

## PolyOne Dynaflex™ G7410-1000-00 Thermoplastic Elastomer (TPE)

Category: Polymer, Thermoplastic, Elastomer, TPE

## **Material Notes:**

Dynaflex™ G7410-1000-00 is an easy processing, high performance compound designed for use in applications requiring a tough, durable material. - Excellent Colorability - Excellent Heat Stability - Overmold Adhesion to Polypropylene - Suitable For Outdoor UseDynaflex™ G7410-1000-00 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 (PE) carriers are most suitable for coloring Dynaflex™ G7410-1000-00. 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™ G7410-1000-00 with minimal property loss, provided that the regrind is free of contamination. The final determination of regrind effectiveness should be determined by the customer. Dynaflex™ G7410-1000-00 has excellent melt stability. Empty the barrel for idle periods of thirty (30) minutes or longer. Drying is not Required Injection Speed: 1 to 5 in/sec 1st Stage - Boost Pressure: 250 to 650 psi 2nd Stage - Hold Pressure: 70% of Boost Hold Time (Thick Part): 4 to 10 sec Hold Time (Thin Part): 1 to 3 secInformation provided by PolyOne

## Order this product through the following link:

http://www.lookpolymers.com/polymer\_PolyOne-Dynaflex-G7410-1000-00-Thermoplastic-Elastomer-TPE.php

Physical Properties	Metric	English	Comments
Specific Gravity	0.898 g/cc	0.898 g/cc	ASTM D792
	14800 cP	14800 cP	
Viscosity	@Shear Rate 11200 1/s, Temperature 200 °C	@Shear Rate 11200 1/s, Temperature 392 °F	ASTM D3835
Linear Mold Shrinkage, Flow	0.018 - 0.022 cm/cm	0.018 - 0.022 in/in	ASTM D955
Melt Flow	2.0 g/10 min	2.0 g/10 min	
	@Load 5.00 kg, Temperature 200 °C	@Load 11.0 lb, Temperature 392 °F	ASTM D1238

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	68	68	10 sec; ASTM D2240
Tensile Strength at Break	5.17 MPa	750 psi	Die C2 hr; ASTM D412
	@Temperature 23.0 °C	@Temperature 73.4 °F	



Mechanical Properties	7 69 MPa Metric	290 pel English	Comments
	@Strain 100 %, Temperature 23.0 °C	@Strain 100 %, Temperature 73.4 °F	
	3.55 MPa	515 psi	
	@Strain 300 %, Temperature 23.0 °C	@Strain 300 %, Temperature 73.4 °F	Die C2 hr; ASTM D412
Elongation at Break	500 %	500 %	Die CO her ACTNA DA10
	@Temperature 23.0 °C	@Temperature 73.4 °F	Die C2 hr; ASTM D412
Tear Strength	28.0 kN/m	160 pli	ASTM D624
Compression Set	19 %	19 %	
	@Temperature 23.0 °C, Time 79200 sec	@Temperature 73.4 °F, Time 22.0 hour	ASTM D395B

Processing Properties	Metric	English	Comments
Rear Barrel Temperature	166 - 204 °C	331 - 399 °F	
Middle Barrel Temperature	177 - 216 °C	351 - 421 °F	
Front Barrel Temperature	182 - 221 °C	360 - 430 °F	
Nozzle Temperature	182 - 221 °C	360 - 430 °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
Appearance	Natural Color	
Features	Good Colorability	
	Good Thermal Stability	
	Recyclable Material	
Forms	Pellets	
Generic Material	TPE	
Generic Name	Thermoplastic Elastomer (TPE)	
Manufacturer / Supplier	GLS Thermoplastic Elastomers	
Processing Method	Extrusion	



Descriptive Properties	Value on Molding	Comments
Regional Availability	Africa & Middle East	
	Asia Pacific	
	Europe	
	North America	
	South America	
RoHS Compliance	RoHS Compliant	
Suggested Max Regrind	20%	
Uses	Outdoor Applications	
	Overmolding	

## **Contact Songhan Plastic Technology Co.,Ltd.**

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