



Monprene® IN-15060V BLK XRD1 (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene IN-15060V BLK XRD1 is a general purpose thermoplastic elastomer, available in BLK, designed for the industrial market, including caster wheels. Monprene IN-15060V BLK XRD1 is a medium hardness, low density grade that exhibits low compression set, good abrasion and chemical resistance. This grade is suitable for injection molding and extrusion.

General

Material Status	• Preliminary Data		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Abrasion Resistant • Abrasion Resistant • Bondability • Chemical Resistant • Good Colorability • Good Flow	• Good Melt Strength • Good Mold Release • Good Moldability • Good Processability • Good Processing Stability • Good Strength	• Good Tear Strength • Low Compression Set • Low Density • Low Specific Gravity • Medium Hardness
Uses	• Building Materials • Expansion Joint • Gaskets • Glazing • Hose	• Industrial Applications • Outdoor Applications • Pipe Seals • Potable Water Applications • Roof Vents	• Rubber Replacement • Strain Reliefs • White Goods & Small Appliances • Windows & Doors
RoHS Compliance	• RoHS Compliant		
Appearance	• Black	• Colors Available	
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.904		ISO 1183
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	5.2	g/10 min	ISO 1133
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress - Across Flow ² (100% Strain)	247	psi	ISO 37
Tensile Strength - Across Flow ² (Break)	1020	psi	ISO 37
Tensile Elongation - Across Flow ² (Break)	600	%	ISO 37
Compression Set ³			
73°F, 22 hr	18	%	ISO 815
158°F, 22 hr	90	%	ISO 868
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ISO 868
Shore A, Injection Molded	60		
Shore A, 5 sec, Injection Molded	58		
Shore A, 15 sec, Injection Molded	57		
Fill Analysis	Nominal Value	Unit	Test Method
Apparent Viscosity ⁴ (392°F, 206 sec ⁻¹)	325	Pa·s	ISO 11443

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Processing Information

Injection	Nominal Value	Unit
Rear Temperature	302 to 356	°F
Middle Temperature	420 to 460	°F
Front Temperature	420 to 460	°F
Nozzle Temperature	420 to 460	°F
Processing (Melt) Temp	420 to 460	°F
Mold Temperature	60 to 90	°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.	400 to 440	°F
Cylinder Zone 2 Temp.	400 to 440	°F
Cylinder Zone 3 Temp.	400 to 440	°F
Cylinder Zone 4 Temp.	400 to 440	°F
Cylinder Zone 5 Temp.	400 to 440	°F
Die Temperature	400 to 440	°F

Extrusion Notes

Screw Speed: 30 to 100 rpm

Notes

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

² Die C, 20 in/min

³ Method B, Type 1

⁴ Capillary