CELANEX® 1602Z

PBT — Celanese

Product Texts

Celanex 1602Z is an internally lubricated, general purpose, unreinforced polybutylene terephthalate with a good balance of mechanical properties and processability.

Flammability at thickness h (0.75 mm)	HB	-

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
[C] Molding shrinkage, parallel	**1.9**	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**2550**	MPa	ISO 527
[C] Yield stress	**60**	MPa	ISO 527
[C] Yield strain	**5**	%	ISO 527
[C] Nominal strain at break	**>50**	%	ISO 527
[C] Charpy impact strength, +23°C	**N**	kJ/m²	ISO 179/1eU
[C] Charpy impact strength, -30°C	**210**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**7**	kJ/m²	ISO 179/1eA
[C] Charpy notched impact strength, -30°C	**6.5**	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] Temp. of deflection under load, 1.80 MPa	**50**	°C	ISO 75-1/-2
[C] Temp. of deflection under load, 0.45 MPa	**150**	°C	ISO 75-1/-2
[C] Coeff. of linear therm. expansion, parallel	**110**	E-6/K	ISO 11359-1/-2
[C] Burning Behav. at thickness h	**HB**	class	IEC 60695-11-10
Thickness tested	**0.8**	mm	-

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
[C] Relative permittivity, 100Hz	**4**	-	IEC 62631-2-1
[C] Relative permittivity, 1MHz	**3.5**	-	IEC 62631-2-1
[C] Dissipation factor, 100Hz	**14**	E-4	IEC 62631-2-1
[C] Dissipation factor, 1MHz	**210**	E-4	IEC 62631-2-1
[C] Volume resistivity	**>1E13**	Ohm*m	IEC 62631-3-1
[C] Surface resistivity	**>1E15**	Ohm	IEC 62631-3-2
[C] Electric strength	**23**	kV/mm	IEC 60243-1

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
[C] Density	**1310**	kg/m³	ISO 1183

[C]: CAMPUS

Characteristics

Processing

Injection Molding

Applications

General Purpose

Delivery form
Pellets

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

Additives
Lubricants, Release agent

Other text information

Injection molding
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. Up to 25% clean and dry regrind may be used.