



Medalist® MD-135

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

This compound is designed for medical and healthcare applications including blow molded parts.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Uses	• Medical/Healthcare Applications • Pharmaceuticals		
Agency Ratings	• ISO 10993-5		
RoHS Compliance	• RoHS Compliant		
Appearance	• Translucent		
Forms	• Pellets		
Processing Method	• Blow Molding	• Extrusion	• Injection Molding

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.880		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	3.2	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress - Flow ² (100% Strain)	345	psi	ASTM D412
Tensile Stress - Flow ² (200% Strain)	443	psi	ASTM D412
Tensile Stress - Flow ² (300% Strain)	534	psi	ASTM D412
Tensile Strength - Flow ² (Break)	895	psi	ASTM D412
Tensile Elongation - Flow ² (Break)	600	%	ASTM D412
Tear Strength - Flow ²	190	lbf/in	ASTM D624
Compression Set (73°F, 22 hr)	17	%	ASTM D395
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore A, 1 sec)	46		ASTM D2240

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	280 to 320	°F
Middle Temperature	320 to 360	°F
Front Temperature	340 to 380	°F
Nozzle Temperature	380 to 420	°F
Processing (Melt) Temp	380 to 420	°F
Mold Temperature	70 to 100	°F

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.	280 to 300	°F
Cylinder Zone 2 Temp.	300 to 320	°F
Cylinder Zone 3 Temp.	320 to 360	°F
Cylinder Zone 5 Temp.	340 to 380	°F
Die Temperature	360 to 400	°F

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Extrusion Notes

Screw Speed: 30 to 100 rpm

Notes

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

² Die C, 20 in/min
