

# Versaflex™ OM 6160-9

## Thermoplastic Elastomer

### GLS Thermoplastic Elastomers



Prospector

#### Product Description

Versaflex® OM 6160-9 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.

New Product. Commercial specifications have not been established.

- Excellent Surface Appearance
- Outstanding Adhesion in Both Two-Shot and Insert Molding Processes
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- Soft, Rubbery Grip
- Very Easy to Process

#### General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • North America	• South America
Features	• Good Adhesion	• Good Processability	• Good Surface Finish
Appearance	• Black		
Processing Method	• Injection Molding		

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.11	g/cm <sup>3</sup>	ASTM D792
Melt Mass-Flow Rate (MFR)			ASTM D1238
190°C/2.16 kg	5.0	g/10 min	
200°C/5.0 kg	38	g/10 min	
Molding Shrinkage - Flow	1.7 to 2.1	%	ASTM D955

Elastomers	Nominal Value	Unit	Test Method
Tensile Stress <sup>2, 3</sup>			ASTM D412
100% Strain, 23°C	2.28	MPa	
300% Strain, 23°C	3.24	MPa	
Tensile Strength <sup>2, 3</sup> (Break, 23°C)	3.38	MPa	ASTM D412
Tensile Elongation <sup>2, 3</sup> (Break, 23°C)	380	%	ASTM D412
Tear Strength	24.5	kN/m	ASTM D624
Compression Set (23°C, 22.0 hr)	31	%	ASTM D395B

Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore A, 10 sec)	60		ASTM D2240

Flammability	Nominal Value	Unit	Test Method
Flame Rating - UL (1.50 mm)	HB		UL 94

Fill Analysis	Nominal Value	Unit	Test Method
Apparent Viscosity (200°C, 11200 sec <sup>-1</sup> )	22.0	Pa·s	ASTM D3835

Injection	Nominal Value	Unit
Suggested Max Regrind	20	%
Rear Temperature	166 to 193	°C
Middle Temperature	249 to 260	°C
Front Temperature	254 to 277	°C
Nozzle Temperature	254 to 277	°C
Processing (Melt) Temp	260 to 277	°C
Mold Temperature	15.6 to 37.8	°C
Back Pressure	0.00 to 0.689	MPa
Screw Speed	75 to 175	rpm

#### Injection Notes

Purge thoroughly before and after use of this product with a low flow (0.5 - 2.5 MFR) polyethylene (PE) or polpropylene (PP).

Regrind levels up to 20% can be used with Versaflex® OM 6160-9 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 6160-9 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: 2.5 to 5 in/sec  
1st Stage - Boost Pressure: 400 to 600 psi  
2nd Stage - Hold Pressure: 30% of Boost  
Hold Time (Thick Part): 3 to 6 sec  
Hold Time (Thin Part): 1 to 3 sec

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> Die C

<sup>3</sup> 2 hr