

Celcon® GC25T

Acetal (POM) Copolymer

Celanese Corporation

Message:

Celcon® GC25T is a 25% glass fiber coupled acetal copolymer grade. It offers higher strength than the standard Celcon GC25-A. Celcon GC25T is FDA approved. Celcon GC25T 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 Information			
UL YellowCard	E38860-239298		
Filler / Reinforcement	Glass fiber reinforced material, 25% filler by weight		
Features	High strength		
	Chemical coupling		
	Fuel resistance		
Agency Ratings	FDA not rated		
RoHS Compliance	Contact manufacturer		
Multi-Point Data	Isothermal Stress vs. Strain (ISO 11403-1)		
Resin ID (ISO 1043)	POM		
Physical	Nominal Value	Unit	Test Method
Specific Gravity			
--	1.58	g/cm³	ASTM D792
--	1.57	g/cm³	ISO 1183
Molding Shrinkage			
Flow	0.40	%	ASTM D955
Transverse flow	1.0	%	ASTM D955
Vertical flow direction	0.80	%	ISO 294-4
Flow direction	0.40	%	ISO 294-4
Water Absorption			
Saturated, 23°C	0.80	%	ISO 62
Equilibrium, 23°C, 50% RH	0.20	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	8630	MPa	ISO 527-2/1A/1
Tensile Strength			
Fracture, 23°C	138	MPa	ASTM D638
Fracture	129	MPa	ISO 527-2/1A/5
Tensile Strain (Break)	3.0	%	ISO 527-2/1A/5
Flexural Modulus (23°C)	8520	MPa	ISO 178
Flexural Stress (23°C)	202	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA

-30°C	7.2	kJ/m ²	ISO 179/1eA
23°C	8.7	kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength			ISO 179/1eU
-30°C	55	kJ/m ²	ISO 179/1eU
23°C	50	kJ/m ²	ISO 179/1eU
Notched Izod Impact (23°C)	8.0	kJ/m ²	ISO 180/1A
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
1.8 MPa, not annealed	163	°C	ASTM D648
1.8 MPa, not annealed	161	°C	ISO 75-2/A
Melting Temperature ¹	165	°C	ISO 11357-3
Linear thermal expansion coefficient			ISO 11359-2
Flow	2.7E-5	cm/cm/°C	ISO 11359-2
Lateral	1.3E-4	cm/cm/°C	ISO 11359-2
Injection	Nominal Value	Unit	
Drying Temperature	80.0 - 100	°C	
Drying Time	3.0	hr	
Rear Temperature	170 - 180	°C	
Middle Temperature	180 - 190	°C	
Front Temperature	180 - 190	°C	
Nozzle Temperature	190 - 200	°C	
Processing (Melt) Temp	180 - 200	°C	
Mold Temperature	90.0 - 120	°C	
Injection Pressure	90.0 - 140	MPa	
Injection Rate	Slow		
Holding Pressure	90.0 - 140	MPa	
Back Pressure	0.00 - 0.500	MPa	
Injection instructions			
Manifold Temperature: 190 to 210°CZone 4 Temperature: 190 to 200°C			
NOTE			
1.	10°C/min		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China



WECHAT