

## PolyOne Dynaflex™ G2701C Thermoplastic Elastomer (TPE)

Category : Polymer , Thermoplastic , Elastomer, TPE

### Material Notes:

Dynaflex™ G2701C is an easy processing TPE designed for injection molding and extrusion applications that require FDA compliance. - Adhesion to Polypropylene - Excellent Colorability - Rubbery Feel - Soft Touch Dynaflex™ G2701C 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. Color concentrates with polypropylene (PP), ethylene vinyl acetate (EVA), or low density polyethylene (LDPE) carriers are most suitable for coloring Dynaflex™ G2701C. 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™ G2701C 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™ G2701C 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: 350 to 650 psi 2nd Stage - Hold Pressure: 50% of Boost Hold Time (Thick Part): 4 to 10 sec Hold Time (Thin Part): 1 to 3 sec Information provided by PolyOne

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_PolyOne-Dynaflex-G2701C-Thermoplastic-Elastomer-TPE.php](http://www.lookpolymers.com/polymer_PolyOne-Dynaflex-G2701C-Thermoplastic-Elastomer-TPE.php)

Physical Properties	Metric	English	Comments
Specific Gravity	0.898 g/cc	0.898 g/cc	ASTM D792
Viscosity	10500 cP	10500 cP	ASTM D3835
	@Shear Rate 11200 1/s, Temperature 200 °C	@Shear Rate 11200 1/s, Temperature 392 °F	
	42800 cP	42800 cP	ASTM D3835
	@Shear Rate 1340 1/s, Temperature 200 °C	@Shear Rate 1340 1/s, Temperature 392 °F	

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	65	65	10 sec; ASTM D2240
Tensile Strength at Break	6.21 MPa	901 psi	Die C2 hr; ASTM D412
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Mechanical Properties Tensile Stress	4.45 MPa Metric	645 psi English	Comments Die C2 hr; ASTM D412
	@Strain 300 %, Temperature 23.0 °C	@Strain 300 %, Temperature 73.4 °F	
Elongation at Break	600 % @Temperature 23.0 °C	600 % @Temperature 73.4 °F	Die C2 hr; ASTM D412

Processing Properties	Metric	English	Comments
Rear Barrel Temperature	132 - 171 °C	270 - 340 °F	
Middle Barrel Temperature	154 - 193 °C	309 - 379 °F	
Front Barrel Temperature	168 - 207 °C	334 - 405 °F	
Nozzle Temperature	168 - 207 °C	334 - 405 °F	
Mold Temperature	15.6 - 26.7 °C	60.1 - 80.1 °F	
Back Pressure	0.345 - 1.03 MPa	50.0 - 149 psi	
Screw Speed	25 - 75 rpm	25 - 75 rpm	

Descriptive Properties	Value	Comments
Agency Ratings	FDA 21 CFR 177.1210	Please contact GLS Thermoplastic Elastomers for a copy of the FDA compliance letter.
Appearance	Clear/Transparent	
Features	Good Colorability	
	Good Processability	
	Good Stability	
	Recyclable Material	
Forms	Pellets	
Generic Material	TPE	
Generic Name	Thermoplastic Elastomer (TPE)	
Manufacturer / Supplier	GLS Thermoplastic Elastomers	
Processing Method	Extrusion	
	Injection Molding	
Regional Availability	Asia Pacific	

Descriptive Properties	Value	Comments
Suggested Max Regrind	20%	
Uses	Consumer Applications	
	Overmolding	
	Personal Care	
	Transparent or Translucent Parts	

## Contact Songhan Plastic Technology Co.,Ltd.

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