



# Monprene® RG-17279 BLK 9004

Teknor Apex Company - Thermoplastic Elastomer

## General Information

### Product Description

Monprene RG-17279 BLK 9004 is specifically designed for food contact applications and other regulated markets such as children's and infants products. Monprene RG-17279 BLK 9004 is a high hardness, medium density grade that is suitable for injection molding and extrusion. Please contact your Teknor Apex rep for a regulatory letter as required.

### General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Food Contact Acceptable • Good Adhesion • Good Organoleptic Properties	• Good Processability • Good Strength • Good Toughness	• High Hardness • Medium Density • Medium Flow
Uses	• Closures • Consumer Applications • Cookware Handles • Grommets	• Handles • Kitchenware • Knobs • Rubber Replacement	• Toys • Tubing
Agency Ratings	• EU Food Contact	• FDA Food Contact	
RoHS Compliance	• RoHS Compliant		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

## ASTM & ISO Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.963		ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	24	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress - Flow <sup>2</sup> (100% Strain)	499	psi	ASTM D412
Tensile Stress - Flow <sup>2</sup> (300% Strain)	709	psi	ASTM D412
Tensile Strength - Flow <sup>2</sup> (Break)	1260	psi	ASTM D412
Tensile Elongation - Flow <sup>2</sup> (Break)	660	%	ASTM D412
Tear Strength - Flow <sup>2</sup>	248	lbf/in	ASTM D624
Compression Set (73°F, 22 hr)	30	%	ASTM D395
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec	79		
Shore A, 5 sec	77		

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### Processing Information

Injection	Nominal Value	Unit
Rear Temperature	360 to 450	°F
Middle Temperature	370 to 460	°F
Front Temperature	380 to 470	°F
Nozzle Temperature	390 to 480	°F
Processing (Melt) Temp	390 to 480	°F
Mold Temperature	95 to 120	°F
Injection Pressure	200 to 800	psi
Injection Rate	Fast	
Back Pressure	25.0 to 100	psi
Screw Speed	50 to 100	rpm
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).

Extrusion	Nominal Value	Unit
Cylinder Zone 1 Temp.	360 to 450	°F
Cylinder Zone 2 Temp.	370 to 460	°F
Cylinder Zone 3 Temp.	380 to 470	°F
Cylinder Zone 4 Temp.	380 to 470	°F
Cylinder Zone 5 Temp.	390 to 480	°F
Die Temperature	390 to 480	°F

#### Extrusion Notes

Screw Speed: 30 to 100 rpm

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> Die C, 20 in/min