

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

The information and recommendations contained in this bulletin are, to the best of our knowledge, accurate and reliable but no guarantee of their accuracy is made. All products are sold upon condition that purchasers shall make their own tests to determine the suitability of such products for their particular purposes and uses and purchaser assumes all risks and liability for the results of use of the products, including use in accordance with seller's recommendations. Nothing in this bulletin constitutes permission or a recommendation to practice or use any invention covered by any patent owned by this company or others. There is no warranty of merchantability and there are no other warranties for the products described. For detailed Product Stewardship information, please contact us. Any product of Teknor Apex, including product names, shall not be used or tested in medical or food contact applications without the prior written acknowledgement of Teknor Apex as to the intended use. Please note that some products may not be available in one or more countries.

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

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

