

# Monprene® OM-10255-01

Thermoplastic Elastomer

Teknor Apex Company

Message:

Monprene® OM-10255-01 is a thermoplastic elastomer (TPE) material. This product is available in North America, Africa and the Middle East, Latin America, Europe or Asia Pacific. The processing method is extrusion or injection molding.

Typical application areas include:

- Handle
- safety equipment
- packing
- kitchen utensils
- engineering/industrial accessories

General Information			
Uses	Safety equipment		
	Handle		
	Packaging		
	Kitchen utensils		
	Washer		
	Pipe fittings		
	Sporting goods		
	Shell		
	Stationery		
	Consumer goods application field		
	Toothbrush handle		
	Medical/nursing supplies		
Forms	Particle		
Processing Method	Extrusion		
	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.00	g/cm <sup>3</sup>	ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/2.16 kg)	45	g/10 min	ASTM D1238
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 second, 23°C, injection molding <sup>1</sup>	48		ASTM D2240
Shore A, 5 seconds, 23°C, injection molding <sup>2</sup>	55		ASTM D2240
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress			ASTM D412

100% strain	1.60	MPa	ASTM D412
300% strain	3.20	MPa	ASTM D412
Tensile Strength (Break)	5.00	MPa	ASTM D412
Tensile Elongation (Break)	500	%	ASTM D412

Additional Information	Nominal Value
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Adhesion to ABS

Adhesion to PC

Adhesion to PC/ABS

Injection	Nominal Value	Unit
Rear Temperature	138 - 188	°C
Middle Temperature	154 - 199	°C
Front Temperature	154 - 216	°C
Nozzle Temperature	154 - 221	°C
Processing (Melt) Temp	166 - 221	°C
Mold Temperature	10.0 - 32.2	°C
Injection Pressure	1.38 - 5.52	MPa
Injection Rate	Fast	
Back Pressure	0.172 - 0.689	MPa
Screw Speed	50 - 100	rpm
Cushion	3.81 - 25.4	mm

Injection instructions
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Drying is not necessary. However, if moisture is a problem, dry the pellets for 2 to 4 hours at 150°F (65°C). For any overmolding process it is recommended that the process temperatures for the TPE material be set at least 10 degrees Celsius higher than the melt temperature of the substrate material.

Extrusion	Nominal Value	Unit
Cylinder Zone 1 Temp.	182 - 232	°C
Cylinder Zone 2 Temp.	188 - 238	°C
Cylinder Zone 3 Temp.	193 - 243	°C
Cylinder Zone 5 Temp.	199 - 249	°C
Die Temperature	199 - 249	°C

Extrusion instructions
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Screw Speed: 30 to 100 rpm

NOTE
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1. Aging 0 hr
2. Aging 48 hr

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Recommended distributors for this material

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