



Medalist® MD-10135

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Medalist MD-10135 is a high performance thermoplastic elastomer specifically designed for healthcare and medical applications. Medalist MD-10135 is a low hardness, low density, RoHS compliant grade that can be sterilized and is suitable for injection molding.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Autoclavable • Bondability • BPA Free • Ethylene Oxide Sterilizable • Good Adhesion	• Good Colorability • Good Processability • Good Sterilizability • Halogen Free • High Elasticity	• High Flexibility • High Flow • Low Density • Low Hardness • Radiation (Gamma) Resistant
Uses	• Bladders • Closures • Dental Applications • Diaphragms	• Disposable Hospital Goods • Flexible Grips • Hypodermic Syringe Parts • Medical/Healthcare Applications	• Rubber Replacement • Soft Touch Applications
RoHS Compliance	• RoHS Compliant		
Appearance	• Clear/Transparent	• Natural Color	
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)	28	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress (300% Strain)	300	psi	ASTM D412
Tensile Strength (Break)	1100	psi	ASTM D412
Tensile Elongation (Break)	700	%	ASTM D412
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	37		
Shore A, 5 sec, Injection Molded	35		

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	350 to 380	°F
Middle Temperature	360 to 390	°F
Front Temperature	360 to 400	°F

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Injection	Nominal Value	Unit
Nozzle Temperature	360 to 400	°F
Processing (Melt) Temp	360 to 400	°F
Mold Temperature	80 to 100	°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.