Medalist® MD-12340 NAT

Thermoplastic Elastomer

Teknor Apex Company

Message:

Medalist(R) MD-12340 is a translucent high performance thermoplastic elastomer intended for use in medical and healthcare applications. Medalist(R) MD-12340 is a low density, low hardness, low odor grade that is suitable for extrusion and injection molding.

General Information	
Features	Low Specific Gravity Low density Radiation disinfection Pressure cooker disinfection Ethylene oxide disinfection Anti-gamma radiation Good adhesion Good chemical resistance The smell is low to none Halogen-free Hardness, low
Uses	Rubber substitution Drug Medical/nursing supplies
Agency Ratings	ISO 10993 Part 5 ISO 13485
RoHS Compliance	RoHS compliance
Appearance	Translucent Natural color
Forms	Particle
Processing Method	Extrusion Injection molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.878	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	2.0	g/10 min	ASTM D1238
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness			ASTM D2240

Shaw A, 1 sec	42		ASTM D2240
Shaw A, 5 seconds	40		ASTM D2240

Elastomers	Nominal Value	Unit	Test Method
Tensile Stress [1]			ASTM D412
100% strain	1.10	MPa	ASTM D412
200% strain	1.83	MPa	ASTM D412
300% strain	2.72	MPa	ASTM D412
Tensile Strength [2] (Break)	9.31	MPa	ASTM D412
Tensile Elongation [3] (Break)	780	%	ASTM D412
Tear Strength [4]	21.9	kN/m	ASTM D624
Compression Set [5] (23°C, 22 hr)	13	%	ASTM D395

Legal statement

Injection	Nominal Value	Unit
Rear Temperature	138 - 160	°C
Middle Temperature	160 - 182	°C
Front Temperature	171 - 193	°C
Nozzle Temperature	193 - 216	°C
Processing (Melt) Temp	193 - 216	°C
Mold Temperature	21 - 38	°C
Injection Pressure	1.38 - 5.52	MPa
Back Pressure	0.172 - 0.689	MPa
Screw Speed	50 - 100	rpm
Cushion	3.81 - 25.4	mm

Injection instructions

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.	138 - 149	°C
Cylinder Zone 2 Temp.	149 - 160	°C
Cylinder Zone 3 Temp.	160 - 182	°C
Cylinder Zone 4 Temp.	171 - 193	°C
Cylinder Zone 5 Temp.	171 - 193	°C
Die Temperature	182 - 204	°C

Extrusion instructions

螺杆转速30 - 100 rpm

NOTE

1.	C mold, 510mm/min

2.	C mold, 510mm/min
3.	C mold, 510mm/min
4.	C mold, 510mm/min
5.	Type 1

Recommended distributors for this material

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WECHAT