

# Monprene® CP-18143 CLR

# Teknor Apex Company - Thermoplastic Elastomer

Friday, June 30, 2017

### **General Information**

### **Product Description**

Monprene CP-18143 CLR is a clear thermoplastic elastomer designed for a variety of consumer product applications requiring a soft, rubber-like feel. Monprene CP-18143 CLR is a low hardness, low density, high flow grade suitable for both injection molding and extrusion.

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>High Flow</li><li>Low Density</li><li>Low Hardness</li></ul>	<ul><li>Low Specific Gravity</li><li>Lubricated</li><li>Slip</li></ul>	Without Fillers
Uses	<ul><li>Consumer Applications</li><li>Gaskets</li><li>Handles</li></ul>	<ul><li> Kitchenware</li><li> Sporting Goods</li><li> Toothbrush Handles</li></ul>	Writing Instruments
RoHS Compliance	<ul> <li>RoHS Compliant</li> </ul>		
Appearance	<ul> <li>Clear/Transparent</li> </ul>		
Forms	• Pellets		
Processing Method	Extrusion	<ul> <li>Injection Molding</li> </ul>	

ASTM & ISO Properties 1				
Physical	Nominal Value	Unit	Test Method	
Specific Gravity	0.880		ASTM D792	
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	25	g/10 min	ASTM D1238	
Elastomers	Nominal Value	Unit	Test Method	
Tensile Stress <sup>2</sup>			ASTM D412	
Across Flow: 100% Strain	1060	psi		
Flow: 100% Strain	859	psi		
Tensile Stress <sup>2</sup>			ASTM D412	
Across Flow: 300% Strain	276	psi		
Flow: 300% Strain	335	psi		
Tensile Strength <sup>2</sup>			ASTM D412	
Across Flow : Break	942	psi		
Flow: Break	1030	psi		
Tensile Elongation <sup>2</sup>			ASTM D412	
Across Flow : Break	590	%		
Flow : Break	690	%		
Tear Strength <sup>2</sup>			ASTM D624	
Across Flow	132	lbf/in		
Flow	138	lbf/in		
Compression Set <sup>3</sup> (73°F, 22 hr)	16	%112	ASTM D395B	
Hardness	Nominal Value	Unit	及分形 Test Method	
Durometer Hardness	拉地化	大水爱佩斯 021	5895 ASTM D2240	
Shore A, 1 sec, Injection Molded	5 X X 2 X 2 X 2 X 2 X 2 X 2 X 2 X 2 X 2	游水明语:		
Shore A, 5 sec, Injection Molded	Nominal Value  Nominal Value  FEKNOR APEXE  TEKNOR APEXE	m acc		
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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				
Injection	Nominal Value	Unit		
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	95 to 120	°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		
njection Notes				

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

Extrusion	Nominal Value Unit
Cylinder Zone 1 Temp.	360 to 450 °F
Cylinder Zone 2 Temp.	370 to 460 °F
Cylinder Zone 3 Temp.	380 to 470 °F
Cylinder Zone 4 Temp.	390 to 480 °F
Cylinder Zone 5 Temp.	390 to 480 °F
Die Temperature	390 to 480 °F

### **Extrusion Notes**

Screw Speed: 30 to 100 rpm

#### Notes

- <sup>1</sup> Typical properties: these are not to be construed as specifications.
- <sup>2</sup> Die C, 20 in/min

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<sup>&</sup>lt;sup>3</sup> Type 1