Versaflex™ G 7400-50 N

Thermoplastic Elastomer

Key Characteristics

Product Description

Versaflex™ G 7400-50 N is an easy processing, general purpose TPE designed for a wide variety of applications, and may be appropriate where FDA and EU 10/2011 compliances are required.

- Non-Slip Grip
- Overmold Adhesion to Polypropylene
- Soft Touch, Rubbery Feel

General

Material Status	• Commercial: Active		
Regional Availability	• Europe		
Features	• General Purpose • Good Colorability	• Good Flow • Good Processability	• Good Processing Stability • Recyclable Material
Uses	• Consumer Applications • Flexible Grips • Gaskets	• General Purpose • Household Goods • Overmolding	• Seals • Soft Touch Applications • Sporting Goods
Agency Ratings	• EU 10/2011 [1]	• FDA 21 CFR 177.1210 [1]	
RoHS Compliance	• RoHS Compliant		
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties [2]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density (73°F (23°C), Natural)	1.20 g/cm³	1.20 g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (190°C/5.0 kg)	140 cm³/10min	140 cm³/10min	ISO 1133
Molding Shrinkage - Flow (0.0787 in (2.00 mm))	1.3 to 2.1 %	1.3 to 2.1 %	ISO 294-4
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Stress [3]			DIN 53504-S2
100% Strain, 73°F (23°C), 0.0787 in (2.00 mm)	174 psi	1.20 MPa	
Tensile Stress [3]			DIN 53504-S2
300% Strain, 73°F (23°C), 0.0787 in (2.00 mm)	232 psi	1.60 MPa	
Tensile Strength [3]			DIN 53504-S2
Break, 73°F (23°C), 0.0787 in (2.00 mm)	798 psi	5.50 MPa	
Tensile Elongation [3]			DIN 53504-S2
Break, 73°F (23°C), 0.0787 in (2.00 mm)	900 %	900 %	
Tear Strength			ISO 34-1
73°F (23°C), 0.0787 in (2.00 mm)	111 lbf/in	19.5 kN/m	
Compression Set			ISO 815
73°F (23°C), 72 hr	23 %	23 %	
158°F (70°C), 22 hr	40 %	40 %	
212°F (100°C), 22 hr	69 %	69 %	

Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness [4]			ISO 7619
Shore A, 10 sec, 73°F (23°C), Injection Molded	50	50	
Flammability	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Flame Rating (0.06 in (1.5 mm))	HB	HB	UL 94
Fill Analysis	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Apparent Viscosity			ASTM D3835
392°F (200°C), 11200 sec^-1	8.20 Pa·s	8.20 Pa·s	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Suggested Max Regrind	20 %	20 %
Rear Temperature	320 to 370 °F	160 to 188 °C
Middle Temperature	350 to 380 °F	177 to 193 °C
Front Temperature	370 to 410 °F	188 to 210 °C
Nozzle Temperature	370 to 420 °F	188 to 216 °C
Mold Temperature	60 to 100 °F	16 to 38 °C
Back Pressure	0.00 to 120 psi	0.00 to 0.827 MPa
Screw Speed	40 to 100 rpm	40 to 100 rpm

Notes

[1] Product rating may be influenced by end product design and/or conditions of use. Please contact GLS Thermoplastic Elastomers for information addressing EU (EU, 10/2011) and FDA (21 CFR 177.1210) compliance.

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

[3] 7.9 in/min (200 mm/min)

[4] ± 5 Sh A