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TEKNOR APEX

Medalist® MD-100

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

This compound is designed for medical and healthcare applications requiring an ultra-soft, gel like material.

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Uses	• Medical/Healthcare Applications	• Pharmaceuticals	
Agency Ratings	• ISO 10993-5		
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	0.872		ASTM D792
Melt Mass-Flow Rate (MFR) (125°C/2.16 kg)	10	g/10 min	ASTM D1238
Molding Shrinkage - Flow	0.026	in/in	ASTM D955
Molding Shrinkage - Across Flow	0.041	in/in	ASTM D955
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress (100% Strain)	30.0	psi	ASTM D412
Tensile Stress (200% Strain)	40.0	psi	ASTM D412
Tensile Stress (300% Strain)	50.0	psi	ASTM D412
Tensile Strength (Break)	300	psi	ASTM D412
Tensile Elongation (Break)	700	%	ASTM D412
Tear Strength	40.0	lbf/in	ASTM D624
Compression Set	34	%	ASTM D395
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness (Shore A)	5		ASTM D2240

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	280 to 300	°F
Middle Temperature	300 to 320	°F
Front Temperature	320 to 340	°F
Nozzle Temperature	340 to 360	°F
Processing (Melt) Temp	340 to 360	°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).