



# Medalist® MD-10154 (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

## General Information

### Product Description

Medalist MD-10154 is a high performance thermoplastic elastomer, intended for use in medical and healthcare applications. Medalist MD-10154 is a medium hardness, low density, RoHS compliant grade suitable for injection molding.

### General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Autoclave Sterilizable • Bondability • Ethylene Oxide Sterilizable • Good Adhesion • Good Processability	• Good Sterilizability • Halogen Free • High Elasticity • High Flow • Low Density	• Medium Hardness • Radiation (Gamma) Resistant • Steam Sterilizable
Uses	• Bladders • Closures • Dental Applications • Diaphragms • Disposable Hospital Goods	• Film • Hypodermic Syringe Parts • Medical/Healthcare Applications • Overmolding • Pharmaceuticals	• Rubber Replacement • Seals • Soft Touch Applications • Tubing
Agency Ratings	• ISO 10993-5	• ISO 13485	
RoHS Compliance	• RoHS Compliant		
Appearance	• Clear/Transparent	• Colors Available	
Forms	• Pellets		
Processing Method	• Injection Molding		

## ASTM & ISO Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.890		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	20	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress <sup>2</sup> (300% Strain)	400	psi	ASTM D412
Tensile Strength <sup>2</sup> (Break)	1300	psi	ASTM D412
Tensile Elongation <sup>2</sup> (Break)	700	%	ASTM D412
Compression Set <sup>3</sup> (73°F, 22 hr)	20	%	ASTM D395
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	50		
Shore A, 5 sec, Injection Molded	48		

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Injection	Nominal Value	Unit
Rear Temperature	260 to 300	°F
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
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

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> Die C, 20 in/min

<sup>3</sup> Type 1