Medalist® MD-32045 AP NAT (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

Wednesday, April 1, 2026

General Information

Product Description

Medalist MD-32045 AP is a high performance thermoplastic elastomer specifically designed for overmolding and multi-shot molding applications in the healthcare/medical segment. Medalist MD-32045 AP is a medium hardness, medium density, halogen-free and translucent grade that bonds to ABS, PC/ABS, and PC.

General			
Material Status	• Preliminary Data		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Abrasion Resistant • Bondability • Chemical Resistant • Filled • Good Colorability	• Good Flexibility • Good Flow • Good Impact Resistance • Good Moldability • Good Sterilizability	• Halogen Free • Lubricated • Medium Density • Medium Hardness
Uses	• Bonding • Medical/Healthcare Applications	• Overmolding • Soft Touch Applications	
Agency Ratings	• ISO 10993-5	• ISO 13485	
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available	• Natural Color	• Translucent
Forms	• Pellets		
Processing Method	• Injection Molding	• Multi Injection Molding	

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.910		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	3.0	g/10 min	ASTM D1238
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress [2] (100% Strain)	630	psi	ASTM D412
Tensile Stress [2] (300% Strain)	780	psi	ASTM D412
Tensile Strength [2] (Break)	1660	psi	ASTM D412
Tensile Elongation [2] (Break)	320	%	ASTM D412
Tear Strength [2]	220	lbf/in	ASTM D624
Compression Set [3] (73°F, 22 hr)	12	%	ASTM D395B
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	43		
Shore A, 5 sec, Injection Molded	41		

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Processing Information

Injection	Nominal Value	Unit
Rear Temperature	320 to 360	°F
Middle Temperature	340 to 380	°F
Front Temperature	360 to 390	°F
Nozzle Temperature	360 to 390	°F
Processing (Melt) Temp	360 to 400	°F
Mold Temperature	60 to 100	°F
Injection Rate	Fast	
Back Pressure	25.0 to 100	psi
Screw Speed	50 to 100	rpm
Cushion	0.150 to 1.00	in

Injection Notes

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

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