+135-3858-6433 (GuangDong)
+188-1699-6168 (ShangHai)
+852-6957-5415 (HongKong)

TEKNOR APEX

Monprene® CP-16540 XRD1 (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

The Monprene® CP-16500 series of thermoplastic elastomers (TPEs) is specifically designed for dog toys, offering a sustainable alternative to thermoset rubber with excellent recyclability. Available from 25 to 65 Shore A, these TPEs are formulated with only FDA listed ingredients and mold thick and thin parts with ease. Monprene CP-16540 XRD1 is a transparent specialty TPE that offers excellent tear strength and superior resistance to puncture and tear propagation.

General			
Material Status	• Preliminary Data		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Chemical Resistant • Good Adhesion • Good Colorability • Good Flexibility • Good Melt Strength • Good Moldability	• Good Processability • Good Tear Strength • Good Toughness • Halogen Free • High Elongation • High Tensile Strength	• Light Stabilized • Low Density • Low Hardness • Medium Flow • Resilient • Without Fillers
Uses	• Consumer Applications • Flexible Grips • Knobs	• Overmolding • Plugs • Rubber Replacement	• Soft Touch Applications • Toys
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available	• Natural Color	• Transparent - Slight Yellow
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.890		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	10	g/10 min	ASTM D1238
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress [2]			ASTM D412
Across Flow : 100% Strain	150	psi	
Flow : 100% Strain	170	psi	
Tensile Stress [2]			ASTM D412
Across Flow : 300% Strain	300	psi	
Flow : 300% Strain	350	psi	
Tensile Strength [2]			ASTM D412
Across Flow : Break	1200	psi	
Flow : Break	900	psi	
Tensile Elongation [2]			ASTM D412
Across Flow : Break	950	%	
Flow : Break	800	%	
Tear Strength [2]			ASTM D624
Across Flow	210	lbf/in	
Flow	140	lbf/in	

+135-3858-6433 (GuangDong)
+188-1699-6168 (ShangHai)
+852-6957-5415 (HongKong)

Monprene® CP-16540 XRD1 (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	42		
Shore A, 5 sec, Injection Molded	40		
Shore A, 10 sec, Injection Molded	39		

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	340 to 440	°F
Middle Temperature	340 to 440	°F
Front Temperature	340 to 440	°F
Nozzle Temperature	340 to 440	°F
Processing (Melt) Temp	340 to 440	°F
Mold Temperature	60 to 90	°F
Injection Pressure	200 to 800	psi
Injection Rate	Fast	

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).

Notes

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

[2] Die C, 20 in/min