



Monprene® OM-19180 AP NAT XRD1(PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene OM-19180 AP NAT XRD1 is a specialty thermoplastic elastomer, available in NAT, and colors, designed for overmolding and co-extrusion applications like grips and anti-skid parts for consumer and industrial products. Monprene OM-19180 AP NAT XRD1 is a medium hardness, medium density, RoHS compliant grade that exhibits excellent adhesion to Nylon, PA6, & PA66.

General

Material Status	• Preliminary Data		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Bondability • Chemical Resistant • Conformable • Ductile • Filled • Good Colorability	• Good Flexibility • Good Flow • Good Impact Resistance • Good Moldability • Halogen Free • High Elasticity	• Lubricated • Medium Density • Medium Hardness • Soft
Uses	• Bonding • Consumer Applications	• Industrial Applications • Overmolding	• Soft Touch Applications
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available	• Natural Color	• Opaque
Forms	• Pellets		
Processing Method	• Injection Molding	• Multi Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.10		ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	0.50	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ² (100% Strain)	580	psi	ASTM D412
Tensile Stress ² (300% Strain)	725	psi	ASTM D412
Tensile Strength ² (Break)	1020	psi	ASTM D412
Tensile Elongation ² (Break)	400	%	ASTM D412
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore A, 1 sec, Injection Molded)	82		ASTM D2240
Additional Information	Nominal Value	Unit	
Adhesion to Nylon			
Adhesion to PA6			
Adhesion to PA66			

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Processing Information

Injection	Nominal Value	Unit
Rear Temperature	450 to 470	°F
Middle Temperature	470 to 490	°F
Front Temperature	490 to 536	°F
Nozzle Temperature	490 to 536	°F
Processing (Melt) Temp	470 to 536	°F
Mold Temperature	90 to 130	°F
Injection Pressure	5000 to 6000	psi
Injection Rate	Fast	
Holding Pressure	2800 to 3000	psi

Injection Notes

Drying is recommended to achieve a moisture level $\leq 0.08\%$. Dry the pellets for 2 to 4 hours at 185°F (85°C).

For overmolding to Nylon 6,6, use higher temperature settings than the recommended processing condition.

Notes

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

² Die C, 20 in/min