



Celanex® 3216HR

Celanese Corporation - Polybutylene Terephthalate

Monday, November 4, 2019

General Information

Product Description

Celanex 3216HR is a flame retarded, hydrolysis resistant, 15% fiberglass reinforced polybutylene terephthalate which has an excellent balance of mechanical properties and processability.

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • Asia Pacific • Latin America • North America
Filler / Reinforcement	• Glass Fiber, 15% Filler by Weight
Additive	• Flame Retardant
Features	• Flame Retardant • Good Processability • Hydrolysis Resistant
RoHS Compliance	• Contact Manufacturer

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.51	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)	9.2	g/10 min	ISO 1133
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	870000	psi	ISO 527-2/1A
Tensile Stress (Break)	11600	psi	ISO 527-2/1A/5
Tensile Strain (Break)	3.1	%	ISO 527-2/1A/5
Flexural Modulus (73°F)	769000	psi	ISO 178
Flexural Stress (73°F)	20300	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	3.8	ft-lb/in ²	ISO 179/1eA
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (264 psi, Unannealed)	356	°F	ISO 75-2/A
Melting Temperature ²	437	°F	ISO 11357-3
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.031 in)	V-0		UL 94

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 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 491	°F
Mold Temperature	149 to 205	°F
Injection Rate	Moderate-Fast	

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Injection Notes

Die Temperature: 240 to 255°C
Feed Temperature: 230 to 240°C
Zone 4 Temperature: 240 to 255°C

Notes

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

² 10°C/min