

BASF Ultrason S 2010 G6 30% Glass Filled PSU

Category : Polymer , Thermoplastic , Polysulfone (PSU) , Polysulfone, 30% Glass Fiber Reinforced

Material Notes:

Ultrason S 2010 G6 is a 30% glass reinforced, medium viscosity injection molding PSU grade with high rigidity and strength.

Order this product through the following link:

http://www.lookpolymers.com/polymer_BASF-Ultrason-S-2010-G6-30-Glass-Filled-PSU.php

Physical Properties	Metric	English	Comments
Density	1.49 g/cc	0.0538 lb/in ³	ISO 1183
Water Absorption	0.60 %	0.60 %	ISO 62
Moisture Absorption at Equilibrium	0.20 %	0.20 %	23°C/50% R.H.; ISO 62
Viscosity Test	63 cm ³ /g	63 cm ³ /g	Viscosity number
Linear Mold Shrinkage, Flow	0.0029 cm/cm	0.0029 in/in	ISO 294
Linear Mold Shrinkage, Transverse	0.0046 cm/cm	0.0046 in/in	ISO 294
Melt Flow	30 g/10 min @Load 10.0 kg, Temperature 360 °C	30 g/10 min @Load 22.0 lb, Temperature 680 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	193 MPa	28000 psi	ISO 2039-1
Tensile Strength at Break	120 MPa	17400 psi	5mm/min; ISO 527-2
	52.0 MPa @Temperature 160 °C	7540 psi @Temperature 320 °F	
	80.0 MPa @Temperature 120 °C	11600 psi @Temperature 248 °F	
	120 MPa @Temperature 40.0 °C	17400 psi @Temperature 104 °F	
	125 MPa @Temperature 0.000 °C	18100 psi @Temperature 32.0 °F	
Tensile Stress	50.0 MPa @Strain 0.600 %, Temperature 23.0 °C	7250 psi @Strain 0.600 %, Temperature 73.4 °F	
	50.0 MPa	7250 psi	

Mechanical Properties	Metric	English	Comments
	@Strain 1.70 %, Temperature 160 °C	@Strain 1.70 %, Temperature 320 °F	
	55.0 MPa	7980 psi	
	@Strain 1.00 %, Temperature 160 °C	@Strain 1.00 %, Temperature 320 °F	
	80.0 MPa	11600 psi	
	@Strain 1.00 %, Temperature 23.0 °C	@Strain 1.00 %, Temperature 73.4 °F	
	105 MPa	15200 psi	
	@Strain 1.50 %, Temperature 23.0 °C	@Strain 1.50 %, Temperature 73.4 °F	
Tensile Strength, Yield	120 MPa	17400 psi	50mm/min; ISO 527-2
Elongation at Break	1.7 %	1.7 %	5mm/min; ISO 527-2
Elongation at Yield	1.7 %	1.7 %	50mm/min; ISO 527-2
	0.20 %	0.20 %	140°C; ISO 899
	@Time 3600 sec, Pressure 10.0 MPa	@Time 1.00 hour, Pressure 1450 psi	
	0.20 %	0.20 %	ISO 899
	@Time 3600 sec, Pressure 15.0 MPa	@Time 1.00 hour, Pressure 2180 psi	
	0.20 %	0.20 %	ISO 899
	@Pressure 15.0 MPa, Time 360000 sec	@Pressure 2180 psi, Time 100 hour	
	0.20 %	0.20 %	ISO 899
	@Pressure 15.0 MPa, Time 3.60e+7 sec	@Pressure 2180 psi, Time 10000 hour	
	0.25 %	0.25 %	140°C; ISO 899
	@Pressure 10.0 MPa, Time 360000 sec	@Pressure 1450 psi, Time 100 hour	
	0.30 %	0.30 %	140°C; ISO 899
	@Pressure 10.0 MPa, Time 3.60e+7 sec	@Pressure 1450 psi, Time 10000 hour	
	0.30 %	0.30 %	140°C; ISO 899
	@Time 3600 sec, Pressure 20.0 MPa	@Time 1.00 hour, Pressure 2900 psi	
	0.35 %	0.35 %	

Mechanical Properties	@Pressure 20.0 MPa, Metric Time 360000 sec	@Pressure 2900 psi, English Time 100 hour	140°C; ISO 899 Comments
	0.39 %	0.39 %	ISO 899
	@Time 3600 sec, Pressure 30.0 MPa	@Time 1.00 hour, Pressure 4350 psi	
	0.40 %	0.40 %	140°C; ISO 899
	@Time 3600 sec, Pressure 30.0 MPa	@Time 1.00 hour, Pressure 4350 psi	
	0.40 %	0.40 %	ISO 899
	@Pressure 30.0 MPa, Time 360000 sec	@Pressure 4350 psi, Time 100 hour	
	0.41 %	0.41 %	ISO 899
	@Pressure 30.0 MPa, Time 3.60e+7 sec	@Pressure 4350 psi, Time 10000 hour	
	0.50 %	0.50 %	140°C; ISO 899
	@Pressure 20.0 MPa, Time 3.60e+7 sec	@Pressure 2900 psi, Time 10000 hour	
	0.50 %	0.50 %	140°C; ISO 899
	@Pressure 30.0 MPa, Time 360000 sec	@Pressure 4350 psi, Time 100 hour	
	0.50 %	0.50 %	140°C; ISO 899
	@Time 3600 sec, Pressure 40.0 MPa	@Time 1.00 hour, Pressure 5800 psi	
	0.55 %	0.55 %	140°C; ISO 899
	@Pressure 40.0 MPa, Time 360000 sec	@Pressure 5800 psi, Time 100 hour	
	0.59 %	0.59 %	ISO 899
	@Time 3600 sec, Pressure 45.0 MPa	@Time 1.00 hour, Pressure 6530 psi	
	0.60 %	0.60 %	ISO 899
	@Pressure 45.0 MPa, Time 360000 sec	@Pressure 6530 psi, Time 100 hour	
	0.60 %	0.60 %	140°C; ISO 899
	@Time 3600 sec, Pressure 45.0 MPa	@Time 1.00 hour, Pressure 6530 psi	
	0.61 %	0.61 %	ISO 899
	@Pressure 45.0 MPa, Time 3.60e+7 sec	@Pressure 6530 psi, Time 10000 hour	

Mechanical Properties	0.80 % Metric	0.80 % English	Comments ISO 899
	@Time 3600 sec, Pressure 60.0 MPa	@Time 1.00 hour, Pressure 8700 psi	
	0.82 %	0.82 %	ISO 899
	@Pressure 60.0 MPa, Time 360000 sec	@Pressure 8700 psi, Time 100 hour	
	0.90 %	0.90 %	ISO 899
	@Pressure 60.0 MPa, Time 3.60e+7 sec	@Pressure 8700 psi, Time 10000 hour	
	0.90 %	0.90 %	140°C; ISO 899
	@Pressure 30.0 MPa, Time 3.60e+7 sec	@Pressure 4350 psi, Time 10000 hour	
	1.2 %	1.2 %	ISO 899
	@Time 3600 sec, Pressure 80.0 MPa	@Time 1.00 hour, Pressure 11600 psi	
	1.35 %	1.35 %	ISO 899
	@Pressure 80.0 MPa, Time 360000 sec	@Pressure 11600 psi, Time 100 hour	
	1.4 %	1.4 %	140°C; ISO 899
	@Pressure 40.0 MPa, Time 3.60e+7 sec	@Pressure 5800 psi, Time 10000 hour	
	1.55 %	1.55 %	ISO 899
	@Pressure 80.0 MPa, Time 3.60e+7 sec	@Pressure 11600 psi, Time 10000 hour	
	1.6 %	1.6 %	140°C; ISO 899
	@Pressure 45.0 MPa, Time 3.60e+7 sec	@Pressure 6530 psi, Time 10000 hour	
	1.9 %	1.9 %	140°C; ISO 899
	@Pressure 45.0 MPa, Time 360000 sec	@Pressure 6530 psi, Time 100 hour	
Creep Strength	23.0 MPa	3340 psi	in water at 95°C
	@Time 3.60e+7 sec	@Time 10000 hour	
	30.0 MPa	4350 psi	in water at 95°C
	@Time 3.60e+6 sec	@Time 1000 hour	
	40.0 MPa	5800 psi	in water at 95°C
	@Time 360000 sec	@Time 100 hour	
	51.0 MPa	7400 psi	

Mechanical Properties	Metric @ Time 36000 sec	English @ Time 10.0 hour	in water at 95°C Comments
Modulus of Elasticity	7.50 GPa	1090 ksi	ISO 527
	@Temperature 160 °C	@Temperature 320 °F	
	8.70 GPa	1260 ksi	
	@Temperature 80.0 °C	@Temperature 176 °F	
	8.80 GPa	1280 ksi	
	@Temperature 60.0 °C	@Temperature 140 °F	ISO 527
	9.00 GPa	1310 ksi	ISO 527
	@Temperature 120 °C	@Temperature 248 °F	
	9.00 GPa	1310 ksi	ISO 527
	@Temperature 20.0 °C	@Temperature 68.0 °F	
Tensile Modulus	8.30 GPa	1200 ksi	Elasticity; ISO 527-1/-2
Fatigue Strength	45.0 MPa	6530 psi	
	@# of Cycles 1.00e+6	@# of Cycles 1.00e+6	
	55.0 MPa	7980 psi	
	@# of Cycles 100000	@# of Cycles 100000	
	69.0 MPa	10000 psi	
	@# of Cycles 10000	@# of Cycles 10000	
Shear Modulus	0.0250 GPa	3.63 ksi	ISO 6721
	@Temperature 200 °C	@Temperature 392 °F	
	0.800 GPa	116 ksi	
	@Temperature 175 °C	@Temperature 347 °F	
	0.900 GPa	131 ksi	
	@Temperature 100 °C	@Temperature 212 °F	ISO 6721
	0.950 GPa	138 ksi	ISO 6721
	@Temperature 50.0 °C	@Temperature 122 °F	
Izod Impact, Notched (ISO)	7.00 kJ/m ²	3.33 ft-lb/in ²	ISO 180/A
	@Temperature -30.0 °C	@Temperature -22.0 °F	ISO 180/A
Izod Impact, Unnotched (ISO)	36.0 kJ/m ²	17.1 ft-lb/in ²	ISO 179/1eU

Mechanical Properties	Metric	English	Comments
	37.0 kJ/m ² @Temperature 120 °C	17.6 ft-lb/in ² @Temperature 248 °F	ISO 179/1eU
	@Temperature 70.0 °C	@Temperature 158 °F	
	41.0 kJ/m ² @Temperature 25.0 °C	19.5 ft-lb/in ² @Temperature 77.0 °F	ISO 179/1eU
	42.0 kJ/m ² @Temperature 0.000 °C	20.0 ft-lb/in ² @Temperature 32.0 °F	ISO 179/1eU
	50.0 kJ/m ² @Temperature -25.0 °C	23.8 ft-lb/in ² @Temperature -13.0 °F	ISO 179/1eU
Charpy Impact Unnotched	4.00 J/cm ²	19.0 ft-lb/in ²	ISO 179/1eU
	4.00 J/cm ² @Temperature -30.0 °C	19.0 ft-lb/in ² @Temperature -22.0 °F	ISO 179/1eU

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China