

Zytel® E51HSB NC010

NYLON RESIN

DuPont Performance Polymers

Message:

Unreinforced, Heat Stabilized, High Viscosity Polyamide 66

General Information				
Additive		Heat Stabilizer		
		Mold Release		
Features		Heat Stabilized		
Uses		Film		
		Profiles		
		Sheet		
Forms		Pellets		
Processing Method		Casting		
		Coating		
		Extrusion		
		Film Extrusion		
		Injection Molding		
		Profile Extrusion		
Multi-Point Data		Sheet Extrusion		
		Isothermal Stress vs. Strain (ISO 11403-1)		
		Secant Modulus vs. Strain (ISO 11403-1)		
		Shear Stress vs. Shear Rate (ISO 11403-1)		
		Specific Volume vs Temperature (ISO 11403-2)		
		Viscosity vs. Shear Rate (ISO 11403-2)		
Part Marking Code (ISO 11469)		>PA66<		
Resin ID (ISO 1043)		PA66		
Physical	Dry	Conditioned	Unit	Test Method
Density	1.14	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	1.3	--	%	
Flow	1.3	--	%	
Water Absorption				ISO 62
23°C, 24 hr, 2.00 mm	8.5	--	%	

Equilibrium, 23°C, 2.00 mm, 50% RH	2.6	--	%	
Viscosity Number	330	--	cm ³ /g	ISO 307
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	3100	1200	MPa	ISO 527-2
Tensile Stress (Yield)	84.0	55.0	MPa	ISO 527-2
Tensile Strain (Yield)	4.3	29	%	ISO 527-2
Nominal Tensile Strain at Break	35	--	%	ISO 527-2
Flexural Modulus	2800	--	MPa	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-30°C	6.0	4.0	kJ/m ²	
23°C	7.0	21	kJ/m ²	
Charpy Unnotched Impact Strength (23°C)	No Break	--		ISO 179/1eU
Notched Izod Impact Strength (23°C)	6.0	--	kJ/m ²	ISO 180/1A
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
0.45 MPa, Unannealed	200	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	70.0	--	°C	ISO 75-2/A
Vicat Softening Temperature	221	--	°C	ISO 306/B50
Melting Temperature ¹	262	--	°C	ISO 11357-3
Electrical	Dry	Conditioned	Unit	Test Method
Volume Resistivity	> 1.0E+15	1.0E+13	ohms·cm	IEC 60093
Comparative Tracking Index	600	--	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Oxygen Index	20	--	%	ISO 4589-2
Fill Analysis	Dry	Conditioned	Unit	
Melt Density	0.980	--	g/cm ³	
Specific Heat Capacity of Melt	2790	--	J/kg/°C	
Thermal Conductivity of Melt	0.16	--	W/m/K	
NOTE				
1.	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.

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

