



Monprene® OM-10150

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene OM-10150 is a thermoplastic elastomer designed for overmolding applications like grips and anti-skid parts for consumer products. Monprene OM-10150 is an opaque, UV resistant 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 Mold Release • Good Moldability • Good Processability • High Flow	• Light Stabilized • Low Density • Low Specific Gravity • Lubricated	• Medium Hardness • Slip • Without Fillers
Uses	• Appliances • Bonding • Cell Phones • Flexible Grips	• Handles • Knobs • Overmolding • Power/Other Tools	• Rubber Replacement • Sporting Goods • Writing Instruments
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available	• Natural Color	• Opaque
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.910		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	40	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ²			ASTM D412
Across Flow : 100% Strain	195	psi	
Flow : 100% Strain	237	psi	
Tensile Stress ²			ASTM D412
Across Flow : 300% Strain	297	psi	
Flow : 300% Strain	400	psi	
Tensile Strength ²			ASTM D412
Across Flow : Break	353	psi	
Flow : Break	410	psi	
Tensile Elongation ²			ASTM D412
Across Flow : Break	350	%	
Flow : Break	340	%	
Tear Strength ²			ASTM D624
Across Flow	93.0	lbf/in	
Flow	83.0	lbf/in	
Compression Set ³ (73°F, 22 hr)	20	%	ASTM D395B
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A	51		
Shore A, 5 sec	49		

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Additional Information	Nominal Value	Unit
Adhesion to Nylon		

Processing Information		
Injection	Nominal Value	Unit
Drying Temperature	140	°F
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

Injection Notes
Moisture can degrade the material. Drying is suggested. This can be accomplished by placing the material in a desiccant dryer for 2 to 4 hours at 140°F (60°C).

For any overmolding process it is recommended that the process temperatures for the TPE material be set at least 50°F (10°C) higher 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