

# Dynaflex® G2745

## Thermoplastic Elastomer

### GLS Thermoplastic Elastomers



Prospector

#### Product Description

Dynaflex® G2745 is designed for injection molding, however, can also be process by extrusion and injection molding.

- Easy Processing
- Excellent Colorability
- Excellent Ozone Resistance and Heat Aging

#### General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • North America	• South America
Features	• Good Colorability • Good Heat Aging Resistance	• Good Processability • Ozone Resistant	
Agency Ratings	• FDA Unspecified Rating		
Appearance	• Clear/Transparent		
Processing Method	• Extrusion	• Injection Molding	

Physical	Nominal Value	Unit	Test Method
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Specific Gravity	0.888	g/cm <sup>3</sup>	ASTM D792
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Elastomers	Nominal Value	Unit	Test Method
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Tensile Stress <sup>2, 3</sup> (300% Strain, 23°C)	2.76	MPa	ASTM D412
Tensile Strength <sup>2, 3</sup> (Break, 23°C)	5.10	MPa	ASTM D412
Tensile Elongation <sup>2, 3</sup> (Break, 23°C)	600	%	ASTM D412

Hardness	Nominal Value	Unit	Test Method
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Durometer Hardness (Shore A, 10 sec)	42		ASTM D2240
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Fill Analysis	Nominal Value	Unit	Test Method
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Apparent Viscosity			ASTM D3835
200°C, 1340 sec <sup>-1</sup>	35.0	Pa·s	
200°C, 11200 sec <sup>-1</sup>	9.90	Pa·s	

Injection	Nominal Value	Unit
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Suggested Max Regrind	20	%
Rear Temperature	196 to 204	°C
Front Temperature	204 to 216	°C
Nozzle Temperature	216 to 232	°C
Mold Temperature	23.9 to 65.6	°C
Back Pressure	0.00 to 0.552	MPa

#### Injection Notes

Color concentrates with polypropylene (PP), ethylene vinyl acetate (EVA), or polyethylene (PE) carrier are most suitable for coloring Dynaflex® G2745. Improved color dispersion can be achieved by using higher melt flow concentrates (with a melt flow from 25 - 40 g/10 min). Typical loadings for color concentrates are 1% to 5% by weight. Liquid color can be used, but mineral oil based carriers may have a significant effect on the final hardness value. Concentrates based on PVC should not be used. A high color match consistency can be obtained by using precolored compounds available from GLS. The final determination of color concentrate suitability should be determined by customer trials.

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® G2745 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® G2745 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: 0.5 to 3 in/sec  
1st Stage - Boost Pressure: 400 to 900 psi

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> Die C

<sup>3</sup> 2 hr

