



Monprene® IN-23968D

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene IN-23968D is a general purpose thermoplastic elastomer designed for a variety of industrial applications, including handles and grommets. Monprene IN-23968D is a medium density, high hardness, RoHS compliant grade suitable for injection molding and extrusion.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Abrasion Resistant • Chemical Resistant • Filled • Good Adhesion • Good Colorability • Good Melt Strength	• Good Moldability • Good Processability • Good Processing Stability • Good Tear Strength • Good Toughness • Halogen Free	• High Hardness • Light Stabilized • Low Compression Set • Low Density • Low Flow • Medium Density
Uses	• General Purpose • Grommets	• Handles • Industrial Applications	• Profiles
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available	• Natural Color	• Opaque
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.05		ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	3.0	g/10 min	ASTM D1238
Mechanical	Nominal Value	Unit	Test Method
Flexural Modulus	232000	psi	ASTM D790
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ²			ASTM D412
Across Flow : 100% Strain	2150	psi	
Flow : 100% Strain	2100	psi	
Tensile Strength ²			ASTM D412
Across Flow : Break	3160	psi	
Flow : Break	3640	psi	
Tensile Elongation ²			ASTM D412
Across Flow : Break	320	%	
Flow : Break	140	%	
Tear Strength ²			ASTM D624
Across Flow	1200	lbf/in	
Flow	800	lbf/in	
Compression Set ³			ASTM D395B
73°F, 22 hr	63	%	
158°F, 22 hr	86	%	
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness ⁴			ASTM D2240
Shore D, 1 sec, Injection Molded	73		
Shore D, 5 sec, Injection Molded	69		

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Fill Analysis	Nominal Value	Unit	Test Method
Apparent Viscosity (392°F, 207 sec ⁻¹)	560	Pa·s	ASTM D3835

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	440 to 480	°F
Middle Temperature	440 to 480	°F
Front Temperature	440 to 480	°F
Nozzle Temperature	440 to 480	°F
Processing (Melt) Temp	440 to 480	°F
Mold Temperature	60 to 90	°F
Injection Pressure	200 to 800	psi
Injection Rate	Fast	
Back Pressure	25.0 to 100	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).

Extrusion	Nominal Value	Unit
Cylinder Zone 1 Temp.	420 to 460	°F
Cylinder Zone 2 Temp.	420 to 460	°F
Cylinder Zone 3 Temp.	420 to 460	°F
Cylinder Zone 4 Temp.	420 to 460	°F
Cylinder Zone 5 Temp.	420 to 460	°F
Die Temperature	420 to 460	°F

Extrusion Notes

Screw Speed: 30 to 100 rpm

Notes

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

² Die C, 20 in/min

³ Type 1

⁴ Aged for 24 hr