



Medalist® MD-12364

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Medalist MD-12364 is a high performance thermoplastic elastomer specifically designed for healthcare and medical applications. Medalist MD-12364 is a medium hardness, low density, halogen-free grade that can be sterilized is suitable for injection molding and extrusion.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Autoclave Sterilizable • Ethylene Oxide Sterilizable • Good Processability • High Purity	• Kink Resistant • Low Density • Low Specific Gravity • Medium Hardness	• No Animal Derived Components • Radiation (Gamma) Resistant
Uses	• Medical/Healthcare Applications	• Pharmaceuticals	• Tubing
RoHS Compliance	• RoHS Compliant		
Appearance	• Translucent		
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.882		ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	1.0	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress (300% Strain)	700	psi	ASTM D412
Tensile Strength (Break)	1900	psi	ASTM D412
Tensile Elongation (Break)	630	%	ASTM D412
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore A, 1 sec)	66		ASTM D2240

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	360 to 450	°F
Middle Temperature	370 to 460	°F
Front Temperature	380 to 470	°F
Nozzle Temperature	390 to 480	°F
Processing (Melt) Temp	390 to 480	°F
Mold Temperature	95 to 120	°F
Injection Pressure	200 to 800	psi
Injection Rate	Fast	

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Injection	Nominal Value	Unit
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).

Extrusion	Nominal Value	Unit
Cylinder Zone 1 Temp.	360 to 450	°F
Cylinder Zone 2 Temp.	370 to 460	°F
Cylinder Zone 3 Temp.	380 to 470	°F
Cylinder Zone 5 Temp.	390 to 480	°F
Die Temperature	390 to 480	°F

Extrusion Notes

Screw Speed: 30 to 100 rpm

Notes

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