+135-3858-6433 (GuangDong)
+188-1699-6168 (ShangHai)
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TEKNOR APEX

Monprene® RG-18143 CLR

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene RG-18143 CLR is a clear high performance thermoplastic elastomer, available in NAT and colors, designed for regulated applications including food contact, toys, and children's products. Monprene RG-18143 CLR is a low hardness, low density, high flow grade with excellent adhesion to PP and complies with various US FDA regulations and EU directives for food contact. This grade is suitable for injection molding. Please contact Teknor Apex for a regulatory compliance letter.

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• High Flow • Low Density • Low Hardness	• Low Specific Gravity • Lubricated • Slip	• Without Fillers
Uses	• Consumer Applications • Gaskets • Handles	• Kitchenware • Sporting Goods • Toothbrush Handles	• Writing Instruments
RoHS Compliance	• RoHS Compliant		
Appearance	• Clear/Transparent		
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / 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 [2]			ASTM D412
Across Flow : 100% Strain	129	psi	
Flow : 100% Strain	205	psi	
Tensile Stress [2]			ASTM D412
Across Flow : 300% Strain	276	psi	
Flow : 300% Strain	335	psi	
Tensile Strength [2]			ASTM D412
Across Flow : Break	942	psi	
Flow : Break	1030	psi	
Tensile Elongation [2]			ASTM D412
Across Flow : Break	590	%	
Flow : Break	690	%	
Tear Strength [2]			ASTM D624
Across Flow	132	lbf/in	
Flow	138	lbf/in	
Compression Set [3] (73°F, 22 hr)	16	%	ASTM D395B
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	42		
Shore A, 5 sec, Injection Molded	40		

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Processing Information		
Injection	**Nominal Value**	**Unit**
Rear Temperature	360 to 400	°F
Middle Temperature	360 to 400	°F
Front Temperature	360 to 400	°F
Nozzle Temperature	360 to 400	°F
Processing (Melt) Temp	360 to 400	°F
Mold Temperature	60 to 90	°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

Injection Notes

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

Notes

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

[2] Die C, 20 in/min

[3] Type 1