

Zytel® 80G33HS1L NC010

NYLON RESIN
DuPont Performance Polymers

Message:
33% Glass Reinforced, Toughened, Heat Stabilized, Polyamide 66

General Information				
UL YellowCard		E41938-234426		
Filler / Reinforcement		Glass Fiber,33% Filler by Weight		
Additive		Heat Stabilizer		
		Lubricant		
		Mold Release		
Features		Heat Stabilized		
		Lubricated		
Agency Ratings		UL Unspecified Rating		
Forms		Pellets		
Processing Method		Injection Molding		
Multi-Point Data		Isothermal Stress vs. Strain (ISO 11403-1)		
		Secant Modulus vs. Strain (ISO 11403-1)		
		Shear Modulus vs. Temperature (ISO 11403-1)		
		Shear Stress vs. Shear Rate (ISO 11403-1)		
		Tensile Modulus vs. Temperature (ISO 11403-1)		
		Tensile Modulus vs. Temperature, Dynamic (ISO 11403-1)		
		Viscosity vs. Shear Rate (ISO 11403-2)		
Part Marking Code (ISO 11469)		>PA66-IGF33<		
Resin ID (ISO 1043)		PA66-IGF33		
Physical	Dry	Conditioned	Unit	Test Method
Density	1.33	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.70	--	%	
Flow	0.30	--	%	
Water Absorption				
24 hr	0.85	--	%	ASTM D570
23°C, 24 hr, 2.00 mm	4.5	--	%	ISO 62
Equilibrium, 23°C, 2.00 mm, 50% RH	1.5	--	%	ISO 62
Viscosity Number	160	--	cm ³ /g	ISO 307

Hardness	Dry	Conditioned	Unit	Test Method
Rockwell Hardness				ISO 2039-2
M-Scale	70	--		
R-Scale	110	--		
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	8900	6200	MPa	ISO 527-2
Tensile Stress (Break)	146	108	MPa	ISO 527-2
Tensile Strain (Break)	3.7	7.0	%	ISO 527-2
Tensile Creep Modulus				ISO 899-1
1 hr	--	5300	MPa	
1000 hr	--	4300	MPa	
Flexural Modulus	7500	6200	MPa	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-40°C	14	18	kJ/m ²	
-30°C	18	17	kJ/m ²	
23°C	20	28	kJ/m ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-30°C	110	100	kJ/m ²	
23°C	97	98	kJ/m ²	
Notched Izod Impact Strength				ISO 180/1A
-40°C	15	15	kJ/m ²	
-30°C	17	16	kJ/m ²	
23°C	21	26	kJ/m ²	
Unnotched Izod Impact Strength				ISO 180/1U
-30°C	80	75	kJ/m ²	
23°C	80	80	kJ/m ²	
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
0.45 MPa, Unannealed	261	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	246	--	°C	ISO 75-2/A
Glass Transition Temperature ¹	75.0	--	°C	ISO 11357-2
Vicat Softening Temperature	245	--	°C	ISO 306/B50
Melting Temperature ²	262	--	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow	1.5E-5	--	cm/cm/°C	
Transverse	1.2E-4	--	cm/cm/°C	

Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	--	1.0E+12	ohms	IEC 60093
Volume Resistivity	> 1.0E+15	1.0E+11	ohms·cm	IEC 60093
Comparative Tracking Index	400	--	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Flammability Classification				IEC 60695-11-10, -20
0.750 mm	HB	--		
1.50 mm	HB	--		
Fill Analysis	Dry	Conditioned	Unit	
Melt Density	1.12	--	g/cm ³	
Specific Heat Capacity of Melt	2200	--	J/kg/°C	
Thermal Conductivity of Melt	0.22	--	W/m/K	
Effective Thermal Diffusivity	0.103	--	cSt	
NOTE				
1.	10°C/min			
2.	10°C/min			

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

