



Monprene® OM-12240-01 NAT XRD2 (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene® OM-12240-01 NAT XRD2 is a specialty thermoplastic elastomer, available in NAT and colors, designed for overmolding applications like grips and anti-skid parts for consumer and industrial products. Monprene® OM-12240-01 NAT XRD2 is a medium hardness, low density, opaque grade that exhibits excellent adhesion to PC, ABS, and PC/ABS.

General

Material Status	• Preliminary Data		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Bondability • Good Colorability • Good Mold Release	• Good Moldability • Low Density • Low Flow	• Low Specific Gravity • Medium Hardness
Uses	• Appliances • Bonding • Cell Phones • Flexible Grips	• Handles • Knobs • Overmolding • Power/Other Tools	• Sporting Goods • Toothbrush Handles • Writing Instruments
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available	• Natural Color	• Opaque
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.952		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	15	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress (300% Strain)	290	psi	ASTM D412
Tensile Strength (Break)	1160	psi	ASTM D412
Tensile Elongation (Break)	500	%	ASTM D412
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A	43		
Shore A, 5 sec	40		
Additional Information	Nominal Value	Unit	
Adhesion to ABS			
Adhesion to PC			
Adhesion to PC/ABS			

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Injection	Nominal Value	Unit
Drying Temperature	140	°F
Drying Time	2.0 to 4.0	hr
Rear Temperature	280 to 320	°F
Middle Temperature	360 to 390	°F
Front Temperature	360 to 390	°F
Nozzle Temperature	380 to 410	°F
Processing (Melt) Temp	350 to 390	°F
Mold Temperature	40 to 120	°F
Injection Pressure	200 to 800	psi
Back Pressure	25.0 to 125	psi
Screw Speed	50 to 100	rpm
Cushion	0.150 to 1.00	in

Injection Notes

Moisture can degrade the material. Drying is suggested. This can be accomplished by placing the material in a desiccant dryer for 2 to 4 hours at 140°F.

Notes

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