



Monprene® RG-12059 NAT XRD1 (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene RG-12059 NAT XRD1 is a low hardness, low density grade that is suitable for injection molding and extrusion.

General

Material Status	• Preliminary Data		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Good Colorability • Good Mold Release • Good Moldability • Good Processability	• Low Density • Low Specific Gravity • Lubricated • Medium Flow	• Medium Hardness • Slip • Without Fillers
Uses	• Consumer Applications • Gaskets • Handles	• Soft Touch Applications • Sporting Goods • Toothbrush Handles	• Toys • Tubing • Writing Instruments
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available	• Natural Color	• Translucent
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.862		ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	1.5	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Strength (Break)	943	psi	ASTM D412
Tensile Elongation (Break)	600	%	ASTM D412
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec	62		
Shore A, 5 sec	59		

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	380 to 420	°F
Middle Temperature	380 to 420	°F
Front Temperature	380 to 420	°F
Nozzle Temperature	380 to 420	°F
Processing (Melt) Temp	380 to 420	°F
Mold Temperature	60 to 90	°F
Injection Rate	Fast	

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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.	360 to 400	°F
Cylinder Zone 2 Temp.	360 to 400	°F
Cylinder Zone 3 Temp.	360 to 400	°F
Cylinder Zone 4 Temp.	360 to 400	°F
Cylinder Zone 5 Temp.	360 to 400	°F
Die Temperature	360 to 400	°F
Extrusion Notes		
Screw Speed: 30 to 100 rpm		

Notes

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