



Monprene® OM-10250

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene OM-10250 is designed for overmolding applications like grips and anti-skid parts for consumer products. Monprene OM-10250 is a medium density, medium hardness, opaque grade that exhibits excellent adhesion to PC, ABS, and PC/ABS.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Bondability • Filled • Good Colorability • Good Mold Release	• Good Moldability • Light Stabilized • Low Flow • Lubricated	• Medium Density • Medium Hardness • Slip
Uses	• Appliances • Bonding • Cell Phones • Dental Applications	• Flexible Grips • Handles • Knobs • Overmolding	• Power/Other Tools • Sporting Goods • Toothbrush Handles • 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	1.05		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	2.0	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ²			ASTM D412
Across Flow : 100% Strain	287	psi	
Flow : 100% Strain	314	psi	
Tensile Stress ²			ASTM D412
Across Flow : 300% Strain	460	psi	
Flow : 300% Strain	519	psi	
Tensile Strength ²			ASTM D412
Across Flow : Break	764	psi	
Flow : Break	672	psi	
Tensile Elongation ²			ASTM D412
Across Flow : Break	620	%	
Flow : Break	520	%	
Tear Strength ²			ASTM D624
Across Flow	158	lbf/in	
Flow	153	lbf/in	
Compression Set ³			ASTM D395B
73°F, 22 hr	25	%	
158°F, 22 hr	86	%	

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Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A	54		
Shore A, 5 sec	50		
Additional Information	Nominal Value	Unit	
Adhesion to ABS			
Adhesion to PC			
Adhesion to PC/ABS			

Processing Information			
Injection	Nominal Value	Unit	
Drying Temperature	140	°F	
Drying Time	2.0 to 4.0	hr	
Rear Temperature	280 to 370	°F	
Middle Temperature	310 to 390	°F	
Front Temperature	310 to 420	°F	
Nozzle Temperature	310 to 430	°F	
Processing (Melt) Temp	330 to 430	°F	
Mold Temperature	50 to 90	°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.

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