



Celanex® 4309AR

Celanese Corporation - Polybutylene Terephthalate

Monday, November 4, 2019

General Information

Product Description

Celanex 4309AR is a 30% glass reinforced PBT with enhanced resistance to hydrolysis, alkaline environments and salt water spray.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Features	• Hydrolysis Resistant	• Salt Water/Spray Resistant	
RoHS Compliance	• Contact Manufacturer		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.44	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (265°C/5.0 kg)	13	g/10 min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	1.4 to 1.6	%	
Flow	0.30 to 0.60	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.17E+6	psi	ISO 527-2/1A
Tensile Stress (Break)	14500	psi	ISO 527-2/1A/5
Tensile Strain (Break)	3.0	%	ISO 527-2/1A/5
Flexural Modulus (73°F)	1.10E+6	psi	ISO 178
Flexural Stress (73°F)	21800	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	4.1	ft-lb/in ²	
73°F	4.8	ft-lb/in ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	24	ft-lb/in ²	
73°F	21	ft-lb/in ²	
Notched Izod Impact Strength (73°F)	4.3	ft-lb/in ²	ISO 180/1A
Unnotched Izod Impact Strength (73°F)	19	ft-lb/in ²	ISO 180/1U
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale)	62		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (66 psi, Unannealed)	423	°F	ISO 75-2/B
Heat Deflection Temperature (264 psi, Unannealed)	376	°F	ISO 75-2/A
CLTE - Flow	1.3E-5	in/in/°F	ISO 11359-2
CLTE - Transverse	5.3E-5	in/in/°F	ISO 11359-2
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.031 in)	HB		UL 94

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Processing Information

Injection	Nominal Value	Unit
Drying Temperature	250	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	446 to 464	°F
Middle Temperature	455 to 482	°F
Front Temperature	455 to 482	°F
Processing (Melt) Temp	455 to 509	°F
Mold Temperature	149 to 199	°F

Injection Notes

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

Notes

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