

PolyOne Dynaflex™ G6703-0001 Thermoplastic Elastomer (TPE)

Category : Polymer , Thermoplastic , Elastomer, TPE

Material Notes:

Dynaflex™ G6703-0001 is an easy processing compound designed for use in injection molding applications where extremely soft feel properties are desired. - Excellent Colorability - Good Ozone and UV Stability - High Elongation - Tactile Feel - Ultra Soft TouchColor concentrates with polypropylene (PP), ethylene vinyl acetate (EVA), or low density polyethylene (PE) carriers are most suitable for coloring Dynaflex™ G6703-1000. 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, however 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™ G6703-0001 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™ G6703-0001 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: 125 to 700 psi 2nd Stage - Hold Pressure: 30% of Boost Hold Time (Thick Part): 3 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-G6703-0001-Thermoplastic-Elastomer-TPE.php

Physical Properties	Metric	English	Comments
Specific Gravity	0.898 g/cc	0.898 g/cc	ASTM D792
Viscosity	5200 cP	5200 cP	ASTM D3835
	@Shear Rate 11200 1/s, Temperature 200 °C	@Shear Rate 11200 1/s, Temperature 392 °F	
Linear Mold Shrinkage, Flow	0.058 - 0.065 cm/cm	0.058 - 0.065 in/in	ASTM D955
Linear Mold Shrinkage, Transverse	0.0020 - 0.0060 cm/cm	0.0020 - 0.0060 in/in	ASTM D955
Melt Flow	4.0 g/10 min	4.0 g/10 min	ASTM D1238
	@Load 2.16 kg, Temperature 190 °C	@Load 4.76 lb, Temperature 374 °F	
	75 g/10 min	75 g/10 min	ASTM D1238
	@Load 5.00 kg, Temperature 200 °C	@Load 11.0 lb, Temperature 392 °F	

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	3.0	3.0	10 sec; ASTM D2240

Mechanical Properties	3.79 MPa Metric	550 psi English	Comments
Tensile Strength at Break	@Temperature 23.0 °C	@Temperature 73.4 °F	Die C2 hr; ASTM D412
Tensile Stress	0.138 MPa	20.0 psi	Die C2 hr; ASTM D412
	@Strain 100 %, Temperature 23.0 °C	@Strain 100 %, Temperature 73.4 °F	
	0.345 MPa	50.0 psi	Die C2 hr; ASTM D412
	@Strain 300 %, Temperature 23.0 °C	@Strain 300 %, Temperature 73.4 °F	
Elongation at Break	1100 %	1100 %	Die C2 hr; ASTM D412
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Tear Strength	7.01 kN/m	40.0 pli	ASTM D624
Compression Set	8.0 %	8.0 %	ASTM D395B
	@Temperature 23.0 °C, Time 79200 sec	@Temperature 73.4 °F, Time 22.0 hour	

Processing Properties	Metric	English	Comments
Rear Barrel Temperature	143 - 171 °C	289 - 340 °F	
Middle Barrel Temperature	149 - 177 °C	300 - 351 °F	
Front Barrel Temperature	177 - 188 °C	351 - 370 °F	
Nozzle Temperature	177 - 227 °C	351 - 441 °F	
Mold Temperature	15.6 - 26.7 °C	60.1 - 80.1 °F	
Back Pressure	0.000 - 0.758 MPa	0.000 - 110 psi	
Screw Speed	40 - 100 rpm	40 - 100 rpm	

Descriptive Properties	Value	Comments
Agency Ratings	FDA Unspecified Rating	
Appearance	Translucent	
Features	Good Colorability	
	Good UV Resistance	
	High Elongation	
	Ozone Resistant	
Forms	Pellets	

Descriptive Properties	Value	Comments
Generic Name	Thermoplastic Elastomer (TPE)	
Manufacturer / Supplier	GLS Thermoplastic Elastomers	
Processing Method	Injection Molding	
Regional Availability	Africa & Middle East	
	Asia Pacific	
	Europe	
	North America	
	South America	
RoHS Compliance	RoHS Compliant	
Suggested Max Regrind	20%	
Uses	Consumer Applications	
	Soft Touch Applications	
	Toys	
	Transparent or Translucent Parts	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China