



Synprene™ X15502011208

Thermoplastic Elastomer

Key Characteristics

Product Description

Synprene™ X15502011208 is a customized thermoplastic elastomer compound with NSF 51 registration.

- Overmold Adhesion to Polypropylene

General

Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Specialty Grade		
Uses	• Consumer Applications • Gaskets	• Household Goods • Overmolding	• Seals
Agency Ratings	• NSF STD-51		
RoHS Compliance	• RoHS Compliant		
Appearance	• Black	• Natural Color	
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.17	1.17	ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	2.0g/10 min	2.0g/10 min	ASTM D1238
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength (Break)	1000 psi	6.89 MPa	ASTM D638
Tensile Elongation (Break)	800 %	800 %	ASTM D638
Elastomers	Typical Value (English)	Typical Value (SI)	Test Method
Tear Strength	180 lbf/in	31.5 kN/m	ASTM D624
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness ² (Shore A, 10 sec)	69	69	ASTM D2240

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Suggested Max Regrind	20 %	20 %
Rear Temperature	330 to 370 °F	166 to 188 °C
Middle Temperature	350 to 370 °F	177 to 188 °C
Front Temperature	370 to 440 °F	188 to 227 °C
Nozzle Temperature	370 to 440 °F	188 to 227 °C
Mold Temperature	60 to 100 °F	16 to 38 °C
Back Pressure	0.00 to 120 psi	0.00 to 0.827 MPa
Screw Speed	40 to 100 rpm	40 to 100 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 Synprene™ X15502011208 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.

Synprene™ X15502011208 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 (Thin Part): 1 to 3 sec

Notes

¹ Typical values are not to be construed as specifications.

² ± 5 Shore A

The logo for PolyOne, featuring the word "PolyOne" in a stylized, italicized serif font with a horizontal line underneath.

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