



Ultraform® N 2320 003 BK120 Q600

BASF Corporation - Acetal (POM) Copolymer

Saturday, November 2, 2019

General Information

Product Description

Ultraform N 2320 003 BK120 Q600 is a pigmented black, rapidly freezing general-purpose injection-molding POM grade. It contains a mold release agent.

Applications

Typical applications include spring elements, clips, gas filler caps, gears wheels, small motor parts, curtain hooks and release buttons for safety belts.

General

Material Status	• Commercial: Active
Availability	• North America
Additive	• Mold Release
Features	• Copolymer • General Purpose
Uses	• Caps • General Purpose • Gears • Springs
Agency Ratings	• EC 1907/2006 (REACH)
RoHS Compliance	• RoHS Compliant
Automotive Specifications	• FORD WSK-M4D635-A2
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.40	g/cm ³	ISO 1183
Water Absorption (Saturation, 73°F)	0.80	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.20	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73°F)	408000	psi	ISO 527-2
Tensile Stress (Yield, 73°F)	8990	psi	ISO 527-2
Tensile Strain (Yield, 73°F)	10	%	ISO 527-2
Nominal Tensile Strain at Break (73°F)	25	%	ISO 527-2
Flexural Modulus (73°F)	339000	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	2.9	ft·lb/in ²	ISO 179
Notched Izod Impact Strength			ISO 180
-40°F	2.8	ft·lb/in ²	
73°F	3.3	ft·lb/in ²	
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (66 psi, Unannealed)	304	°F	ISO 75-2/B
Heat Deflection Temperature (264 psi, Unannealed)	205	°F	ISO 75-2/A
Melting Temperature (DSC)	333	°F	ISO 3146
RTI Elec			UL 746
0.06 in	221	°F	
0.12 in	221	°F	

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Thermal	Nominal Value	Unit	Test Method
RTI Imp			UL 746
0.06 in	194	°F	
0.12 in	194	°F	
RTI Str			UL 746
0.06 in	194	°F	
0.12 in	221	°F	
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+13	ohms	IEC 60093
Volume Resistivity	1.0E+15	ohms·cm	IEC 60093
Electric Strength	1000	V/mil	IEC 60243-1
Dielectric Constant			IEC 60250
100 Hz	3.80		
1 MHz	3.80		
Dissipation Factor			IEC 60250
100 Hz	1.0E-3		
1 MHz	5.0E-3		
Comparative Tracking Index	600	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in	HB		
0.12 in	HB		

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	176 to 230	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.15	%
Processing (Melt) Temp	374 to 446	°F
Mold Temperature	140 to 248	°F
Injection Pressure	508 to 1020	psi

Notes

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