



Medalist® MD-84368 AP(PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Medalist MD-84300 AP series are high performance thermoplastic elastomers designed specifically for extrusion and injection molded electrical applications in the medical and healthcare industry. The Medalist MD-84300 series are a better alternative to traditional TPVs used in such applications. Medalist MD-84368 AP is a medium hardness, low density grade with good electrical properties and can be sterilized by autoclave, ETO, or gamma radiation.

General

Material Status	• Preliminary Data		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Autoclave Sterilizable • Electrically Insulating • Ethylene Oxide Sterilizable • Good Color Stability • Good Colorability	• Good Sterilizability • Halogen Free • High Tensile Strength • Low Density • Low Flow	• Low Specific Gravity • Medium Hardness • Radiation Sterilizable • Slip
Uses	• Flexible Jacketing • Medical/Healthcare Applications	• Pharmaceuticals • Rubber Replacement	• Wire & Cable Applications
Agency Ratings	• ISO 13485		
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available	• Natural Color	• Opaque
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.932		ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	2.0	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress (100% Strain)	435	psi	ASTM D412
Tensile Stress (300% Strain)	798	psi	ASTM D412
Tensile Strength (Break)	870	psi	ASTM D412
Tensile Elongation (Break)	350	%	ASTM D412
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec	71		
Shore A, 5 sec	69		

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	390 to 420	°F

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Injection	Nominal Value	Unit
Middle Temperature	415 to 430	°F
Front Temperature	430 to 441	°F
Nozzle Temperature	430 to 445	°F
Processing (Melt) Temp	430 to 445	°F
Mold Temperature	77 to 150	°F
Injection Pressure	200 to 1000	psi
Back Pressure	25.0 to 50.0	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.	329 to 410	°F
Cylinder Zone 2 Temp.	338 to 421	°F
Cylinder Zone 3 Temp.	347 to 430	°F
Cylinder Zone 4 Temp.	347 to 430	°F
Cylinder Zone 5 Temp.	356 to 444	°F
Die Temperature	356 to 444	°F

Extrusion Notes

Screw Speed: 30 to 100 rpm

Notes

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