Ultraform® S 2320 003 UNC Q600

BASF Corporation - Acetal (POM) Copolymer

Saturday, November 2, 2019

General Information

Product Description

Ultraform S 2320 003 UNC Q600 is an easy flowing and rapidly freezing injection molding POM grade. Contains a mold release agent.

Applications
Typical applications include difficult, thin-walled parts.

General			
Material Status	• Commercial: Active		
Availability	• North America		
Additive	• Mold Release		
Features	• Copolymer	• Good Flow	• Good Mold Release
Uses	• Thin-walled Parts		
Agency Ratings	• EC 1907/2006 (REACH)		
RoHS Compliance	• RoHS Compliant		
Automotive Specifications	• CHRYSLER MS-DB-100 CPN4074 Color: Natural	• FORD WSK-M4D635-A2	
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.40		ASTM D792
Density	1.40	g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	11	cm³/10min	ISO 1133
Molding Shrinkage - Flow (0.125 in)	0.020	in/in	
Molding Shrinkage			ISO 294-4
Across Flow	2.1	%	
Flow	2.1	%	
Water Absorption (Saturation)	0.80	%	ASTM D570
Water Absorption (Saturation, 73°F)	0.80	%	ISO 62
Water Absorption (Equilibrium, 50% RH)	0.20	%	ASTM D570
Water Absorption (Equilibrium, 73°F, 50% RH)	0.20	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus (73°F)	392000	psi	ISO 527-2
Tensile Strength (Yield, 73°F)	9430	psi	ASTM D638
Tensile Stress			ISO 527-2
Yield, -40°F	13500	psi	
Yield, 73°F	9430	psi	
Yield, 176°F	4790	psi	
Tensile Elongation (Yield, 73°F)	9.0	%	ASTM D638
Tensile Strain (Yield, 73°F)	9.0	%	ISO 527-2
Nominal Tensile Strain at Break (73°F)	28	%	ISO 527-2
Tensile Creep Modulus (1 hr)	276000	psi	ISO 899-1
Tensile Creep Modulus (1000 hr)	189000	psi	ISO 899-1

powered by PROSPECTOR®
www.ulprospector.com

UL and the UL logo are trademarks of UL LLC © 2019. All Rights Reserved.
The information presented here was acquired by UL from the producer of the product or material or original information provider. However, UL assumes no responsibility or liability for the accuracy of the information contained on this website and strongly encourages that upon final product or material selection information is validated with the manufacturer. This website provides links to other websites owned by third parties. The content of such third party sites is not within our control, and we cannot and will not take responsibility for the information or content.

Ultraform® S 2320 003 UNC Q600

BASF Corporation - Acetal (POM) Copolymer

Mechanical	Nominal Value	Unit	Test Method
Flexural Modulus (73°F)	380000	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179
-22°F	2.4	ft·lb/in²	
73°F	2.6	ft·lb/in²	
Charpy Unnotched Impact Strength			ISO 179
-22°F	81	ft·lb/in²	
73°F	86	ft·lb/in²	
Notched Izod Impact			ASTM D256
-40°F	0.94	ft·lb/in	
73°F	1.1	ft·lb/in	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	320	°F	ASTM D648
Heat Deflection Temperature (66 psi, Unannealed)	313	°F	ISO 75-2/B
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed	230	°F	
Heat Deflection Temperature (264 psi, Unannealed)	212	°F	ISO 75-2/A
Peak Melting Temperature	333	°F	ASTM D3418
Melting Temperature (DSC)	333	°F	ISO 3146
CLTE - Flow	3.3E-5	in/in/°F	ASTM E831
CLTE - Flow	6.1E-5	in/in/°F	
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity (0.0591 in)	1.0E+13	ohms	ASTM D257
Surface Resistivity	1.0E+13	ohms	IEC 60093
Volume Resistivity (0.0591 in)	1.0E+15	ohms·cm	ASTM D257
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

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.

powered by PROSPECTOR®
www.ulprospector.com

UL and the UL logo are trademarks of UL LLC © 2019. All Rights Reserved.
The information presented here was acquired by UL from the producer of the product or material or original information provider. However, UL assumes no responsibility or liability for the accuracy of the information contained on this website and strongly encourages that upon final product or material selection information is validated with the manufacturer. This website provides links to other websites owned by third parties. The content of such third party sites is not within our control, and we cannot and will not take responsibility for the information or content.