Medalist® MD-50183

Teknor Apex Company - Thermoplastic Elastomer

Wednesday, April 1, 2026

General Information

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Biocompatible • BPA Free • Cleanable • Disposable • Durable	• Excellent Processability • Good Clarity • Good Colorability • Good Compression Set • Good Flexibility	• Good Moldability • Low Density • Medium Hardness • Non-Phthalate Plasticizer
Uses	• Medical Devices • Medical Packaging • Medical/Healthcare Applications • Packaging • Pharmaceutical Packaging	• Pharmaceuticals • Safety Equipment • Single-Use Applications • Soft Touch Applications • Surgical Instruments	• Thick-walled Parts • Thin-walled Parts • Transparent or Translucent Parts • Transparent Parts
RoHS Compliance	• RoHS Compliant		
Appearance	• Translucent		
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.890		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	3.0	g/10 min	ASTM D1238
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress (50% Strain)	835	psi	ASTM D412
Tensile Stress (100% Strain)	860	psi	ASTM D412
Tensile Stress (300% Strain)	1020	psi	ASTM D412
Tensile Strength (Break)	2300	psi	ASTM D412
Tensile Elongation (Break)	740	%	ASTM D412
Tear Strength	375	lbf/in	ASTM D624
Compression Set (73°F, 22 hr)	13	%	ASTM D395
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness			ASTM D2240
Shore A, 1 sec	85		
Shore A, 5 sec	83		

Legal Statement

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Processing Information

Injection	Nominal Value	Unit
Rear Temperature	260 to 300	°F

Revision Date: 5/1/2020

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Injection	Nominal Value	Unit
Middle Temperature	280 to 320	°F
Front Temperature	300 to 340	°F
Nozzle Temperature	340 to 380	°F
Processing (Melt) Temp	340 to 380	°F
Mold Temperature	70 to 100	°F
Injection Pressure	200 to 800	psi
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.	340 to 370	°F
Cylinder Zone 2 Temp.	360 to 385	°F
Cylinder Zone 3 Temp.	365 to 400	°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.

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