VANDAR® 4662Z

PBT-GF30 Celanese

Product Texts

Vandar 4662Zis a high impact polyester alloy which contains 30% glass fiber loading. It is characterized by toughness, dimensional stability, and high modulus. Good weatherability and moldability are other key attributes.

Flammability at thickness h (1.5 mm)	HB	-

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
[C] Melt volume-flow rate, MVR	**5.5**	cm³/10min	ISO 1133
Temperature	**250**	°C	-
Load	**5**	kg	-
[C] Molding shrinkage, parallel	**0.4**	%	ISO 294-4, 2577
[C] Molding shrinkage, normal	**1.3**	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**7000**	MPa	ISO 527
[C] Stress at break	**80**	MPa	ISO 527
[C] Strain at break	**3.5**	%	ISO 527
[C] Charpy impact strength, +23°C	**70**	kJ/m²	ISO 179/1eU
[C] Charpy impact strength, -30°C	**70**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**20**	kJ/m²	ISO 179/1eA
[C] Charpy notched impact strength, -30°C	**10**	kJ/m²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
[C] Melting temperature, 10°C/min	**225**	°C	ISO 11357-1/-3
[C] Glass transition temperature, 10°C/min	**60**	°C	ISO 11357-1/-2
[C] Temp. of deflection under load, 1.80 MPa	**175**	°C	ISO 75-1/-2
[C] Temp. of deflection under load, 0.45 MPa	**218**	°C	ISO 75-1/-2
[C] Vicat softening temperature, B	**190**	°C	ISO 306
[C] Coeff. of linear therm. expansion, parallel	**15**	E-6/K	ISO 11359-1/-2
[C] Coeff. of linear therm. expansion, normal	**127**	E-6/K	ISO 11359-1/-2
[C] Burning Behav. at thickness h	**HB**	class	IEC 60695-11-10
Thickness tested	**1.5**	mm	-

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
[C] Relative permittivity, 100Hz	**4.9**	-	IEC 62631-2-1
[C] Relative permittivity, 1MHz	**4.3**	-	IEC 62631-2-1
[C] Dissipation factor, 100Hz	**70**	E-4	IEC 62631-2-1
[C] Dissipation factor, 1MHz	**260**	E-4	IEC 62631-2-1
[C] Volume resistivity	**1E12**	Ohm*m	IEC 62631-3-1
[C] Surface resistivity	**1E14**	Ohm	IEC 62631-3-2
[C] Electric strength	**33**	kV/mm	IEC 60243-1

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
[C] Water absorption	**0.45**	%	Sim. to ISO 62
[C] Humidity absorption	**0.2**	%	Sim. to ISO 62
[C] Density	**1470**	kg/m³	ISO 1183

[C]: CAMPUS

Characteristics

Processing
Injection Molding

Delivery form
Pellets

Additives
Lubricants

Special Characteristics
High impact or impact modified, U.V. stabilized or stable to weather, Heat stabilized or stable to heat

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

Other text information

Injection molding
To avoid hydrolytic degradation during processing, Vandar resins have to be dried to a moisture level equal to or less than 0.02%.
Drying should be done in a dehumidifying hopper dryer capable of dewpoints <-30°F (-34°C) at 250°F (121°C) for 4 hours.
Rear Temperature 450-480(230-250) deg F (deg C)
Center Temperature 460-490(235-255) deg F (deg C)
Front Temperature 470-500(240-260) deg F (deg C)
Nozzle Temperature 470-510(240-265) deg F (deg C)
Melt Temperature 470-510(240-265) deg F (deg C)
Mold Temperature 100-200(40-95 deg F (deg C)
Back Pressure 0-50 psi
Screw Speed Moderate
Injection Speed Fast

Injection speed, injection pressure and holding pressure have to be optimized to the individual article geometry. To avoid material degradation during processing low back pressure and minimum screw speed have to be used. Overheating of the material has to be avoided, in particular for flame retardant grades. Up to 25% clean and dry regrind may be used.