



Celcon® GC25TF

Celanese Corporation - Acetal (POM) Copolymer

Saturday, November 2, 2019

General Information

Product Description

Celcon® GC25TF is a 25% glass coupled acetal copolymer formulated for higher flow in thin walled and small parts. Celcon GC25TF is also exceptionally resistant to fuel. It offers excellent resistance to transportation fuels especially oxygenated fuels. Chemical abbreviation according to ISO 1043-1: POM

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • Asia Pacific • Latin America • North America
Filler / Reinforcement	• Glass Fiber, 25% Filler by Weight
Features	• Chemically Coupled • Fuel Resistant • High Flow
Uses	• Thin-walled Parts
RoHS Compliance	• Contact Manufacturer
Resin ID (ISO 1043)	• POM

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.57	g/cm ³	ISO 1183
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	1.26E+6	psi	ISO 527-2/1A
Tensile Stress (Break)	17400	psi	ISO 527-2/1A/5
Tensile Strain			
Break	2.0	%	ISO 527-2/1A/5
Break	2.0	%	ISO 527-2/1A/50
Flexural Modulus (73°F)	1.26E+6	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)	3.0	ft-lb/in ²	ISO 180/1A
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (264 psi, Unannealed)	324	°F	ISO 75-2/A
Vicat Softening Temperature	322	°F	ISO 306/B50
Melting Temperature ²	329	°F	ISO 11357-3
Melting Temperature	329	°F	
CLTE - Flow	1.7E-5	in/in/°F	ISO 11359-2
CLTE - Transverse	5.6E-5	in/in/°F	ISO 11359-2

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	212 to 248	°F
Drying Time	3.0 to 4.0	hr
Rear Temperature	338 to 356	°F
Middle Temperature	356 to 374	°F

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Injection	Nominal Value	Unit
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