



Dynaflex™ G7930-9 NSFG

Thermoplastic Elastomer

Key Characteristics

Product Description

Dynaflex™ G7930-9 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

General

Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• General Purpose • Good Flow	• Good Processability • Good Processing Stability	• Recyclable Material
Uses	• Consumer Applications • Flexible Grips • Food Service Applications • Gaskets	• Household Goods • Kitchenware • Non-specific Food Applications • Overmolding	• Seals • Soft Touch Applications
Agency Ratings	• FDA 21 CFR 177.2600 ¹	• NSF 51	
RoHS Compliance	• RoHS Compliant		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties ²

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.05	1.05	ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	37 g/10 min	37 g/10 min	ASTM D1238
Molding Shrinkage - Flow	0.013 to 0.021 in/in	1.3 to 2.1 %	ASTM D955
Elastomers	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Stress ^{3, 4} (100% Strain, 73°F (23°C))	130 psi	0.896 MPa	ASTM D412
Tensile Stress ^{3, 4} (300% Strain, 73°F (23°C))	200 psi	1.38 MPa	ASTM D412
Tensile Strength ^{3, 4} (Break, 73°F (23°C))	480 psi	3.31 MPa	ASTM D412
Tensile Elongation ^{3, 4} (Break, 73°F (23°C))	650 %	650 %	ASTM D412
Tear Strength ⁴ (73°F (23°C))	100 lbf/in	17.5 kN/m	ASTM D624
Compression Set (73°F (23°C), 22 hr)	13 %	13 %	ASTM D395B
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness (Shore A, 10 sec)	30	30	ASTM D2240
Fill Analysis	Typical Value (English)	Typical Value (SI)	Test Method
Apparent Viscosity			ASTM D3835
392°F (200°C), 11200 sec ⁻¹	6.40 Pa·s	6.40 Pa·s	

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Additional Information

Dynaflex™ G7930-9 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.

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Suggested Max Regrind	20 %	20 %
Rear Temperature	320 to 350 °F	160 to 177 °C
Middle Temperature	350 to 370 °F	177 to 188 °C
Front Temperature	370 to 400 °F	188 to 204 °C
Nozzle Temperature	370 to 400 °F	188 to 204 °C
Mold Temperature	60.0 to 80.0 °F	15.6 to 26.7 °C
Back Pressure	50.0 to 150 psi	0.345 to 1.03 MPa
Screw Speed	25 to 75 rpm	25 to 75 rpm

Injection Notes

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™ G7930-9 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™ G7930-9 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 5 in/sec

1st Stage - Boost Pressure: 200 to 700 psi

2nd Stage - Hold Pressure: 50% of Boost

Hold Time (Thick Part): 4 to 10 sec

Hold Time (Thin Part): 1 to 3 sec

Notes

¹ Please contact GLS Thermoplastic Elastomers for a copy of the FDA compliance letter.

² Typical values are not to be construed as specifications.

³ Die C

⁴ 2 hr

CONTACT INFORMATION

Americas

United States - Avon Lake
+1 440 930 1000

United States - McHenry
+1 815 385 8500

Asia

China - Guangzhou
+86 20 8732 7260

China - Shenzhen
+86 755 2969 2888

China - Suzhou
+86 512 6823 24 38

China - Suzhou
+86 512 6265 2600

Hong Kong -
+852 2690 5332

Taiwan - Yonghe City,
+886 9396 99740, +886 2929 1849

Europe

Germany - Gaggenau
+49 7225 6802 0

Spain - Barbastro (Huesca)
+34 974 310 314



Beyond Polymers.

Better Business Solutions.™

www.polyone.com

PolyOne Americas

33587 Walker Road
Avon Lake, Ohio 44012
United States
+1 440 930 1000
+1 866 POLYONE

PolyOne Asia

No. 88 Guoshoujing Road
Z.J Hi-tech Park, Pudong
Shanghai, 201203, China
+86 21 5080 1188

PolyOne Europe

6 Giällewee
+352 269 050 35

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