

Monprene® CP-18143 CLR

Thermoplastic Elastomer

Teknor Apex Company

Message:

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 specific gravity grade that exhibits high flow characteristics, suitable for injection molding and extrusion.

General Information	
Features	Low Specific Gravity Without Fillers Low density smoothness High liquidity Lubrication Hardness, low
Uses	Handle Kitchen utensils Washer Sporting goods Stationery Consumer goods application field Toothbrush handle
Appearance	Clear/transparent
Forms	Particle
Processing Method	Extrusion Injection molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.878	g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	25	g/10 min	ASTM D1238
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 second, injection molding	42		ASTM D2240
Shore A, 5 seconds, injection molding	40		ASTM D2240
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress			ASTM D412
Transverse flow: 100% strain ¹	7.30	MPa	ASTM D412
Flow: 100% strain ²	5.92	MPa	ASTM D412

Transverse flow: 300% strain ³	1.90	MPa	ASTM D412
Flow: 300% strain ⁴	2.31	MPa	ASTM D412
Tensile Strength ⁵			ASTM D412
Transverse flow: Fracture	6.49	MPa	ASTM D412
Flow: Fracture	7.13	MPa	ASTM D412
Tensile Elongation ⁶			ASTM D412
Transverse flow: Fracture	590	%	ASTM D412
Flow: Fracture	690	%	ASTM D412
Tear Strength ⁷			ASTM D624
Transverse flow	23.1	kN/m	ASTM D624
Flow	24.2	kN/m	ASTM D624
Compression Set ⁸ (23°C, 22 hr)	16	%	ASTM D395B
Injection	Nominal Value	Unit	
Rear Temperature	182 - 232	°C	
Middle Temperature	188 - 238	°C	
Front Temperature	193 - 243	°C	
Nozzle Temperature	199 - 249	°C	
Processing (Melt) Temp	199 - 249	°C	
Mold Temperature	35.0 - 48.9	°C	
Injection Pressure	1.38 - 5.52	MPa	
Injection Rate	Fast		
Back Pressure	0.172 - 0.689	MPa	
Screw Speed	50 - 100	rpm	
Cushion	3.81 - 25.4	mm	
Injection instructions			
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.	182 - 232	°C	
Cylinder Zone 2 Temp.	188 - 238	°C	
Cylinder Zone 3 Temp.	193 - 243	°C	
Cylinder Zone 5 Temp.	199 - 249	°C	
Die Temperature	199 - 249	°C	
Extrusion instructions			
Screw Speed: 30 to 100 rpm			
NOTE			
1.	Mouth die C, 510mm/min		
2.	Mouth die C, 510mm/min		
3.	C mold, 510mm/min		
4.	C mold, 510mm/min		
5.	C mold, 510mm/min		
6.	Mouth die C, 510mm/min		
7.	C mold, 510mm/min		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

