



Medalist® MD-16150G (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Medalist MD-16150G NAT XRD1 is a high performance thermoplastic elastomer specifically designed for healthcare and medical applications.
Medalist MD-16150G NAT XRD1 is a low hardness, low density, tack-free 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	• Chemical Resistant • Ethylene Oxide Sterilizable • Good Colorability • Good Moldability • Good Processability	• Good Toughness • Halogen Free • High Elongation • High Flexibility • High Flow	• Low Density • Low Hardness • Resilient • Soft • Tack Free
Uses	• Disposable Hospital Goods • Medical Devices	• Rubber Replacement • Soft Touch Applications	• Surgical Instruments
Agency Ratings	• ISO 10993-5	• ISO 13485	
RoHS Compliance	• RoHS Compliant		
Appearance	• Clear/Transparent	• Colors Available	• Natural Color
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.842		ASTM D792
Melt Mass-Flow Rate (MFR) (150°C/2.16 kg)	31	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ² (100% Strain)	15.0	psi	ASTM D412
Tensile Stress ² (300% Strain)	25.0	psi	ASTM D412
Tensile Strength ² (Break)	377	psi	ASTM D412
Tensile Elongation ² (Break)	1200	%	ASTM D412
Tear Strength ²	48.0	lbf/in	ASTM D624
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore OO, 1 sec, Injection Molded	51		
Shore OO, 5 sec, Injection Molded	49		

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	280 to 310	°F

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Injection	Nominal Value	Unit
Middle Temperature	300 to 330	°F
Front Temperature	320 to 350	°F
Nozzle Temperature	320 to 350	°F
Processing (Melt) Temp	320 to 350	°F
Mold Temperature	80 to 120	°F
Injection Rate	Slow-Moderate	
Back Pressure	25.0 to 100	psi
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.

² Die C, 20 in/min