



Medalist MD-135

Uses: Medical and healthcare applications including blow molded parts

Appearance: Translucent

Processing method: Injection molding, extrusion, blow molding

Physical Properties		Test Method	Nominal Value	
			English Units	SI Units
Specific Gravity		ASTM D792	0.88	0.88 g/cm ³
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)		ASTM D1238		
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)		ASTM D1238	4.0 g/10 min	4.0 g/10 min
Melt Mass-Flow Rate (MFR) (125°C/2.16 kg)		ASTM D1238		
Mold Shrinkage (Flow)		ASTM D955	0.0437 in/in	4.4%
Mold Shrinkage (Across Flow)		ASTM D955	0.0365 in/in	3.6%
Elastomers		Test Method	Nominal Value	
Tensile Stress at 100%		ASTM D412	150 psi	1.03 Mpa
Tensile Stress at 200%		ASTM D412	215 psi	1.48 Mpa
Tensile Stress at 300%		ASTM D412	310 psi	2.14 Mpa
Tensile Strength at Break		ASTM D412	410 psi	2.83 Mpa
Elongation at Break		ASTM D412	650%	650%
Tear Strength		ASTM D624	190 lb/in	33.3 kN/m
Compression Set (73°F, 22 hours)		ASTM D395	17%	17%
Hardness		Test Method	Nominal Value	
Durometer Hardness (Shore A)		ASTM D2240	45	45
Injection Processing		Recommendation		
Rear Temperature			280 to 320°F	138 to 160°C
Middle Temperature			320 to 360°F	160 to 182°C
Front Temperature			340 to 380°F	171 to 193°C
Nozzle Temperature			380 to 420°F	193 to 216°C
Processing (Melt) Temperature			380 to 420°F	193 to 216°C
Mold Temperature			70 to 100°F	21 to 38°C
Injection Pressure			200 to 800 psi	1.38 to 5.52 Mpa
Back Pressure			25 to 100 psi	0.17 to 0.69 Mpa
Screw Speed			50 to 100 rpm	50 to 100 rpm
Cushion			0.150 to 1.00 in	3.8 to 25.4 mm
Injection Notes: Drying is not necessary. However, if moisture is a problem, dry the pellets for 2 to 4 hours at 150°F (65°C).				
Extrusion Processing		Recommendation		
Cylinder Zone 1 Temperature			280 to 300°F	138 to 149°C
Cylinder Zone 2 Temperature			300 to 320°F	149 to 160°C
Cylinder Zone 3 Temperature			320 to 360°F	160 to 182°C
Cylinder Zone 5 Temperature			340 to 380°F	171 to 193°C
Die Temperature			360 to 400°F	182 to 204°C
Extrusion Notes: Screw Speed: 30 to 100 rpm				

The data above was obtained on samples of the materials under laboratory conditions. To the best of our knowledge, this data is within the accuracy and precision of the respective tests. Because of testing and sampling variability, we cannot guarantee that other laboratories will obtain the same results and no warranty is expressed or implied.