

Monprene® OM-12341 XRD1 (Preliminary Data)

Teknor Apex Company - Thermoplastic Elastomer

Friday, June 30, 2017

General Information

Product Description

Monprene OM-12341 XRD1 is a specialty thermoplastic elastomer, available in NAT, BLK, and colors, designed for overmolding applications like grips and anti-skid parts for consumer and industrial products. Monprene OM-12341 XRD1 is a low hardness, medium density, filled grade that exhibits excellent adhesion to polystyrene(PS) and can be processed via injection and multi-injection molding.

General

Material Status	• Preliminary Data		
Availability	• Africa & Middle East • Asia Pacific	• Europe • North America	
Features	• Bondability • Chemical Resistant • Excellent Processability	• Filled • Good Adhesion • Low Hardness	• Medium Density • Medium Flow
Uses	• Bonding • Flexible Grips	• Footwear • Grommets	• Rubber Replacement
RoHS Compliance	• RoHS Compliant		
Appearance	• Black	• Colors Available	• Natural Color
Forms	• Pellets		
Processing Method	• Injection Molding	• Multi Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.992		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	4.0	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ²			ASTM D412
Across Flow : 100% Strain	181	psi	
Flow : 100% Strain	218	psi	
Tensile Stress ²			ASTM D412
Across Flow : 300% Strain	276	psi	
Flow : 300% Strain	348	psi	
Tensile Strength ²			ASTM D412
Across Flow : Break	580	psi	
Flow : Break	421	psi	
Tensile Elongation ²			ASTM D412
Across Flow : Break	720	%	
Flow : Break	490	%	
Tear Strength ²			ASTM D624
Across Flow	160	lbf/in	
Flow	108	lbf/in	
Compression Set ³			ASTM D395B
73°F, 22 hr	14	%	
158°F, 22 hr	96	%	
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	43		
Shore A, 5 sec, Injection Molded	40		

Additional Information

Adhesion to PS



Revision Date: 6/1/2016

The information and recommendations contained in this bulletin are, to the best of our knowledge, accurate and reliable but no guarantee of their accuracy is made. All products are sold upon condition that purchasers shall make their own tests to determine the suitability of such products for their particular purposes and uses and purchasers assume all risks and liability for the results of use of the products, including use in accordance with seller's recommendations. Nothing in this bulletin constitutes permission or a recommendation to practice or use any invention covered by any patent owned by this company or by others. There is no warranty of merchantability and there are no other warranties for the products described.

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Processing Information

Injection	Nominal Value	Unit
Rear Temperature	347 to 383	°F
Middle Temperature	356 to 392	°F
Front Temperature	383 to 419	°F
Nozzle Temperature	401 to 437	°F
Processing (Melt) Temp	370 to 410	°F
Mold Temperature	68 to 104	°F
Injection Pressure	200 to 1000	psi
Injection Rate	Moderate-Fast	
Back Pressure	25.0 to 50.0	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).

Notes

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

² Die C, 20 in/min

³ Type 1

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