



Medalist® MD-16155HH

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Medalist® MD-16155HH is a high performance thermoplastic elastomer (TPE) intended for use in medical and healthcare applications. Medalist® MD-16155HH is a medium density, medium hardness, sterilizable grade with good compression set, and high heat resistance that is suitable for injection molding.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Autoclave Sterilizable • Chemical Resistant • Ethylene Oxide Sterilizable • Excellent Elastic Recovery • Good Adhesion	• Good Flow • Good Moldability • Good Sterilizability • Halogen Free • Low Compression Set	• Medium Density • Medium Hardness • Radiation (Gamma) Resistant
Uses	• Gaskets • Hospital Goods • Medical/Healthcare Applications	• Membranes • Pharmaceuticals • Plugs	• Rubber Replacement • Seals
Agency Ratings	• ISO 10993-5	• ISO 13485	
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available	• Natural Color	• Opaque
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.03		ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/5.0 kg)	2.5	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ² (100% Strain)	350	psi	ASTM D412
Tensile Strength ² (Break)	890	psi	ASTM D412
Tensile Elongation ² (Break)	620	%	ASTM D412
Tear Strength ²	157	lbf/in	ASTM D624
Compression Set			
73°F, 22 hr ³	13	%	ASTM D395B
158°F, 22 hr ³	25	%	ASTM D395B
212°F, 22 hr	36	%	ASTM D395
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec	59		
Shore A, 5 sec	57		

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Processing Information

Injection	Nominal Value	Unit
Rear Temperature	360 to 420	°F
Middle Temperature	380 to 440	°F
Front Temperature	400 to 480	°F
Nozzle Temperature	400 to 480	°F
Processing (Melt) Temp	400 to 480	°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

¹ Typical properties: these are not to be construed as specifications.

² Die C, 20 in/min

³ Type 1