



Monprene® IN-22058 XRD (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene IN-22058 is a general purpose thermoplastic elastomer, available in NAT and BLK, designed for a variety of industrial applications, including seals and gaskets. Monprene IN-22058 is a medium density, medium hardness grade that is suitable for injection molding and extrusion.

General

Material Status	• Preliminary Data		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Chemical Resistant • Filled • Good Adhesion • Good Flexibility	• Good Processability • Good Toughness • Low Compression Set • Low Flow	• Medium Density • Medium Hardness • Resilient
Uses	• Flexible Grips • Gaskets • General Purpose • Grommets	• Handles • Industrial Applications • O-rings • Rubber Replacement	• Seals • Tubing
RoHS Compliance	• RoHS Compliant		
Appearance	• Black	• Natural Color	
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.01		ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	1.0	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ²			ASTM D412
Across Flow : 100% Strain	184	psi	
Flow : 100% Strain	269	psi	
Tensile Stress ²			ASTM D412
Across Flow : 300% Strain	315	psi	
Flow : 300% Strain	460	psi	
Tensile Strength ²			ASTM D412
Across Flow : Break	1110	psi	
Flow : Break	704	psi	
Tensile Elongation ²			ASTM D412
Across Flow : Break	640	%	
Flow : Break	650	%	
Tear Strength ²			ASTM D624
Across Flow	165	lbf/in	
Flow	125	lbf/in	
Compression Set ³			ASTM D395B
73°F, 22 hr	18	%	
158°F, 22 hr	42	%	
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec	60		
Shore A, 5 sec	58		

Monprene® IN-22058 XRD (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

Processing Information		
Injection	Nominal Value	Unit
Rear Temperature	360 to 450	°F
Middle Temperature	370 to 460	°F
Front Temperature	380 to 470	°F
Nozzle Temperature	390 to 480	°F
Processing (Melt) Temp	390 to 480	°F
Mold Temperature	95 to 120	°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.	360 to 450	°F
Cylinder Zone 2 Temp.	370 to 460	°F
Cylinder Zone 3 Temp.	380 to 470	°F
Cylinder Zone 4 Temp.	380 to 470	°F
Cylinder Zone 5 Temp.	390 to 480	°F
Die Temperature	390 to 480	°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