



Ultrason® S 2010

BASF Corporation - Polysulfone

Tuesday, November 5, 2019

General Information

Product Description

Ultrason S 2010 is an unreinforced, medium viscosity standard injection molding PSU grade. It flows readily and offers outstanding heat resistance and dimensional stability. Typical applications include automotive applications such as fuse encapsulation, connectors, heating system and headlight components and household applications requiring high heat resistance.

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • North America
Features	• Good Flow • High Heat Resistance • High Dimensional Stability • Medium Viscosity
Uses	• Automotive Electronics • Electrical Parts • Connectors • Household Goods
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	1.23	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (360°C/10.0 kg)	90	cm ³ /10min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	0.72	%	
Flow	0.68	%	
Water Absorption (Saturation, 73°F)	0.80	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.30	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73°F)	370000	psi	ISO 527-2
Tensile Stress (Yield, 73°F)	10900	psi	ISO 527-2
Tensile Strain (Yield, 73°F)	6.0	%	ISO 527-2
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179
-22°F	2.9	ft·lb/in ²	
73°F	2.6	ft·lb/in ²	
Charpy Unnotched Impact Strength			ISO 179
-22°F	No Break		
73°F	No Break		
Notched Izod Impact Strength			ISO 180
-22°F	2.9	ft·lb/in ²	
73°F	2.6	ft·lb/in ²	
Hardness	Nominal Value	Unit	Test Method
Ball Indentation Hardness	19600	psi	ISO 2039-1

Ultrason® S 2010

BASF Corporation - Polysulfone

Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (264 psi, Unannealed)	349	°F	ISO 75-2/A
CLTE - Flow	2.9E-5	in/in/°F	
RTI Elec			UL 746
0.06 in	311	°F	
0.13 in	311	°F	
RTI Imp			UL 746
0.06 in	266	°F	
0.13 in	266	°F	
RTI Str			UL 746
0.06 in	311	°F	
0.13 in	311	°F	
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+15	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	3.10		
1 MHz	3.10		
Dissipation Factor			IEC 60250
100 Hz	8.0E-4		
1 MHz	6.4E-3		
Comparative Tracking Index	125	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in	HB		
0.13 in	V-2		

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	266 to 302	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.020	%
Processing (Melt) Temp	644 to 734	°F
Mold Temperature	284 to 356	°F
Injection Pressure	508 to 1810	psi
Injection Rate	Fast	

Notes

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