



Monprene® RG-28163 CLR

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene RG-28163 CLR is a high performance thermoplastic elastomer designed for consumer and industrial applications, including food contact, film, and tubing. Monprene RG-28163 CLR is a medium hardness, low density, RoHS compliant grade with excellent adhesion to PP. This grade is suitable for cast film and extrusion. Please contact Teknor Apex for a regulatory compliance letter.

General

Material Status	• Commercial: Active		
Availability	<ul style="list-style-type: none">• Africa & Middle East• Asia Pacific	<ul style="list-style-type: none">• Europe• Latin America	<ul style="list-style-type: none">• North America
Features	<ul style="list-style-type: none">• Chemical Resistant• Good Adhesion• Good Colorability• Good Melt Strength• Good Processability	<ul style="list-style-type: none">• Good Toughness• Halogen Free• High Clarity• High Purity• Kink Resistant	<ul style="list-style-type: none">• Low Density• Low Specific Gravity• Lubricated• Medium Hardness
Uses	<ul style="list-style-type: none">• Clear Sheet• Film	<ul style="list-style-type: none">• Food Service Applications• Hose	<ul style="list-style-type: none">• Non-specific Food Applications• Tubing
RoHS Compliance	• RoHS Compliant		
Appearance	<ul style="list-style-type: none">• Clear/Transparent	<ul style="list-style-type: none">• Colors Available	
Forms	<ul style="list-style-type: none">• Pellets		
Processing Method	<ul style="list-style-type: none">• Cast Film	<ul style="list-style-type: none">• Extrusion	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.890		ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	4.5	g/10 min	ASTM D1238
Films	Nominal Value	Unit	Test Method
Oxygen Transmission Rate (Wet)			ASTM F1927
73°F, 40 mil, 35% RH	33.2	cm ³ /100 in ² /24 hr	
73°F, 40 mil, 90% RH	31.7	cm ³ /100 in ² /24 hr	
Water Vapor Transmission Rate			ASTM F1249
1.0 mil, 100°F, 100% RH	3.3	g·mil/100in ² /atm/24 hr	
40 mil, 100°F, 100% RH	0.083	g·mil/100in ² /atm/24 hr	
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ² (50% Strain)	325	psi	ASTM D412
Tensile Stress ² (100% Strain)	385	psi	ASTM D412
Tensile Stress ² (300% Strain)	615	psi	ASTM D412
Tensile Strength ² (Break)	1720	psi	ASTM D412
Tensile Elongation ² (Break)	630	%	ASTM D412
Tear Strength ²	247	lbf/in	ASTM D624
Compression Set ³			ASTM D395B
73°F, 22 hr	18	%	
158°F, 22 hr	86	%	

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Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	67		
Shore A, 5 sec, Injection Molded	65		

Processing Information

Extrusion	Nominal Value	Unit
Cylinder Zone 1 Temp.	320 to 350	°F
Cylinder Zone 2 Temp.	340 to 375	°F
Cylinder Zone 3 Temp.	360 to 400	°F
Cylinder Zone 4 Temp.	360 to 400	°F
Cylinder Zone 5 Temp.	360 to 410	°F
Die Temperature	350 to 420	°F

Extrusion Notes

Screw Speed: 30 to 100 rpm.
Screen Pack Recommendation:
60/200/200/60 to 60/200/400/400/200/60 mesh size.

Notes

¹ Typical properties: these are not to be construed as specifications.

² Die C, 20 in/min

³ Type 1