

Monprene® OM-10165

Teknor Apex Company - Thermoplastic Elastomer

Friday, June 30, 2017

General Information

Product Description

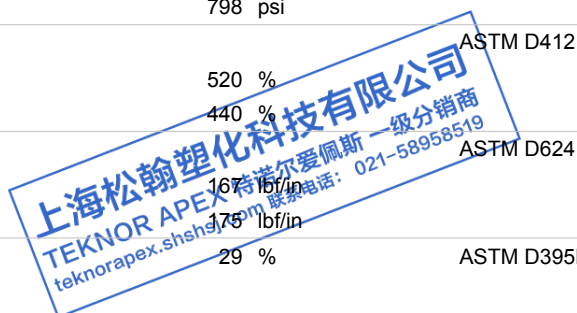
Monprene OM-10165 is a specialty thermoplastic elastomer, available in NAT, BLK, and colors, designed for overmolding applications like grips and anti-skid parts for a variety of consumer and industrial products. Monprene OM-10165 is a medium hardness, low density opaque grade that exhibits excellent adhesion to nylon.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Abrasion Resistant • Bondability • Chemical Resistant • Chemically Coupled • Good Adhesion • Good Colorability	• Good Moldability • Good Toughness • Low Density • Low Specific Gravity • Medium Flow • Medium Hardness	• Slip • Soft • Sunlight Resistant • Weather Resistant • Without Fillers
Uses	• Appliances • Bonding • Cell Phones • Flexible Grips	• Handles • Industrial Applications • Knobs • Overmolding	• Power/Other Tools • Rubber Replacement • Sporting Goods • Writing Instruments
RoHS Compliance	• RoHS Compliant		
Appearance	• Black • Colors Available	• Grey • Natural Color	• Opaque
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.920		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	8.0	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ²			ASTM D412
Across Flow : 100% Strain	337	psi	
Flow : 100% Strain	441	psi	
Tensile Stress ²			ASTM D412
Across Flow : 300% Strain	533	psi	
Flow : 300% Strain	697	psi	
Tensile Strength ²			ASTM D412
Across Flow : Break	771	psi	
Flow : Break	798	psi	
Tensile Elongation ²			ASTM D412
Across Flow : Break	520	%	
Flow : Break	440	%	
Tear Strength ²			ASTM D624
Across Flow	167	lb/in	
Flow	175	lb/in	
Compression Set ³ (73°F, 22 hr)	29	%	ASTM D395B



Revision Date: 1/31/2017

The information and recommendations contained in this bulletin are, to the best of our knowledge, accurate and reliable but no guarantee of their accuracy is made. All products are sold upon condition that purchasers shall make their own tests to determine the suitability of such products for their particular purposes and uses and purchasers assume all risks and liability for the results of use of the products, including use in accordance with seller's recommendations. Nothing in this bulletin constitutes permission or a recommendation to practice or use any invention covered by any patent owned by this company or by others. There is no warranty of merchantability and there are no other warranties for the products described.

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Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	67		
Shore A, 5 sec, Injection Molded	65		

Additional Information	Nominal Value	Unit
Adhesion to Nylon		

Legal Statement

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Processing Information

Injection	Nominal Value	Unit
Rear Temperature	400 to 450	°F
Middle Temperature	440 to 480	°F
Front Temperature	480 to 510	°F
Nozzle Temperature	510 to 530	°F
Processing (Melt) Temp	510 to 530	°F
Mold Temperature	75 to 140	°F
Injection Pressure	200 to 1000	psi
Injection Rate	Fast	
Back Pressure	25.0 to 125	psi
Screw Speed	50 to 120	rpm
Cushion	0.150 to 1.00	in

Injection Notes

Drying is not necessary. However, if moisture is a problem, dry the pellets for 2 to 4 hours at 150°F (65°C).

For any overmolding process it is recommended that the process temperatures for the TPE material be set at least 50°F (10°C) than the melt temperature of the substrate material.

Notes

¹ Typical properties: these are not to be construed as specifications.

² Die C, 20 in/min

³ Type 1

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