



Monprene® IN-19147

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene IN-19147 is a general purpose thermoplastic elastomer designed for a variety of industrial applications, including seals and gaskets. Monprene IN-19147 is a low density, medium hardness grade suitable for injection molding and extrusion.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Bondability • Good Colorability • Good Mold Release • Good Moldability	• Good Processability • Low Density • Low Flow • Low Specific Gravity	• Medium Hardness • Without Fillers
Uses	• Consumer Applications • Gaskets	• Handles • Industrial Applications	• Seals • Tubing
RoHS Compliance	• RoHS Compliant		
Appearance	• Clear/Transparent	• Colors Available	• Natural Color
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

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)	2.0	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ²			ASTM D412
Across Flow : 100% Strain	197	psi	
Flow : 100% Strain	300	psi	
Tensile Stress ²			ASTM D412
Across Flow : 300% Strain	367	psi	
Flow : 300% Strain	571	psi	
Tensile Strength ²			ASTM D412
Across Flow : Break	1130	psi	
Flow : Break	843	psi	
Tensile Elongation ²			ASTM D412
Across Flow : Break	710	%	
Flow : Break	520	%	
Tear Strength ²			ASTM D624
Across Flow	211	lbf/in	
Flow	146	lbf/in	
Compression Set ³			ASTM D395B
73°F, 22 hr	13	%	
158°F, 22 hr	93	%	
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	50		
Shore A, 5 sec, Injection Molded	47		

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Processing Information

Injection	Nominal Value	Unit
Rear Temperature	420 to 460	°F
Middle Temperature	420 to 460	°F
Front Temperature	420 to 460	°F
Nozzle Temperature	420 to 460	°F
Processing (Melt) Temp	420 to 460	°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).

Extrusion	Nominal Value	Unit
Cylinder Zone 1 Temp.	400 to 440	°F
Cylinder Zone 2 Temp.	400 to 440	°F
Cylinder Zone 3 Temp.	400 to 440	°F
Cylinder Zone 4 Temp.	400 to 440	°F
Cylinder Zone 5 Temp.	400 to 440	°F
Die Temperature	400 to 440	°F

Extrusion Notes

Screw Speed: 30 to 100 rpm

Notes

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

² Die C, 20 in/min

³ Type 1