Zytel® 8018HS BKB085

PA66-I-GF14 Celanese

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 (-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® 8018HS BKB085 is a 14% glass reinforced heat stabilized, toughened polyamide 66 resin.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
[C] Molding shrinkage, parallel	**0.4 / ***	%	ISO 294-4, 2577
[C] Molding shrinkage, normal	**0.8 / ***	%	ISO 294-4, 2577
[C] Ejection temperature	**210**	°C	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**4200 / 2300**	MPa	ISO 527
[C] Stress at break	**85 / 55**	MPa	ISO 527
[C] Strain at break	**4 / 13**	%	ISO 527
[C] Charpy impact strength, +23°C	**80 / 100**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**14 / 18**	kJ/m²	ISO 179/1eA
[C] Charpy notched impact strength, -30°C	**6 / 6**	kJ/m²	ISO 179/1eA
ASTM Data			
Tensile Strength	**90 / -**	MPa	ASTM D 638
Elongation at Break	**6 / -**	%	ASTM D 638
Flexural Modulus	**3660 / -**	MPa	ASTM D 790

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Melting temperature, 10°C/min	**263 / ***	°C	ISO 11357-1/-3
[C] Glass transition temperature, 10°C/min	**75 / ***	°C	ISO 11357-1/-2
[C] Temp. of deflection under load, 1.80 MPa	**220 / ***	°C	ISO 75-1/-2
[C] Temp. of deflection under load, 0.45 MPa	**246 / ***	°C	ISO 75-1/-2
[C] Coeff. of linear therm. expansion, parallel	**50 / ***	E-6/K	ISO 11359-1/-2
[C] Coeff. of linear therm. expansion, normal	**118 / ***	E-6/K	ISO 11359-1/-2
[C] Burning Behav. at 1.5 mm nom. thickn.	**HB / ***	class	IEC 60695-11-10
Thickness tested	**1.5 / ***	mm	-
Yellow Card available	**yes / ***	-	-
[C] Burning Behav. at thickness h	**HB / ***	class	IEC 60695-11-10
Thickness tested	**0.8 / ***	mm	-
Yellow Card available	**yes / ***	-	-
ASTM Data			
UL 94 Flame rating	**HB**	-	UL 94
Thickness tested	**1.5**	mm	-
DTUL @ 264 psi	**205**	°C	ASTM D 648
Melting Temperature	**263**	°C	ASTM D 3418

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Comparative tracking index	**580 / -**	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
[C] Density	**1190 / -**	kg/m³	ISO 1183
Density	**1190**	kg/m³	ASTM D 792

[C]: CAMPUS

Characteristics

Processing
Injection Molding

Delivery form
Black

Special Characteristics
High impact or impact modified, Heat stabilized or stable to heat

Features
Weldable

Applications
Automotive, Sports Equipment

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