Ultraform® S 2320 003 AT

BASF Corporation - Acetal (POM) Copolymer

Saturday, November 2, 2019

General Information

Product Description

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

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		
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.41	g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	11	cm³/10min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	2.1	%	
Flow	2.1	%	
Water Absorption (Saturation, 73°F)	0.90	%	ISO 62
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 Stress (Yield, 73°F)	9280	psi	ISO 527-2
Tensile Strain (Yield, 73°F)	10	%	ISO 527-2
Nominal Tensile Strain at Break (73°F)	29	%	ISO 527-2
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179
-22°F	2.6	ft·lb/in²	
73°F	2.9	ft·lb/in²	
Charpy Unnotched Impact Strength			ISO 179
-22°F	110	ft·lb/in²	
73°F	120	ft·lb/in²	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature (264 psi, Unannealed)	212	°F	ISO 75-2/A
Melting Temperature (DSC)	333	°F	ISO 3146
CLTE - Flow	6.1E-5	in/in/°F	ISO 11359-2

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Thermal	Nominal Value	Unit	Test Method
RTI Elec			UL 746
0.030 in	221	°F	
0.06 in	221	°F	
0.12 in	221	°F	
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+13	ohms·cm	IEC 60093
Dielectric Constant (1 MHz)	3.80		IEC 60250
Dissipation Factor (1 MHz)	5.0E-3		IEC 60250
Comparative Tracking Index	600	V	IEC 60112

Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.030 in	HB		
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.