



Celanex® 6407

Celanese Corporation - Polybutylene Terephthalate

Monday, November 4, 2019

General Information

Product Description

Celanex 6407 is a 30% glass/mineral reinforced resin particularly suited for large exterior automotive components, where extended flow, flatness and good surface appearance is essential.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass/Mineral, 30% Filler by Weight		
Features	• Pleasing Surface Appearance		
Uses	• Automotive Applications	• Automotive Exterior Parts	
RoHS Compliance	• Contact Manufacturer		
Automotive Specifications	• CHRYSLER MS-DB-400 CPN3669 Color: Black	• GM GMP.PBT+PET.010 Color: Black	• GM GMP.PBT+PET.010 Color: Natural

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.51	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (265°C/2.16 kg)	21	g/10 min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	1.0	%	
Flow	0.30 to 0.60	%	
Water Absorption (Saturation, 73°F)	0.10	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.16E+6	psi	ISO 527-2/1A
Tensile Stress (Break)	12300	psi	ISO 527-2/1A/5
Tensile Strain (Break)	2.1	%	ISO 527-2/1A/5
Flexural Modulus (73°F)	1.16E+6	psi	ISO 178
Flexural Stress (73°F)	20300	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	2.9	ft-lb/in ²	ISO 179/1eA
Notched Izod Impact Strength (73°F)	3.0	ft-lb/in ²	ISO 180/1A
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (66 psi, Unannealed)	408	°F	ISO 75-2/B
Heat Deflection Temperature (264 psi, Unannealed)	342	°F	ISO 75-2/A
CLTE - Flow	1.1E-5	in/in/°F	ISO 11359-2
CLTE - Transverse	3.9E-5	in/in/°F	ISO 11359-2

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	248 to 266	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.020	%
Hopper Temperature	68 to 122	°F
Rear Temperature	446 to 482	°F

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Injection	Nominal Value	Unit
Middle Temperature	455 to 491	°F
Front Temperature	455 to 491	°F
Nozzle Temperature	482 to 509	°F
Processing (Melt) Temp	455 to 509	°F
Mold Temperature	149 to 205	°F
Injection Rate	Moderate-Fast	

Injection Notes

Die Temperature: 240 to 265°C
Feed Temperature: 230 to 250°C
Zone 4 Temperature: 240 to 265°C

Notes

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