		
The Versaflex SP 2820-55N is designed for improved tear strength.		
General		
Material Status	• Commercial: Active	
Regional Availability	• North America	
Uses	• Soft Touch Grips	
Appearance	• Natural Color	
Processing Method	• Extrusion	• Injection Molding

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	0.910	0.910	ASTM D792
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Stress (100% Strain)	392 psi	2.70 MPa	ASTM D412
Tensile Stress [2, 3] (300% Strain, 73°F (23°C))	650 psi	4.48 MPa	ASTM D412
Tensile Strength (Break)	1090 psi	7.50 MPa	ASTM D412
Tensile Elongation [2, 3] (Break, 73°F (23°C))	620 %	620 %	ASTM D412
Tear Strength	192 lbf/in	33.6 kN/m	ASTM D624
Compression Set			ASTM D395
73°F (23°C)	11 %	11 %	
158°F (70°C)	38 %	38 %	
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Durometer Hardness (Shore A, 10 sec)	55	55	ASTM D2240
Fill Analysis	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Apparent Viscosity			ASTM D3835
392°F (200°C), 1340 sec^-1	153 Pa·s	153 Pa·s	
392°F (200°C), 11200 sec^-1	28.3 Pa·s	28.3 Pa·s	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Suggested Max Regrind	20 %	20 %
Rear Temperature	330 to 370 °F	166 to 188 °C
Middle Temperature	360 to 420 °F	182 to 216 °C
Front Temperature	370 to 440 °F	188 to 227 °C
Nozzle Temperature	400 to 470 °F	204 to 243 °C
Processing (Melt) Temp	380 to 460 °F	193 to 238 °C
Mold Temperature	50 to 80 °F	10 to 27 °C
Back Pressure	0.00 to 80.0 psi	0.00 to 0.552 MPa
Screw Speed	80 to 120 rpm	80 to 120 rpm

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Injection Notes

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

Regrind levels up to 20% can be used with Versaflex SP 2820-55N with minimal property loss, provided that the regrind is free of contamination. To minimize losses during molding, the melt temperature should remain as low as possible. The final determination of regrind effectiveness should be determined by the customer.

Versaflex SP 2820-55N has excellent melt stability. Maximum residence times may vary, depending on the size of the barrel. Generally, the barrel should be emptied if it is idle for periods of 8 - 10 minutes or longer.

Drying is not Required

Injection Speed: 1 to 4 in/sec
Hold Pressure: 40-60% of peak injection pressure
Hold Time (Thick Part): 2 to 7 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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