

Medalist® MD-32265

Teknor Apex Company - Thermoplastic Elastomer

Saturday, September 14, 2024

General Information

Product Description

Medalist MD-32265 is a high performance thermoplastic elastomer specifically designed for overmolding and multi-shot molding applications in the healthcare/medical segment. Medalist MD-32265 is a medium hardness, medium density, RoHS compliant grade that is sterilized, and is suitable for both injection molding and extrusion.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Bondability • BPA Free • Good Adhesion • Good Colorability	• Good Compression Set • Good Flexibility • Good Impact Resistance • Good Moldability	• Good Processability • Good Sterilizability • High Elasticity • Medium Hardness
Uses	• Bonding • Flexible Grips • Gaskets • Handles	• Jacketing • Medical Devices • Medical/Healthcare Applications • Overmolding	• Pharmaceuticals • Rubber Replacement
Agency Ratings	• ISO 10993-5	• 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	0.998	g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/5.0 kg)	2.0	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress (100% Strain)	2.14	MPa	ASTM D412
Tensile Stress (200% Strain)	3.03	MPa	ASTM D412
Tensile Stress (300% Strain)	4.00	MPa	ASTM D412
Tensile Strength (Break)	6.21	MPa	ASTM D412
Tensile Elongation (Break)	600	%	ASTM D412
Tear Strength	30.6	kN/m	ASTM D624
Compression Set (23°C, 22 hr)	20	%	ASTM D395
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore A)	65		ASTM D2240
Additional Information	Nominal Value	Unit	
Adhesion to Nylon			

Legal Statement

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Revision Date: 4/28/2020

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Processing Information

Injection	Nominal Value	Unit
Drying Temperature	60	°C
Drying Time	2.0 to 4.0	hr
Rear Temperature	160 to 182	°C
Middle Temperature	177 to 216	°C
Front Temperature	204 to 249	°C
Nozzle Temperature	227 to 282	°C
Processing (Melt) Temp	227 to 282	°C
Mold Temperature	21 to 38	°C
Injection Pressure	1.38 to 5.52	MPa
Back Pressure	0.689 to 1.24	MPa
Screw Speed	50 to 100	rpm
Cushion	3.81 to 25.4	mm

Injection Notes

Moisture can degrade the material. Drying is suggested. This can be accomplished by placing the material in a desiccant dryer for 2 to 4 hours at 140°F.

Extrusion

Extrusion	Nominal Value	Unit
Cylinder Zone 1 Temp.	193 to 216	°C
Cylinder Zone 2 Temp.	249 to 271	°C
Cylinder Zone 3 Temp.	260 to 282	°C
Cylinder Zone 4 Temp.	271 to 293	°C
Die Temperature	271 to 293	°C

Extrusion Notes

Screw Speed: 30 to 100 rpm

Notes

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

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