



Monprene® OM-12265-03 NAT XRD1

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene OM-12265-03 NAT XRD1 is a specialty thermoplastic elastomer designed for overmolding applications like grips and anti-skid parts for consumer and industrial products. Monprene OM-12265-03 NAT XRD1 is a medium hardness, low density, UV stabilized grade that exhibits excellent adhesion to PC, ABS, and PC/ABS, and is compliance to REACH.

General

Material Status	• Preliminary Data		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Bondability • Good Adhesion	• Good Moldability • UV Resistant	
Uses	• Appliances • Bonding • Cell Phones • Dental Applications	• Flexible Grips • Handles • Knobs • Overmolding	• Power/Other Tools • Rubber Replacement • Sporting Goods • Writing Instruments
RoHS Compliance	• RoHS Compliant		
Appearance	• Opaque		
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.962		ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	7.0	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress (300% Strain)	435	psi	ASTM D412
Tensile Strength (Break)	1160	psi	ASTM D412
Tensile Elongation (Break)	6.0	%	ASTM D412
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore A)	58		ASTM D2240
Additional Information	Nominal Value	Unit	
Adhesion to ABS			
Adhesion to PC			
Adhesion to PC/ABS			

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	140	°F
Drying Time	2.0 to 4.0	hr
Rear Temperature	302 to 419	°F

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Injection	Nominal Value	Unit
Middle Temperature	329 to 419	°F
Front Temperature	338 to 419	°F
Nozzle Temperature	338 to 419	°F
Processing (Melt) Temp	338 to 419	°F
Mold Temperature	59 to 95	°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.

Extrusion	Nominal Value	Unit
Cylinder Zone 1 Temp.	280 to 300	°F
Cylinder Zone 2 Temp.	300 to 320	°F
Cylinder Zone 3 Temp.	320 to 360	°F
Cylinder Zone 5 Temp.	340 to 379	°F
Die Temperature	360 to 399	°F

Notes

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