



Medalist® MD-34028

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Medalist MD-34028 is a high performance thermoplastic elastomer specifically designed for healthcare and medical applications. Medalist MD-34028 is a low hardness, low density, halogen-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 Adhesion • Good Colorability • Good Compression Set	• Good Moldability • Good Sterilizability • Halogen Free • High Viscosity • High Viscosity	• Low Density • Low Hardness • Radiation (Gamma) Resistant
Uses	• Bonding • Hospital Goods • Knobs • Medical Devices	• Medical/Healthcare Applications • Overmolding • Pharmaceuticals • Safety Equipment	• Safety Equipment • Surgical Instruments
Agency Ratings	• ISO 10993-5	• ISO 13485	
RoHS Compliance	• RoHS Compliant		
Appearance	• Translucent		
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.970		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	21	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ² (300% Strain)	250	psi	ASTM D412
Tensile Strength ² (Break)	400	psi	ASTM D412
Tensile Elongation ² (Break)	500	%	ASTM D412
Compression Set ³ (73°F, 22 hr)	10	%	ASTM D395
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore A)	30		ASTM D2240
Additional Information	Nominal Value	Unit	
Adhesion to ABS			
Adhesion to PC			
Adhesion to PC/ABS			

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Processing Information

Injection	Nominal Value	Unit
Rear Temperature	280 to 320	°F
Middle Temperature	320 to 360	°F
Front Temperature	360 to 400	°F
Nozzle Temperature	360 to 420	°F
Processing (Melt) Temp	360 to 420	°F
Mold Temperature	70 to 100	°F
Injection Pressure	200 to 800	psi
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