



Monprene® OM-10240-02

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene OM-10240-02 is designed for overmolding applications like grips and anti-skid parts for consumer/industrial products. Monprene OM-10240-02 is a low hardness, low density, translucent 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	• High Flow • Low Density • Low Hardness • Low Specific Gravity	• Lubricated • Slip • Without Fillers
Uses	• Consumer Applications • Gaskets • Handles	• Overmolding • Safety Equipment • Sporting Goods	• Writing Instruments
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available	• Natural Color	• Translucent
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) (150°C/2.16 kg)	3.0	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ²			ASTM D412
Across Flow : 100% Strain	111	psi	
Flow : 100% Strain	288	psi	
Tensile Stress ²			ASTM D412
Across Flow : 300% Strain	237	psi	
Flow : 300% Strain	605	psi	
Tensile Strength ²			ASTM D412
Across Flow : Break	1420	psi	
Flow : Break	916	psi	
Tensile Elongation ²			ASTM D412
Across Flow : Break	590	%	
Flow : Break	510	%	
Tear Strength ²			ASTM D624
Across Flow	185	lbf/in	
Flow	112	lbf/in	
Compression Set ³ (73°F, 22 hr)	22	%	ASTM D395B
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	42		
Shore A, 5 sec, Injection Molded	40		

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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
Rear Temperature	360 to 450	°F
Middle Temperature	370 to 460	°F
Front Temperature	380 to 470	°F
Nozzle Temperature	390 to 480	°F
Processing (Melt) Temp	390 to 480	°F
Mold Temperature	60 to 90	°F
Injection Pressure	200 to 800	psi
Injection Rate	Fast	
Back Pressure	25.0 to 100	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