

Ultrason® S 3010

Polysulfone

BASF Corporation

Product Description
 Ultrason S 3010 is an unreinforced, higher viscosity injection molding and extrusion PSU grade, tougher and with improved chemical resistance. It conforms to FDA requirements of 21 CFR 177.1655.

General			
Material Status	• Commercial: Active		
Availability	• Europe	• North America	
Additive	• Ignition Resistant		
Features	• Flame Retardant	• Good Flow	• Good Toughness
	• Good Chemical Resistance	• Good Impact Resistance	• High Viscosity
Uses	• Automotive Electronics	• Film	
	• Electrical Parts	• Sanitary Products	
Agency Ratings	• FDA 21 CFR 177.1655	• NSF 61	
RoHS Compliance	• RoHS Compliant		
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	
Multi-Point Data	• Shear Modulus 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	--		
		1.24 g/cm ³	ASTM D792
		1240 kg/m ³	ISO 1183 ²
Melt volume-flow rate (360°C/10.0 kg)	60.0	cm ³ /10min	ISO 1133 ²
Molding Shrinkage			
Flow: 3.18 mm	0.70	%	ASTM D955
Across Flow	0.68	%	ISO 294-4
Flow	0.73	%	ISO 294-4
Water Absorption			
Saturation	0.80	%	ASTM D570 ISO 62 ²
Equilibrium, 50% RH	0.30	%	ASTM D570
Equilibrium	0.30	%	ISO 62 ²

Mechanical	Nominal Value	Unit	Test Method
Tensile modulus	2600	MPa	ISO 527-2 ²
Tensile Strength			
Yield, 23°C	80.0	MPa	ASTM D638
Yield	80.0	MPa	ISO 527-2 ²
Tensile Elongation			
Yield, 23°C	5.7	%	ASTM D638
Yield	5.7	%	ISO 527-2 ²
Break, 23°C	> 50	%	ASTM D638
Nominal strain at break	> 50	%	ISO 527-2 ²
Tensile Creep Modulus			ISO 899-1 ²
1 hr	2500	MPa	
1000 hr	2500	MPa	
Flexural Modulus			
23°C	2600	MPa	ASTM D790
23°C	2740	MPa	ISO 178
Flexural Strength (23°C)	120	MPa	ISO 178

Dongguan Yi-Ming Plastic Chemical Co., Ltd.

如需要更多物性资料请查阅 www.kedisujiao.com

备注：以上原料物性数据由厂家发布,我公司仅提供参考！数据如有变动，请联系原料生产厂家获知。我公司不承担任何法律责任！

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Impact	Nominal Value	Unit	Test Method
Charpy notched impact strength (23°C)	5.50	kJ/m ²	ISO 179/1eA ²
Charpy Unnotched Impact Strength			ISO 179
-30°C	No Break		
23°C	No Break		
Notched Izod Impact (23°C)	48.0	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Unannealed	182	°C	ASTM D648
1.8 MPa, Unannealed	171	°C	ASTM D648
1.8 MPa	169	°C	ISO 75-2 ²
CLTE - Flow	0.000055	cm/cm/°C	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity ³	1.0E+14	ohms	ASTM D257 IEC 60093 ²
Volume Resistivity			
1.50 mm	> 1.0E+13	ohm·cm	ASTM D257
--	> 1.0E+11	ohm·m	IEC 60093 ²
Relative Permittivity			IEC 60250 ²
100 Hz	3.10		
1 MHz	3.10		
Dissipation Factor			IEC 60250 ²
100 Hz	8.0		
1 MHz	64		
Comparative tracking index	125		IEC 60112 ²
Electric strength	38	kV/mm	IEC 60243-1 ²
Flammability	Nominal Value	Unit	Test Method
Flame Rating - UL (1.50 mm)	HB		UL 94
UL 746	Nominal Value	Unit	Test Method
RTI Str (1.50 mm)	155	°C	UL 746
RTI Imp (1.50 mm)	130	°C	UL 746
RTI Elec (1.50 mm)	155	°C	UL 746
Injection	Nominal Value	Unit	
Drying Temperature	130 to 150	°C	
Drying Time	2.0 to 4.0	hr	
Suggested Max Moisture	0.020	%	
Processing (Melt) Temp	330 to 390	°C	
Mold Temperature	120 to 160	°C	
Injection Pressure	3.50 to 12.5	MPa	
Injection Rate	Fast		

Notes

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

² Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.

³ 1.5 mm

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