Ultraform® N 2320 003 UNC Q600

Acetal (POM) Copolymer

BASF Corporation

Message:

Ultraform N 2320 003 UNC Q600 is a rapidly freezing general-purpose injection-molding POM grade. It contains a mold release agent.
Applications
Typical applications include spring elements, clips, gas filler caps, gear wheels, small motor parts, curtain hooks and release buttons for safety belts.

General Information	
Additive	Mold Release
Features	Copolymer General Purpose Good Mold Release
Uses	Caps Gears General Purpose Springs Wheels
Agency Ratings	EC 1907/2006 (REACH)
RoHS Compliance	RoHS Compliant
Forms	Pellets
Processing Method	Injection Molding
Multi-Point Data	Isochronous Stress vs. Strain (ISO 11403-1) Isothermal Stress vs. Strain (ISO 11403-1) Secant Modulus vs. Strain (ISO 11403-1) Shear Modulus vs. Temperature (ISO 11403-1) Specific Heat vs. Temperature (ISO 11403-2) Specific Volume vs Temperature (ISO 11403-2) Viscosity vs. Shear Rate (ISO 11403-2)

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.40	g/cm³	ASTM D792, ISO 1183
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	7.50	cm³/10min	ISO 1133
Molding Shrinkage			
Flow : 3.18 mm	2.0	%	
Across Flow	2.1	%	ISO 294-4
Flow	2.1	%	ISO 294-4
Water Absorption			

Saturation	0.80	%	ASTM D570
Saturation, 23°C	0.80	%	ISO 62
Equilibrium, 50% RH	0.20	%	ASTM D570
Equilibrium, 23°C, 50% RH	0.20	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus (23°C)	2700	MPa	ISO 527-2
Tensile Strength			
Yield, 23°C	65.0	MPa	ASTM D638, ISO 527-2
Yield, -40°C	93.0	MPa	ISO 527-2
Yield, 80°C	33.0	MPa	ISO 527-2
Tensile Elongation (Yield, 23°C)	9.4	%	ASTM D638, ISO 527-2
Nominal Tensile Strain at Break (23°C)	27	%	ISO 527-2
Tensile Creep Modulus			ISO 899-1
1 hr	1800	MPa	
1000 hr	1400	MPa	
Flexural Modulus (23°C)	2470	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179
-30°C	5.5	kJ/m^2	
23°C	6.0	kJ/m^2	
Charpy Unnotched Impact Strength			ISO 179
-30°C	190	kJ/m^2	
23°C	210	kJ/m^2	
Notched Izod Impact			ASTM D256
-40°C	60	J/m	
23°C	69	J/m	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			
0.45 MPa, Unannealed	154	°C	ASTM D648
1.8 MPa, Unannealed	99.0	°C	ASTM D648
1.8 MPa, Unannealed	100	°C	ISO 75-2/A
Peak Melting Temperature	167	°C	ASTM D3418, ISO 3146
CLTE - Flow			
--	6.0E-5	cm/cm/°C	ASTM E831
--	1.1E-4	cm/cm/°C	
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity [1]	1.0E+13	ohms	ASTM D257, IEC 60093
Volume Resistivity			
1.50 mm	1.0E+13	ohms·cm	ASTM D257
--	1.0E+13	ohms·cm	IEC 60093
Electric Strength	40	kV/mm	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

Injection	Nominal Value	Unit
Drying Temperature	80.0 to 110	°C
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.15	%
Processing (Melt) Temp	190 to 230	°C
Mold Temperature	60.0 to 120	°C
Injection Pressure	3.50 to 7.00	MPa

NOTE	
1.	1.5 mm

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China