

TEKNOR APEX

# Monprene® OM-12265 (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

### **General Information**

## **Product Description**

Monprene OM-12265 is a specialty thermoplastic elastomer designed for overmolding and co-extrusion applications like grips and anti-skid parts for consumer and industrial products. Monprene OM-12265 is a medium hardness, medium density, RoHS compliant grade that exhibits excellent adhesion to PC, ABS, PC/ABS, & PP.

General			
Material Status	Commercial: Active		
Availability	<ul><li> Africa &amp; Middle East</li><li> Asia Pacific</li></ul>	<ul><li>Europe</li><li>Latin America</li></ul>	North America
Features	<ul> <li>Abrasion Resistant</li> <li>Bondability</li> <li>Chemical Resistant</li> <li>Chemically Coupled</li> <li>Conformable</li> <li>Crack Resistant</li> </ul>	<ul> <li>Creep Resistant</li> <li>Ductile</li> <li>Good Color Stability</li> <li>Good Flexibility</li> <li>Good Flow</li> <li>Good Moldability</li> </ul>	<ul> <li>Good Processability</li> <li>Lubricated</li> <li>Medium Density</li> <li>Medium Hardness</li> <li>Without Fillers</li> </ul>
Uses	<ul><li> Appliances</li><li> Bonding</li><li> Cell Phones</li><li> Consumer Applications</li></ul>	<ul><li>Flexible Grips</li><li>Handles</li><li>Knobs</li><li>Overmolding</li></ul>	<ul><li>Power/Other Tools</li><li>Soft Touch Applications</li><li>Writing Instruments</li></ul>
RoHS Compliance	RoHS Compliant		
Appearance	Colors Available	Natural Color	Opaque
Forms	Pellets		
Processing Method	Injection Molding		

ASTM & ISO Properties <sup>1</sup>					
Physical	Nominal Value	Unit	Test Method		
Density / Specific Gravity	0.960		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 (300% Strain)	650	psi	ASTM D412		
Tensile Strength (Break)	1300	psi	ASTM D412		
Tensile Elongation (Break)	600	%	ASTM D412		
Hardness	Nominal Value	Unit	Test Method		
Durometer Hardness			ASTM D2240		
Shore A, 1 sec, Injection Molded	68				
Shore A, 5 sec, Injection Molded	66				
Flammability	Nominal Value	Unit	Test Method		
Flame Rating			UL 94		
0.12 in, All Colors	HB				
0.24 in, All Colors	HB				
Additional Information	Nominal Value	Unit			
Adhesion to ABS					
Adhesion to PC					
Adhesion to PC/ABS					



## Monprene® OM-12265 (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

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	40 to 120	°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.

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

<sup>1</sup> Typical properties: these are not to be construed as specifications.