TEKNOR APEX

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	**Nominal Value**	**Unit**	
Adhesion to PS			

Revision Date: 6/1/2016

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Legal Statement

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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