

## PolyOne Dynaflex™ G7980-9001-02 Thermoplastic Elastomer (TPE)

Category: Polymer, Thermoplastic, Elastomer, TPE

## **Material Notes:**

Dynaflex™ G7980-9001-02 is an easy processing, general purpose TPE designed for a wide variety of applications, including those where FDA compliance is required. - Overmold Adhesion to Polypropylene - Rubbery Feel - Soft TouchDynaflex™ G7980-900-02 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.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™ G7980-9001-02 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™ G7980-9001-02 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: 350 to 900 psi 2nd Stage - Hold Pressure: 30% of Boost Hold Time (Thick Part): 3 to 10 sec Hold Time (Third Part): 1 to 3 secInformation provided by PolyOne

Order this product through the following link: http://www.lookpolymers.com/polymer\_PolyOne-Dynaflex-G7980-9001-02-Thermoplastic-Elastomer-TPE.php

Physical Properties	Metric	English	Comments	
Specific Gravity	1.18 g/cc	1.18 g/cc	ASTM D792	
	10900 cP	10900 cP		
Viscosity	@Shear Rate 11200 1/s, Temperature 200 °C	@Shear Rate 11200 1/s, Temperature 392 °F	ASTM D3835	
Linear Mold Shrinkage, Flow	0.0060 - 0.011 cm/cm	0.0060 - 0.011 in/in	ASTM D955	
	54 g/10 min	54 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	80	80	10 sec; ASTM D2240
Tensile Strength at Break	6.76 MPa	980 psi	Die C2 hr; ASTM D412
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	3.65 MPa	529 psi	
Tensile Stress	@Strain 100 %, Temperature 23.0 °C	@Strain 100 %, Temperature 73.4 °F	Die C2 hr; ASTM D412
	4.07 MPa	590 psi	



Mechanical Properties	Metricin 300 %,	English 300 %,	Comments	
	Temperature 23.0 °C	Temperature 73.4 °F		
Elongation at Break	620 %	620 %	Die C2 hr; ASTM D412	
	@Temperature 23.0 °C	@Temperature 73.4 °F		
Tear Strength	33.3 kN/m	190 pli	ASTM D624	
Compression Set	26 %	26 %		
	@Temperature 23.0 °C, Time 79200 sec	@Temperature 73.4 °F, Time 22.0 hour	ASTM D395B	

Thermal Properties	Metric	English	Comments	
Flammability, UL94	НВ	НВ	<b>UL 94</b> 591 in	
	@Thickness 1.50 mm	@Thickness 0.0591 in		

Processing Properties	Metric	English	Comments
Rear Barrel Temperature	166 - 188 °C	331 - 370 °F	
Middle Barrel Temperature	177 - 188 °C	351 - 370 °F	
Front Barrel Temperature	188 - 227 °C	370 - 441 °F	
Nozzle Temperature	188 - 227 °C	370 - 441 °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	Black	
Automotive Specifications	FMVSS 302	
Features	General Purpose	
	Good Flow	
	Good Processability	
	Good Processing Stability	



Descriptive Properties	Value able Material	Comments
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	
	Sporting Goods	

## **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