



Medalist® MD-16120G (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Medalist MD-16120G XRD1 is a high performance thermoplastic elastomer specifically designed for healthcare and medical applications. Medalist MD-16120G XRD1 is a low hardness, low density, lubricated grade that can be sterilized and is suitable for injection molding.

General

Material Status	• Preliminary Data		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Good Colorability • Good Moldability • Good Processability • Good Sterilizability	• Halogen Free • High Elongation • High Flow • Low Density	• Low Hardness • Lubricated • Soft
Uses	• Disposable Hospital Goods • Hospital Goods	• Medical/Healthcare Applications • Pharmaceuticals	• Rubber Replacement • Soft Touch Applications
Agency Ratings	• ISO 10993-5	• ISO 13485	
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available	• Natural Color	• Translucent
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.842		ASTM D792
Melt Mass-Flow Rate (MFR) (125°C/0.325 kg)	1.0	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ² (100% Strain)	5.08	psi	ASTM D412
Tensile Stress ² (200% Strain)	6.38	psi	ASTM D412
Tensile Stress ² (300% Strain)	7.83	psi	ASTM D412
Tensile Strength ² (Break)	200	psi	ASTM D412
Tensile Elongation ² (Break)	1300	%	ASTM D412
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore OO, 1 sec, Injection Molded	23		
Shore OO, 5 sec, Injection Molded	20		

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	250 to 275	°F
Middle Temperature	275 to 300	°F

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Injection	Nominal Value	Unit
Front Temperature	300 to 320	°F
Nozzle Temperature	300 to 330	°F
Processing (Melt) Temp	300 to 330	°F
Mold Temperature	80 to 120	°F
Injection Rate	Slow-Moderate	
Back Pressure	25.0 to 100	psi
Cushion	0.150 to 1.00	in

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).

Notes

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

² Die C, 20 in/min