



Monprene® OM-10268

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene OM-10268 is a specialty thermoplastic elastomer, available in NAT, BLK, and colors, designed for overmolding and co-extrusion applications like grips and anti-skid parts for consumer and industrial products. Monprene OM-10268 is a medium hardness, low 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	• Abrasion Resistant • Bondability • Chemical Resistant • Good Adhesion	• Good Processability • Good Weather Resistance • Light Stabilized • Medium Density	• Medium Flow • Medium Hardness • Slip • Without Fillers
Uses	• Appliances • Bonding • Cell Phones • Flexible Grips	• Handles • Knobs • Overmolding • Power/Other Tools	• Rubber Replacement • Soft Touch Applications • Sporting Goods • Writing Instruments
Agency Ratings	• UL 94		
RoHS Compliance	• RoHS Compliant		
UL File Number	• QMFZ2.E54709		
Appearance	• Black • Colors Available	• Grey • Natural Color	• Opaque
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	• Multi Injection Molding

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.00		ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	10	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ²			ASTM D412
Across Flow : 100% Strain	327	psi	
Flow : 100% Strain	403	psi	
Tensile Stress ²			ASTM D412
Across Flow : 300% Strain	541	psi	
Flow : 300% Strain	612	psi	
Tensile Strength ²			ASTM D412
Across Flow : Break	978	psi	
Flow : Break	894	psi	
Tensile Elongation ²			ASTM D412
Across Flow : Break	570	%	
Flow : Break	520	%	
Tear Strength ²			ASTM D624
Across Flow	174	lbf/in	
Flow	174	lbf/in	

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Elastomers	Nominal Value	Unit	Test Method
Compression Set ³			ASTM D395B
73°F, 22 hr	17	%	
158°F, 22 hr	38	%	
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A	70		
Shore A, 5 sec	68		
Thermal	Nominal Value	Unit	Test Method
RTI Elec	122	°F	UL 746B
RTI Imp	122	°F	UL 746B
RTI Str	122	°F	UL 746B
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.04 to 0.05 in, All Colors)	HB		UL 94
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 800	psi
Injection Rate	Moderate-Fast	
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.

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Extrusion	Nominal Value	Unit
Drying Temperature	140	°F
Drying Time	2.0 to 4.0	hr
Cylinder Zone 1 Temp.	280 to 300	°F
Cylinder Zone 2 Temp.	300 to 320	°F
Cylinder Zone 3 Temp.	320 to 360	°F
Cylinder Zone 4 Temp.	320 to 360	°F
Cylinder Zone 5 Temp.	320 to 360	°F
Die Temperature	320 to 360	°F

Extrusion Notes

screw speed: 30 to 100 rpm

Notes

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

² Die C, 20 in/min

³ Type 1