

## PolyOne Dynaflex™ G7950-1 NSFG Thermoplastic Elastomer (TPE)

Category : Polymer , Thermoplastic , Elastomer, TPE

### Material Notes:

Dynaflex™ G7950-1 NSFG is a NSF 51 (food equipment) approved material suitable for a wide variety of applications. -NSF 51 approved - FDA (see Notes) -Overmold Adhesion to Polypropylene -Soft Touch, Rubbery Feel Dynaflex™ G7950-1 NSFG 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™ G7950-1 NSFG. 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. Concentrates based on PVC should not be used. 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™ G7950-1 NSFG 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™ G7950-1 NSFG 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: 250 to 800 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-G7950-1-NSFG-Thermoplastic-Elastomer-TPE.php](http://www.lookpolymers.com/polymer_PolyOne-Dynaflex-G7950-1-NSFG-Thermoplastic-Elastomer-TPE.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.18 g/cc	1.18 g/cc	ASTM D792
Viscosity	10000 cP	10000 cP	ASTM D3835
	@Shear Rate 11200 1/s, Temperature 200 °C	@Shear Rate 11200 1/s, Temperature 392 °F	
Linear Mold Shrinkage, Flow	0.013 - 0.019 cm/cm	0.013 - 0.019 in/in	ASTM D955
Melt Flow	3.0 g/10 min	3.0 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	50	50	10 sec; ASTM D2240
Tensile Strength at Break	4.55 MPa	660 psi	Die C2 hr; ASTM D412
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Mechanical Properties	1.72 MPa Metric	249 psi English	Comments
Tensile Stress	@Strain 100 %, Temperature 23.0 °C	@Strain 100 %, Temperature 73.4 °F	Die C2 hr; ASTM D412
	2.48 MPa	360 psi	Die C2 hr; ASTM D412
	@Strain 300 %, Temperature 23.0 °C	@Strain 300 %, Temperature 73.4 °F	
Elongation at Break	620 %	620 %	Die C2 hr; ASTM D412
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Tear Strength	21.0 kN/m	120 pli	ASTM D624
Compression Set	13 %	13 %	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	160 - 188 °C	320 - 370 °F	
Middle Barrel Temperature	177 - 199 °C	351 - 390 °F	
Front Barrel Temperature	193 - 216 °C	379 - 421 °F	
Nozzle Temperature	193 - 227 °C	379 - 441 °F	
Mold Temperature	15.6 - 37.8 °C	60.1 - 100 °F	
Back Pressure	0.000 - 1.03 MPa	0.000 - 149 psi	
Screw Speed	25 - 100 rpm	25 - 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.
	NSF 51	
Appearance	Natural Color	
Features	Good Colorability	
	Good Flow	
	Good Processability	
	Good Processing Stability	
	Recyclable Material	

<b>Forms Descriptive Properties</b>	<b>Pellets Value</b>	<b>Comments</b>
<b>Generic Material</b>	<b>TPE</b>	
<b>Generic Name</b>	<b>Thermoplastic Elastomer (TPE)</b>	
<b>Manufacturer / Supplier</b>	<b>GLS Thermoplastic Elastomers</b>	
<b>Processing Method</b>	<b>Injection Molding</b>	
<b>Regional Availability</b>	<b>Africa &amp; Middle East</b>	
	<b>Asia Pacific</b>	
	<b>Europe</b>	
	<b>North America</b>	
	<b>South America</b>	
<b>RoHS Compliance</b>	<b>RoHS Compliant</b>	
<b>Suggested Max Regrind</b>	<b>20%</b>	
<b>Uses</b>	<b>Consumer Applications</b>	
	<b>Flexible Grips</b>	
	<b>Gaskets</b>	
	<b>Household Goods</b>	
	<b>Kitchenware</b>	
	<b>Non-specific Food Applications</b>	
	<b>Overmolding</b>	
	<b>Seals</b>	
	<b>Soft Touch Applications</b>	
	<b>Sporting Goods</b>	

## Contact Songhan Plastic Technology Co.,Ltd.

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