



Medalist® RG-38052 XRD1 (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene RG-38052 XRD1 is a high performance thermoplastic elastomer specifically designed for regulated applications including food contact. Monprene RG-38052 XRD1 is a low hardness, low density, RoHS compliant grade that is suitable for injection molding and extrusion. This grade complies with various US FDA regulations for food contact. Please contact Teknor Apex for a regulatory compliance letter.

General

Material Status	• Preliminary Data		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Chemical Resistant • Food Contact Acceptable • Good Colorability	• Good Flexibility • Good Melt Strength • Good Processability	• Good Toughness • Low Density • Low Hardness
Uses	• Consumer Applications • Packaging	• Rubber Replacement • Tubing	
Agency Ratings	• FDA Food Contact		
RoHS Compliance	• RoHS Compliant		
Appearance	• Translucent		
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.890		ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	4.0	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress (50% Strain)	215	psi	ASTM D412
Tensile Stress (100% Strain)	270	psi	ASTM D412
Tensile Stress (300% Strain)	510	psi	ASTM D412
Tensile Strength (Break)	1420	psi	ASTM D412
Tensile Elongation (Break)	640	%	ASTM D412
Tear Strength	220	lbf/in	ASTM D624
Compression Set (73°F, 22 hr)	16	%	ASTM D395
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec	53		
Shore A, 5 sec	52		

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	300 to 340	°F

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Injection	Nominal Value	Unit
Middle Temperature	340 to 380	°F
Front Temperature	380 to 440	°F
Nozzle Temperature	380 to 440	°F
Processing (Melt) Temp	380 to 440	°F
Mold Temperature	70 to 125	°F
Back Pressure	50.0 to 150	psi
Screw Speed	50 to 100	rpm
Cushion	0.140 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)

Extrusion	Nominal Value	Unit
Cylinder Zone 1 Temp.	340 to 370	°F
Cylinder Zone 2 Temp.	360 to 385	°F
Cylinder Zone 3 Temp.	365 to 400	°F
Cylinder Zone 4 Temp.	375 to 420	°F
Cylinder Zone 5 Temp.	400 to 440	°F
Die Temperature	400 to 440	°F

Extrusion Notes

Screw Speed: 30 to 100 rpm

Screen Pack Recommendation: 60/200/200/60 to 60/200/400/400/200/60 mesh size

Notes

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