



Celcon® GC10

Celanese Corporation - Acetal (POM) Copolymer

Saturday, November 2, 2019

General Information

Product Description

Celcon® GC10 acetal copolymer is a 10% glass reinforced acetal for improved strength and stiffness. Chemical abbreviation according to ISO 1043-1: POM

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
Filler / Reinforcement	• Asia Pacific • Glass Fiber, 10% Filler by Weight		
Features	• Good Stiffness	• Good Strength	
RoHS Compliance	• Contact Manufacturer		
Resin ID (ISO 1043)	• POM		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.46	g/cm ³	ISO 1183
Molding Shrinkage			ISO 294-4
Across Flow	1.2	%	
Flow	0.90	%	
Water Absorption (Saturation, 73°F)	0.80	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.20	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	653000	psi	ISO 527-2/1A
Tensile Stress (Break)	10900	psi	ISO 527-2/1A/5
Tensile Strain (Break)	3.0	%	ISO 527-2/1A/5
Flexural Modulus (73°F)	616000	psi	ISO 178
Flexural Stress (3.5% Strain)	16700	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	2.1	ft·lb/in ²	ISO 179/1eA
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	21	ft·lb/in ²	
73°F	14	ft·lb/in ²	
Notched Izod Impact Strength (73°F)	2.3	ft·lb/in ²	ISO 180/1A
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (264 psi, Unannealed)	311	°F	ISO 75-2/A
Vicat Softening Temperature	322	°F	ISO 306/B50
Melting Temperature ²	331	°F	ISO 11357-3
Melting Temperature	331	°F	
CLTE - Flow	2.9E-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	212 to 248	°F

UL and the UL logo are trademarks of UL LLC © 2019. All Rights Reserved.

The information presented here was acquired by UL from the producer of the product or material or original information provider. However, UL assumes no responsibility or liability for the accuracy of the information contained on this website and strongly encourages that upon final product or material selection information is validated with the manufacturer. This website provides links to other websites owned by third parties. The content of such third party sites is not within our control, and we cannot and will not take responsibility for the information or content.



Celcon® GC10

Celanese Corporation - Acetal (POM) Copolymer

Injection	Nominal Value	Unit
Drying Time	3.0 to 4.0	hr
Rear Temperature	338 to 356	°F
Middle Temperature	356 to 374	°F
Front Temperature	356 to 374	°F
Nozzle Temperature	374 to 392	°F
Processing (Melt) Temp	356 to 392	°F
Mold Temperature	194 to 248	°F
Injection Rate	Slow	
Back Pressure	< 290	psi

Injection Notes

Zone4 temperature: 190 to 200°C

Hot runner temperature: 190 to 210°C

Notes

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

² 10°C/min