



Monprene® OM-12928

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene OM-12928 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-12928 is a low hardness, low density, RoHS compliant grade that exhibits excellent adhesion to PC/ABS.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Aliphatic • Bondability • Chemically Coupled • Conformable • Crack Resistant • Creep Resistant	• Good Colorability • Good Flow • Good Impact Resistance • Good Moldability • Halogen Free • Light Stabilized	• Low Density • Low Hardness • Low Specific Gravity • Lubricated • Medium Flow • Without Fillers
Uses	• Appliances • Bonding • Cell Phones • Consumer Applications	• Flexible Grips • Handles • Knobs • Overmolding	• Power/Other Tools • Sporting Goods • Writing Instruments
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available	• Natural Color	• Translucent
Forms	• Pellets		
Processing Method	• Injection Molding	• Multi Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.880		ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	12	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Strength - Flow ² (Break)	600	psi	ASTM D412
Tensile Elongation - Flow ² (Break)	800	%	ASTM D412
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	31		
Shore A, 5 sec, Injection Molded	28		
Additional Information	Nominal Value	Unit	
Adhesion to PC/ABS			

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Processing Information

Injection	Nominal Value	Unit
Drying Temperature	150	°F
Drying Time	2.0 to 4.0	hr
Rear Temperature	400 to 450	°F
Middle Temperature	410 to 450	°F
Front Temperature	420 to 460	°F
Nozzle Temperature	430 to 470	°F
Processing (Melt) Temp	430 to 470	°F
Mold Temperature	60 to 90	°F
Injection Pressure	200 to 1000	psi
Injection Rate	Fast	
Back Pressure	25.0 to 125	psi
Screw Speed	50 to 120	rpm
Cushion	0.150 to 1.00	in

Injection Notes

For any overmolding process it is recommended that the process temperatures for the TPE material be set at least 50°F (10°C) higher than the melt temperature of the substrate material.

Notes

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

² Die C, 20 in/min