

DuPont™ Zytel® 70G35EF NC010

NYLON RESIN

Product Information

Common features of Zytel® nylon resin include mechanical and physical properties such as high mechanical strength, excellent balance of stiffness and toughness, good high temperature performance, good electrical and flammability properties, good abrasion and chemical resistance. In addition, Zytel® nylon resins are available in different modified and reinforced grades to create a wide range of products with tailored properties for specific processes and end-uses. Zytel® nylon resin, including most flame retardant grades, offer the ability to be coloured.

The good melt stability of Zytel® nylon resin normally enables the recycling of properly handled production waste. If recycling is not possible, DuPont recommends, as the preferred option, incineration with energy recovery (-31kJ/g of base polymer) in appropriately equipped installations. For disposal, local regulations have to be observed.

Zytel® nylon resin typically is used in demanding applications in the automotive, furniture, domestic appliances, sporting goods and construction industry.

Zytel® 70G35EF NC010 is a 35% glass reinforced polyamide 66 developed for electrical and electronics applications.

General information	Value	Unit	Test Standard
Resin Identification	PA66+PA6-GF35	-	ISO 1043
Part Marking Code	>PA66+PA6-GF35<	-	ISO 11469
Rheological properties	dry / cond	Unit	Test Standard
Moulding shrinkage, parallel	0.4 / -	%	ISO 294-4, 2577
Moulding shrinkage, normal	1.0 / -	%	ISO 294-4, 2577
Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	11000 / 8500	MPa	ISO 527-1/-2
Stress at break	200 / 140	MPa	ISO 527-1/-2
Strain at break	3.5 / 4.6	%	ISO 527-1/-2
Flexural Modulus	10000 / 7500	MPa	ISO 178
Flexural Strength	290 / 230	MPa	ISO 178
Tensile creep modulus			ISO 899-1
1h	* / 8500	MPa	
1000h	* / 6000	MPa	
Charpy impact strength			ISO 179/1eU
23°C	90 / 100	kJ/m ²	
-30°C	80 / 80	kJ/m ²	
Charpy notched impact strength			ISO 179/1eA
23°C	14 / 18	kJ/m ²	
-30°C	11 / 10	kJ/m ²	
-40°C	12 / -	kJ/m ²	
Puncture energy, 23°C	6 / -	J	ISO 6603-2
Izod notched impact strength			ISO 180/1A
23°C	15 / -	kJ/m ²	
-40°C	13 / -	kJ/m ²	
Thermal properties	dry / cond	Unit	Test Standard
Melting temperature, 10°C/min	260 / *	°C	ISO 11357-1/-3
Glass transition temperature, 10°C/min	80 / 20	°C	ISO 11357-1/-2
Temp. of deflection under load			ISO 75-1/-2
1.8 MPa	250 / *	°C	
8 MPa	110 / *	°C	
Vicat softening temperature, 50°C/h, 50N	255 / *	°C	ISO 306
Coeff. of linear therm. expansion, parallel	17 / *	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	85 / *	E-6/K	ISO 11359-1/-2
Thermal conductivity of melt	0.24	W/(m K)	-
Spec. heat capacity of melt	2130	J/(kg K)	-
Flammability	dry / cond	Unit	Test Standard
Burning Behav. at 1.5mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	IEC 60695-11-10