



Celanex® 1642Z

Celanese Corporation - Polybutylene Terephthalate

Monday, November 4, 2019

General Information

Product Description

Celanex 1642Z is a general purpose, 20% fiberglass reinforced PBT with a good balance of mechanical properties and processability.

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight
Features	• General Purpose • Good Processability
Uses	• General Purpose
RoHS Compliance	• Contact Manufacturer

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.45	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)	9.0	g/10 min	ISO 1133
Molding Shrinkage - Flow	0.40 to 0.80	%	ISO 294-4
Water Absorption (Saturation, 73°F)	0.10	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	906000	psi	ISO 527-2/1A
Tensile Stress (Break)	15200	psi	ISO 527-2/1A/5
Tensile Strain (Break)	4.0	%	ISO 527-2/1A/5
Flexural Modulus (73°F)	798000	psi	ISO 178
Flexural Stress (73°F)	24700	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	3.0	ft-lb/in ²	ISO 179/1eA
Notched Izod Impact Strength (73°F)	3.6	ft-lb/in ²	ISO 180/1A
Thermal	Nominal Value	Unit	Test Method
CLTE - Flow	1.7E-5	in/in/°F	ISO 11359-2
CLTE - Transverse	6.7E-5	in/in/°F	ISO 11359-2

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	250	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.020	%
Suggested Max Regrind	25	%
Hopper Temperature	68 to 122	°F
Rear Temperature	446 to 464	°F
Middle Temperature	455 to 482	°F
Front Temperature	455 to 482	°F
Nozzle Temperature	482 to 500	°F
Processing (Melt) Temp	455 to 500	°F
Mold Temperature	149 to 199	°F
Back Pressure	< 50.8	psi

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Injection Notes

Die Temperature: 250 to 260°C
Feed Temperature: 230 to 240°C
Zone 4 Temperature: 240 to 260°C

Notes

¹ Typical properties: these are not to be construed as specifications.