

Versaflex™ OM 6059-9

Thermoplastic Elastomer

Key Characteristics

Product Description

Versaflex™ OM 6059-9 is specifically designed to bond to a variety of standard and modified nylon materials, including those which are glass-filled, heat stabilized and/or impact modified.

- Exceptional Colorability
- Outstanding Adhesion in Both Two-Shot and Insert Molding Processes
- Soft, Rubbery Grip
- Very Easy to Process

General

Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East	• Latin America	• North America
	• Asia Pacific		
Features	• Good Adhesion	• Good Colorability	• Good Processability
Agency Ratings	• UL 94		
Appearance	• Black		
Processing Method	• Injection Molding		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.10	1.10	ASTM D792
Elastomers	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Stress ^{2, 3} (100% Strain, 73°F (23°C))	254 psi	1.75 MPa	ASTM D412
Tensile Strength ^{2, 3} (Break, 73°F (23°C))	355 psi	2.45 MPa	ASTM D412
Tensile Elongation ^{2, 3} (Break, 73°F (23°C))	290 %	290 %	ASTM D412
Compression Set			ASTM D395B
72°F (22°C), 22 hr	14 %	14 %	
158°F (70°C), 22 hr	63 %	63 %	
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness (Shore A, 10 sec)	58	58	ASTM D2240
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating (0.06 in (1.5 mm))	HB	HB	UL 94
Fill Analysis	Typical Value (English)	Typical Value (SI)	Test Method
Apparent Viscosity			ASTM D3835
392°F (200°C), 1340 sec ⁻¹	75.0 Pa·s	75.0 Pa·s	
392°F (200°C), 11200 sec ⁻¹	16.9 Pa·s	16.9 Pa·s	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Suggested Max Regrind	20 %	20 %
Rear Temperature	360 to 400 °F	182 to 204 °C
Middle Temperature	470 to 510 °F	243 to 266 °C
Front Temperature	480 to 520 °F	249 to 271 °C
Nozzle Temperature	490 to 530 °F	254 to 277 °C

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Injection	Typical Value (English)	Typical Value (SI)
Processing (Melt) Temp	480 to 520 °F	249 to 271 °C
Mold Temperature	55 to 85 °F	13 to 29 °C
Back Pressure	0.00 to 80.0 psi	0.00 to 0.552 MPa
Screw Speed	80 to 120 rpm	80 to 120 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 Versaflex™ OM 6059-9 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.

Versaflex™ OM 6059-9 has good 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: 3 to 6 in/sec
 1st Stage - Boost Pressure: 300 to 800 psi
 2nd Stage - Hold Pressure: 0% of Boost
 Hold Time (Thick Part): 0 to 4 sec
 Hold Time (Thin Part): 0 to 3 sec

Notes

¹ Typical values are not to be construed as specifications.

² Die C

³ 2 hr

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