

Dynaflex™ G2711C

Thermoplastic Elastomer

Key Characteristics

Product Description

Dynaflex™ G2711C is an easy process compound designed for injection molding and extrusion applications that require FDA compliance.

- Excellent Colorability
- Overmold Adhesion to Polypropylene
- Rubbery Feel
- Soft Touch

General

Material Status	• Commercial: Active		
Regional Availability	• Asia Pacific		
Features	• Good Colorability	• Recyclable Material	
	• Ozone Resistant	• UV Resistant	
Uses	• Consumer Applications	• Personal Care	
	• Overmolding	• Soft Touch Applications	
Agency Ratings	• FDA Unspecified Rating ¹		
RoHS Compliance	• RoHS Compliant		
Appearance	• Translucent		
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

Technical Properties ²

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 ^{3, 4} (300% Strain, 73°F (23°C))	370 psi	2.55 MPa	ASTM D412
Tensile Strength ^{3, 4} (Break, 73°F (23°C))	778 psi	5.36 MPa	ASTM D412
Tensile Elongation ^{3, 4} (Break, 73°F (23°C))	640 %	640 %	ASTM D412
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness (Shore A, 10 sec)	43	43	ASTM D2240
Fill Analysis	Typical Value (English)	Typical Value (SI)	Test Method
Apparent Viscosity 392°F (200°C), 11200 sec ⁻¹	12.8 Pa·s	12.8 Pa·s	ASTM D3835

Additional Information

Dynaflex™ G2711C can be recycled as a filler or impact modifier for polyolefins, or can be recycled by grinding and reintroduction to the molding process. Similar to PP or PE recycling process, if separated appropriately, it can be recycled many times.

Municipality waste stream recycle code is "7" which is designated for "Other".

Please contact GLS Thermoplastic Elastomers for a copy of our Recyclability Compliance letter.

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Suggested Max Regrind	20 %	20 %
Rear Temperature	300 to 370 °F	149 to 188 °C
Middle Temperature	360 to 380 °F	182 to 193 °C
Front Temperature	370 to 440 °F	188 to 227 °C
Nozzle Temperature	370 to 440 °F	188 to 227 °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 75 rpm	25 to 75 rpm

Injection Notes

Color concentrates with polypropylene (PP), ethylene vinyl acetate (EVA), or polyethylene (PE) carrier are most suitable for coloring Dynaflex™ G2711C. 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™ G2711C 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™ G2711C 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: 400 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 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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