

## PolyOne Dynaflex™ G7930-1001-00 Thermoplastic Elastomer (TPE)

Category: Polymer, Thermoplastic, Elastomer, TPE

## **Material Notes:**

Dynaflex™ G7930-1001-00 is an easy processing, general purpose TPE designed for a wide variety of applications, including those where FDA compliance is required. - Non-Slip Grip - Overmold Adhesion to Polypropylene - Soft Touch, Rubbery FeelDynaflex™ G7930-1001-00 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™ G7930-1001-00. 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 polypopylene (PP). Regrind levels up to 20% can be used with Dynaflex™ G7930-1001-00 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™ G7930-1001-00 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: 200 to 900 psi 2nd Stage - Hold Pressure: 50% of Boost Hold Time (Thick Part): 3 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-G7930-1001-00-Thermoplastic-Elastomer-TPE.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.05 g/cc	1.05 g/cc	ASTM D792
	6400 cP	6400 cP	
Viscosity	@Shear Rate 11200 1/s, Temperature 200 °C	@Shear Rate 11200 1/s, Temperature 392 °F	ASTM D3835
Linear Mold Shrinkage, Flow	0.013 - 0.021 cm/cm	0.013 - 0.021 in/in	ASTM D955
	30 g/10 min	30 g/10 min	
Melt Flow	@Load 5.00 kg, Temperature 200 °C	@Load 11.0 lb, Temperature 392 °F	ASTM D1238

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	30	30	10 sec; ASTM D2240
	3.31 MPa	480 psi	
Tensile Strength at Break			Die C2 hr; ASTM D412



Mechanical Properties	@Temperature 23.0 °C Metric	@Temperature 73.4 °F English	Comments	
	0.896 MPa	130 psi		
Tensile Stress	@Strain 100 %, Temperature 23.0 °C	@Strain 100 %, Temperature 73.4 °F	Die C2 hr; ASTM D412	
	1.38 MPa	200 psi		
	@Strain 300 %, Temperature 23.0 °C	@Strain 300 %, Temperature 73.4 °F	Die C2 hr; ASTM D412	
Florestion at Dysol.	650 %	650 %	Die C2 hr; ASTM D412	
Elongation at Break	@Temperature 23.0 °C	@Temperature 73.4 °F		
Tear Strength	17.5 kN/m 99.9 pli		ASTM D624	
	13 %	13 %	ASTM D395B	
Compression Set	@Temperature 23.0 °C, Time 79200 sec	@Temperature 73.4 °F, Time 22.0 hour		

Thermal Properties	Metric	English	Comments
Flammability, UL94	НВ	HB UL 94	
	@Thickness 1.50 mm	@Thickness 0.0591 in	OL 94

Processing Properties	Metric	English	Comments
Rear Barrel Temperature	160 - 188 °C	320 - 370 °F	
Middle Barrel Temperature	177 - 193 °C	351 - 379 °F	
Front Barrel Temperature	188 - 210 °C	370 - 410 °F	
Nozzle Temperature	188 - 216 °C	370 - 421 °F	
Mold Temperature	15.6 - 37.8 °C	60.1 - 100 °F	
Back Pressure	0.000 - 0.827 MPa	0.000 - 120 psi	
Screw Speed	40 - 100 rpm	40 - 100 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.
	UL 94 .QMFZ2.E76261	
Appearance	Natural Color	
Automotive Specifications	FMVSS 302	



Descriptive Properties	General Purpose Value	Comments
	Good Colorability	
	Good Flow	
	Good Processability	
	Good Processing Stability	
	Recyclable Material	
Forms	Pellets	
Generic Material	TPE	
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	
	Flexible Grips	
	Gaskets	
	General Purpose	
	Household Goods	
	Overmolding	
	Seals	
	Soft Touch Applications	
	Sporting Goods	



**Descriptive Properties** 

Value

Comments

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

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