

# Monprene® RG-20140 (PRELIMINARY DATA)

### Teknor Apex Company - Thermoplastic Elastomer

Friday, June 30, 2017

### **General Information**

### **Product Description**

The Monprene RG-20100 series is a group of high performance thermoplastic elastomers specifically designed for extruded regulated applications including food contact, toys, and children's products. Monprene RG-20140 is a low density, low hardness grade that complies with various US FDA and European regulations and directives for food contact and toy safety and is suitable for extrusion. Please contact Teknor Apex for a regulatory compliance letter.

General			
Material Status	Preliminary Data		
Availability	<ul><li>Africa &amp; Middle East</li><li>Europe</li></ul>	<ul><li>Latin America</li><li>North America</li></ul>	
Features	<ul><li>BPA Free</li><li>Food Contact Acceptable</li><li>Good Adhesion</li><li>Good Colorability</li><li>Good Processability</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>No Animal Derived Components</li><li>Slip</li><li>Without Fillers</li></ul>
Uses	<ul><li>Consumer Applications</li><li>Cosmetic Packaging</li><li>Food Containers</li><li>Food Packaging</li></ul>	<ul><li>Food Service Applications</li><li>Kitchenware</li><li>Lids</li><li>Non-specific Food Application</li></ul>	<ul><li>Rubber Replacement</li><li>Toys</li></ul>
Agency Ratings	<ul> <li>EU Food Contact, Unspecified Rating</li> </ul>	FDA Food Contact, Unspecified     Rating	
RoHS Compliance	<ul> <li>RoHS Compliant</li> </ul>		
Appearance	<ul> <li>Colors Available</li> </ul>	Translucent	
Forms	• Pellets		
Processing Method	<ul> <li>Extrusion</li> </ul>		

ASTM & ISO Properties 1				
Physical	Nominal Value	Unit	Test Method	
Density	0.890	g/cm³	ISO 1183	
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	0.50	g/10 min	ASTM D1238	
Elastomers	Nominal Value	Unit	Test Method	
Tensile Stress <sup>2</sup>			ISO 37	
Across Flow: 100% Strain	116	psi		
Flow: 100% Strain	290	psi		
Tensile Stress <sup>2</sup>			ISO 37	
Across Flow : Break	870	psi		
Flow : Break	319	psi		
Tensile Elongation <sup>2</sup>			ISO 37	
Across Flow : Break	800	%		
Flow: Break	140	%		
Compression Set <sup>3</sup>		14	150 815	
73°F, 22 hr	_11	% 共有协	四分销商	
158°F, 22 hr	JA Bit.	% 7 美國斯	<b>公司</b> SO 815 政分開商 58958519 Test Method	
Hardness	Nominal Value	<b>Brit</b> 电话:02个	Test Method	
Shore Hardness (Shore A, 5 sec)	LIBITAR APE 40	n Ben	ISO 868	
Fill Analysis	TEK Nominal Value	Unit	Test Method	
Apparent Viscosity (392°F, 206 sec^-1)	teknoraps 290	Pa·s	ASTM D3835	

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### **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			
Extrusion	Nominal Value Unit		
Cylinder Zone 1 Temp.	300 to 320 °F		
Cylinder Zone 2 Temp.	320 to 400 °F		
Cylinder Zone 3 Temp.	340 to 420 °F		
Cylinder Zone 4 Temp.	360 to 440 °F		
Die Temperature	360 to 440 °F		

### **Extrusion Notes**

Screw Speed: 30 to 100 rpm

Drying is not necessary. However, if moisture is a problem, dry the pellets for 2 to 4 hours at 150F (65C).

#### **Notes**

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

<sup>2</sup> Type 1, 20 in/min

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<sup>&</sup>lt;sup>3</sup> Type A