

# Monprene® OM-12235-01

## Teknor Apex Company - Thermoplastic Elastomer

Friday, June 30, 2017

### **General Information**

#### **Product Description**

Monprene OM-12235-01, available in NAT and colors, is designed for overmolding applications like grips and anti-skid parts for consumer and industrial products. Monprene OM-12235-01 is a low hardness, low density, UV stabilized, opaque grade that exhibits excellent adhesion to PC, ABS, and PC/ABS and is suitable for co-extrusion, extrusion, multi-injection, or injection molding.

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>Bondability</li><li>Chemical Resistant</li><li>Good Adhesion</li><li>Good Processability</li><li>Light Stabilized</li></ul>	<ul><li>Low Density</li><li>Low Flow</li><li>Low Hardness</li><li>Low Specific Gravity</li><li>Lubricated</li></ul>	<ul><li>Slip</li><li>Sunlight Resistant</li><li>Weather Resistant</li><li>Without Fillers</li></ul>
Uses	<ul><li>Bonding</li><li>Cell Phones</li><li>Flexible Grips</li><li>Grommets</li></ul>	<ul><li> Handles</li><li> Industrial Applications</li><li> Knobs</li><li> Overmolding</li></ul>	<ul><li>Power/Other Tools</li><li>Rubber Replacement</li><li>Sporting Goods</li><li>Writing Instruments</li></ul>
RoHS Compliance	<ul> <li>RoHS Compliant</li> </ul>		
Appearance	<ul><li>Colors Available</li><li>Grey</li></ul>	<ul><li>Natural Color</li><li>Opaque</li></ul>	
Forms	• Pellets		
Processing Method	Extrusion	Injection Molding	Multi Injection Molding

ASTM & ISO Properties 1			
Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.940		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.1 kg)	0.50	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress <sup>2</sup>			ASTM D412
Across Flow: 100% Strain	104	psi	
Flow: 100% Strain	122	psi	
Tensile Stress <sup>2</sup>			ASTM D412
Across Flow: 300% Strain	205	psi	
Flow: 300% Strain	254	psi	
Tensile Strength <sup>2</sup>			ASTM D412
Across Flow : Break	474	psi	
Flow : Break	400	psi	
Tensile Elongation <sup>2</sup>			ASTM D412
Across Flow : Break	550	%	
Flow : Break	460	% TIE	AND A
Tear Strength <sup>2</sup>		以枝何"	吸分量ASTM D624
Across Flow	40年190	lbf/ing lill all	1-58950
Flow	海拉里到 66.0	lbt/in <sup>电话</sup>	
Compression Set <sup>3</sup>	550 460 460 TEKNOR APE66.05 TEKNOR APE66.05 17 teknorapex.shshsj.com		ASTM D395B
73°F, 22 hr	TEKITOTAPEX.SITT	%	
158°F, 22 hr	tekii 61	%	

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Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	38		
Shore A, 5 sec, Injection Molded	35		
Additional Information	Nominal Value	Unit	
Adhesion to ABS			
Adhesion to PC			
Adhesion to PC/ABS			

#### **Legal Statement**

The information and recommendations contained in this bulletin are, to the best of our knowledge, accurate and reliable but no guarantee of their accuracy is made. All products are sold upon condition that purchasers shall make their own tests to determine the suitability of such products for their particular purposes and uses and purchaser assumes all risks and liability for the results of use of the products, including use in accordance with seller's recommendations. Nothing in this bulletin constitutes permission or a recommendation to practice or use any invention covered by any patent owned by this company or others. There is no warranty of merchantability and there are no other warranties for the products described. For detailed Product Stewardship information, please contact us. Any product of Teknor Apex, including product names, shall not be used or tested in medical or food contact applications without the prior written acknowledgement of Teknor Apex as to the intended use. Please note that some products may not be available in one or more countries.

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**

<sup>3</sup> Type 1

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.

1401.		
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	<b>有限公</b> 蘭蘭
Die Temperature	320 to 360 °F 320 to 360 °F 320 to 360 °F TEKNOR APEX TEKNOR APEX TEKNOR APEX teknorapex.shshej.com	佩斯 21-58958519
Notes	· 有松朝 EX 特诺尔	語: 02
<sup>1</sup> Typical properties: these are not to be construed as specifications.	NOR APELSICOM BAN	
<sup>2</sup> Die C, 20 in/min	TEKNOrapex.sil	
3 Type 1	ten	

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### Teknor Apex Company - Thermoplastic Elastomer

Teknor Apex Company Corporate Headquarters

In U.S. for Vinyls, TPEs, Colorants, Engineered Thermoplastics (Chem Polymer) 505 Central Avenue

Pawtucket, Rhode Island 02861 U.S.

Phone: 401-725-8000 Fax: 401-725-8095

Toll Free (U.S. only) 800-556-3864

info@teknorapex.com

Teknor Apex U.K. Ltd.

Tat Bank Road
Oldbury, West Midlands B69 4NH England

Phone: (44) 121-665-2100 Fax: (44) 121-544-5530

etpsales@teknorapex.co.uk



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