Dynaflex™ G7630-9 (Black)

Thermoplastic Elastomer

Key Characteristics

Product Description

Dynaflex™ G7630-9 (Black) is an easy processing, general purpose TPE designed for a wide variety of applications, including those where FDA compliance is required. *Made with Kraton® Polymer

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

General			
Material Status	• Commercial: Active		
Regional Availability	• Asia Pacific		
Features	• General Purpose • Good Flow	• Good Processability • Good Processing Stability	
Uses	• Consumer Applications • Flexible Grips • Gaskets	• General Purpose • Overmolding • Seals	• Soft Touch Applications • Sporting Goods
Agency Ratings	• FDA 21 CFR 177.1210 [1]		
RoHS Compliance	• RoHS Compliant		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

Technical Properties [2]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.05	1.05	ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	31 g/10 min	31 g/10 min	ASTM D1238
Molding Shrinkage - Flow	0.013 to 0.021 in/in	1.3 to 2.1 %	ASTM D955
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Stress [3, 4] (100% Strain, 73°F (23°C))	100 psi	0.689 MPa	ASTM D412
Tensile Stress [3, 4] (300% Strain, 73°F (23°C))	240 psi	1.65 MPa	ASTM D412
Tensile Strength [3, 4] (Break, 73°F (23°C))	475 psi	3.28 MPa	ASTM D412
Tensile Elongation [3, 4] (Break, 73°F (23°C))	650 %	650 %	ASTM D412
Tear Strength	85.0 lbf/in	14.9 kN/m	ASTM D624
Compression Set (73°F (23°C), 22 hr)	13 %	13 %	ASTM D395B
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Durometer Hardness (Shore A, 10 sec)	29	29	ASTM D2240
Fill Analysis	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Apparent Viscosity			ASTM D3835
392°F (200°C), 11200 sec^-1	6.40 Pa·s	6.40 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

Injection Notes

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

Regrind levels up to 20% can be used with Dynaflex™ G7630-9 (Black) 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™ G7630-9 (Black) 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: 200 to 900 psi
2nd Stage - Hold Pressure: 50% of Boost
Hold Time (Thick Part): 3 to 10 sec
Hold Time (Thin Part): 1 to 3 sec

Notes

[1] Please contact GLS Thermoplastic Elastomers for a copy of the FDA compliance letter.

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

[3] Die C

[4] 2 hr

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