

# Dynaflex™ G2730

## Thermoplastic Elastomer

### Key Characteristics

#### Product Description

Dynaflex™ G2730 is a soft, easy processing compound.

- Excellent Weatherability
- High Resilience
- Soft, Rubbery Feel

#### General

Material Status	• Commercial: Active
Regional Availability	• Asia Pacific
Features	• Good Weather Resistance • Resilient
Uses	• Consumer Applications • Personal Care • Overmolding • Soft Touch Applications
Agency Ratings	• FDA 21 CFR 177.1210 <sup>1</sup>
RoHS Compliance	• RoHS Compliant
Appearance	• Translucent
Forms	• Pellets
Processing Method	• Extrusion • Injection Molding

### Technical Properties<sup>2</sup>

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	0.890	0.890	ASTM D792
Elastomers	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Stress <sup>3,4</sup> (300% Strain, 73°F (23°C))	175 psi	1.21 MPa	ASTM D412
Tensile Strength <sup>3,4</sup> (Break, 73°F (23°C))	440 psi	3.03 MPa	ASTM D412
Tensile Elongation <sup>3,4</sup> (Break, 73°F (23°C))	650 %	650 %	ASTM D412
Compression Set (73°F (23°C), 22 hr)	11 %	11 %	ISO 815
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness (Shore A, 10 sec)	25	25	ASTM D2240
Fill Analysis	Typical Value (English)	Typical Value (SI)	Test Method
Apparent Viscosity			ASTM D3835
392°F (200°C), 1340 sec <sup>-1</sup>	30.7 Pa·s	30.7 Pa·s	
392°F (200°C), 11200 sec <sup>-1</sup>	5.90 Pa·s	5.90 Pa·s	

### Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Suggested Max Regrind	20 %	20 %
Rear Temperature	380 to 400 °F	193 to 204 °C
Front Temperature	400 to 420 °F	204 to 216 °C
Nozzle Temperature	420 to 450 °F	216 to 232 °C
Processing (Melt) Temp	355 to 455 °F	179 to 235 °C
Mold Temperature	75 to 150 °F	24 to 66 °C
Back Pressure	100 to 200 psi	0.689 to 1.38 MPa

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**Injection Notes**

Color concentrates with polypropylene (PP), ethylene vinyl acetate (EVA), or low density polyethylene (LDPE) carriers are most suitable for coloring Dynaflex™ G2730. 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 an 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™ G2730 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™ G2730 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 5 in/sec  
 1st Stage - Boost Pressure: 500 to 700 psi

**Notes**

<sup>1</sup> Please contact GLS Thermoplastic Elastomers for a copy of the FDA compliance letter.

<sup>2</sup> Typical values are not to be construed as specifications.

<sup>3</sup> Die C

<sup>4</sup> 2 hr

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