

Medalist® MD-53273 (PRELIMINARY DATA)

Thermoplastic Elastomer

Teknor Apex Company

Message:

The Medalist MD-53200 Series is a high performance thermoplastic elastomer series, designed to be a sustainable alternative to flexible PVC for medical tubing and film. Medalist MD-53273 is a low density, medium hardness, clear, lubricated grade, available in Nat and color-matched, intended for use in medical and healthcare applications, with excellent processability and throughput in extruded tubing.

General Information	
Features	Low Specific Gravity
	High purity
	Low density
	Pressure cooker disinfection
	Ethylene oxide disinfection
	Anti-gamma radiation
	Workability, good
	Good melt strength
	Good coloring
	Good adhesion
	Good chemical resistance
	Kink resistance
	Definition, high
	Good toughness
	Lubrication
	No kinetic components
	Halogen-free
	Medium hardness
Uses	Clear Sheet
	Films
	Pipe
	Pipe fittings
	Rubber substitution
	Drug
	Medical/nursing supplies
Agency Ratings	ISO 10993 Part 5
	ISO 13485
RoHS Compliance	RoHS compliance
Appearance	Available colors

Clear/transparent

Forms	Particle
Processing Method	Extrusion cast film Injection molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.888	g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	6.0	g/10 min	ASTM D1238
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shaw A, 1 sec	78		ASTM D2240
Shaw A, 5 seconds	76		ASTM D2240
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress			ASTM D412
50% strain	3.83	MPa	ASTM D412
100% strain	4.21	MPa	ASTM D412
300% strain	6.07	MPa	ASTM D412
Tensile Strength (Break)	14.4	MPa	ASTM D412
Tensile Elongation (Break)	630	%	ASTM D412
Tear Strength	56.0	kN/m	ASTM D624
Compression Set			ASTM D395
23°C, 22 hr	21	%	ASTM D395
70°C, 22 hr	82	%	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	149 - 171	°C
Middle Temperature	171 - 193	°C
Front Temperature	193 - 227	°C
Nozzle Temperature	193 - 227	°C
Processing (Melt) Temp	193 - 227	°C
Mold Temperature	21 - 52	°C
Back Pressure	0.345 - 1.03	MPa
Screw Speed	50 - 100	rpm
Cushion	3.56 - 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.

171 - 188

°C

Cylinder Zone 2 Temp.

182 - 196

°C

Cylinder Zone 3 Temp.

185 - 204

°C

Cylinder Zone 4 Temp.

204 - 227

°C

Cylinder Zone 5 Temp.

204 - 227

°C

Die Temperature

204 - 227

°C

Extrusion instructions

Screw Speed: 30 to 100 rpm. Screen Pack Recommendation: 60/200/200/60 to 60/200/400/400/200/60 mesh size.

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



WECHAT