+135-3858-6433 (GuangDong)
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TEKNOR APEX

Monprene® OM-10275

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene OM-10275 is designed for overmolding applications like grips and anti-skid parts for consumer/industrial products. Monprene OM-10275 is a medium hardness, medium density, 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 • Good Colorability • Good Mold Release • Good Moldability	• Light Stabilized • Lubricated • Medium Density • Medium Flow	• Medium Hardness • Slip • Without Fillers
Uses	• Appliances • Bonding • Cell Phones • Dental Applications • Flexible Grips	• Handles • Knobs • Overmolding • Power/Other Tools • Rubber Replacement	• Sporting Goods • Toothbrush Handles • Writing Instruments
RoHS Compliance	• RoHS Compliant		
Appearance	• Black • Colors Available	• Natural Color • Opaque	
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.00		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	7.0	g/10 min	ASTM D1238
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress [2]			ASTM D412
Across Flow : 100% Strain	453	psi	
Flow : 100% Strain	694	psi	
Tensile Stress [2]			ASTM D412
Across Flow : 300% Strain	733	psi	
Flow : 300% Strain	939	psi	
Tensile Strength [2]			ASTM D412
Across Flow : Break	1190	psi	
Flow : Break	1430	psi	
Tensile Elongation [2]			ASTM D412
Across Flow : Break	580	%	
Flow : Break	660	%	
Tear Strength [2]			ASTM D624
Across Flow	262	lbf/in	
Flow	303	lbf/in	
Compression Set [3]			ASTM D395B
73°F, 22 hr	47	%	
158°F, 22 hr	90	%	

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Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	65		
Shore A, 1 sec, Injection Molded [4]	78		
Shore A, 5 sec, Injection Molded [4]	75		

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 320	°F
Middle Temperature	360 to 390	°F
Front Temperature	360 to 390	°F
Nozzle Temperature	380 to 410	°F
Processing (Melt) Temp	350 to 390	°F
Mold Temperature	50 to 90	°F
Injection Pressure	200 to 800	psi
Back Pressure	25.0 to 125	psi
Screw Speed	50 to 100	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

[4] Aged for 48 hr