Dynaflex™ G7702-9001-02

Thermoplastic Elastomer

Key Characteristics

Product Description

Dynaflex™ G7702-9001-02 is a performance TPE designed for a wide variety of applications.

- Excellent Dimensional Stability
- Excellent Heat Stability
- High Resilience
- Low Compression Set
- Overmold Adhesion to Polypropylene

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Latin America • North America	
Features	• Good Dimensional Stability • Good Thermal Stability	• Low Compression Set • Resilient	
Uses	• Appliance Components • Automotive Applications	• Gaskets • Lawn and Garden Equipment	• Overmolding • Seals
RoHS Compliance	• RoHS Compliant		
Automotive Specifications	• FMVSS 302		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.10	1.10	ASTM D792
Molding Shrinkage - Flow	0.014 to 0.020 in/in	1.4 to 2.0 %	ASTM D955
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Stress [2, 3] (100% Strain, 73°F (23°C))	140 psi	0.965 MPa	ASTM D412
Tensile Stress [2, 3] (300% Strain, 73°F (23°C))	390 psi	2.69 MPa	ASTM D412
Tensile Strength [2, 3] (Break, 73°F (23°C))	550 psi	3.79 MPa	ASTM D412
Tensile Elongation [2, 3] (Break, 73°F (23°C))	480 %	480 %	ASTM D412
Tear Strength	120 lbf/in	21.0 kN/m	ASTM D624
Compression Set			ASTM D395B
73°F (23°C), 22 hr	11 %	11 %	
158°F (70°C), 22 hr	22 %	22 %	
212°F (100°C), 22 hr	28 %	28 %	
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Durometer Hardness (Shore A, 10 sec)	37	37	ASTM D2240
Fill Analysis	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Apparent Viscosity			ASTM D3835
392°F (200°C), 11200 sec^-1	10.2 Pa·s	10.2 Pa·s	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Suggested Max Regrind	20 %	20 %
Rear Temperature	340 to 380 °F	171 to 193 °C
Middle Temperature	380 to 470 °F	193 to 243 °C
Front Temperature	400 to 490 °F	204 to 254 °C
Nozzle Temperature	420 to 490 °F	216 to 254 °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	25 to 100 rpm	25 to 100 rpm

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 Dynaflex™ G7702-9001-02 can 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.

Dynaflex™ G7702-9001-02 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 3 in/sec
1st Stage - Boost Pressure: 250 to 1000 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] Die C

[3] 2 hr

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