

Product Texts

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, we recommend, as the preferred option, incineration with energy recovery (-31 kJ/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® 74G33W BK196 is a high gloss automotive weatherable black 33% glass reinforced nylon 66 and nylon 6 comelt resin.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^(C) Molding shrinkage, parallel	0.1 / *	%	ISO 294-4, 2577
^(C) Molding shrinkage, normal	0.7 / *	%	ISO 294-4, 2577
^(C) Ejection temperature	210	°C	-

^(C): CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^(C) Tensile Modulus	10000 / 7080	MPa	ISO 527
^(C) Stress at break	185 / 125	MPa	ISO 527
^(C) Strain at break	3 / 6	%	ISO 527
^(C) Charpy impact strength, +23°C	80 / 100	kJ/m ²	ISO 179/1eU
^(C) Charpy impact strength, -30°C	70 / 65	kJ/m ²	ISO 179/1eU
^(C) Charpy notched impact strength, +23°C	12 / 18	kJ/m ²	ISO 179/1eA
^(C) Charpy notched impact strength, -30°C	10 / 10	kJ/m ²	ISO 179/1eA

ASTM Data

Tensile Strength	180 / -	MPa	ASTM D 638
Elongation at Break	3 / -	%	ASTM D 638
Flexural Modulus	9300 / -	MPa	ASTM D 790
Flexural Strength	270 / -	MPa	ASTM D 790
Izod Impact notched, 1/8 in	133 / -	J/m	ASTM D 256

^(C): CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^(C) Melting temperature, 10°C/min	255 / *	°C	ISO 11357-1/-3
^(C) Temp. of deflection under load, 1.80 MPa	225 / *	°C	ISO 75-1/-2
^(C) Temp. of deflection under load, 0.45 MPa	250 / *	°C	ISO 75-1/-2
^(C) Coeff. of linear therm. expansion, parallel	14 / *	E-6/K	ISO 11359-1/-2
^(C) Coeff. of linear therm. expansion, normal	108 / *	E-6/K	ISO 11359-1/-2
^(C) Burning Behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	0.8 / *	mm	-
Yellow Card available	yes / *	-	-

ASTM Data

DTUL @ 264 psi	225	°C	ASTM D 648
Melting Temperature	257	°C	ASTM D 3418

^(C): CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^(C) Dissipation factor, 100Hz	290 / -	E-4	IEC 62631-2-1
^(C) Dissipation factor, 1MHz	250 / -	E-4	IEC 62631-2-1
^(C) Volume resistivity	>1E13 / 1E11	Ohm*m	IEC 62631-3-1

Zytel® 74G33W BK196

(PA66+PA6)-GF33

Celanese

[C] Surface resistivity	* / 1E12	Ohm	IEC 62631-3-2
[C] Electric strength	37 / -	kV/mm	IEC 60243-1

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
[C] Density	1390 / -	kg/m ³	ISO 1183
Density	1390	kg/m ³	ASTM D 792

[C]: CAMPUS

Characteristics**Processing**

Injection Molding

Features

High Gloss

Delivery form

Pellets, Black

Applications

Automotive

Special Characteristics

Light stabilized or stable to light, U.V. stabilized or stable to weather

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa