



Monprene® OM-10176

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene OM-10176 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-10176 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	• Good Adhesion • Good Processability	• Low Density • Low Specific Gravity	• Medium Hardness
Uses	• Appliances • Bonding • Cell Phones • Flexible Grips	• Handles • Knobs • Overmolding • Power/Other Tools	• Sporting Goods • Writing Instruments
RoHS Compliance	• RoHS Compliant		
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding	• Multi Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.920		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	3.0	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Strength (Break)	1000	psi	ASTM D412
Tensile Elongation (Break)	600	%	ASTM D412
Compression Set			ASTM D395
73°F, 22 hr	25	%	
158°F, 22 hr	92	%	
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A	78		
Shore A, 5 sec	76		
Additional Information	Nominal Value	Unit	
Adhesion to Nylon			

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	150	°F

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Injection	Nominal Value	Unit
Drying Time	2.0 to 4.0	hr
Rear Temperature	400 to 450	°F
Middle Temperature	410 to 450	°F
Front Temperature	420 to 460	°F
Nozzle Temperature	430 to 470	°F
Processing (Melt) Temp	430 to 470	°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

Notes

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