

Celcon® M90SW

Acetal (POM) Copolymer

Celanese Corporation

Message:

Celcon M90SW is a low wear grade designed for gears and other low wear applications, especially where reducing noise and wear against the same mating surface is important. This grade may be preferred in high load-low velocity applications. Celcon® M90SW is an option where silicone or PTFE based wear resistant products are not acceptable.

Please also see Hostaform® C 9021 SW.

General Information			
UL YellowCard	E38860-239310		
Features	Good wear resistance		
Uses	Gear		
RoHS Compliance	Contact manufacturer		
Physical	Nominal Value	Unit	Test Method
Density	1.41	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	8.00	cm ³ /10min	ISO 1133
Molding Shrinkage			ISO 294-4
Vertical flow direction	1.6	%	ISO 294-4
Flow direction	2.0	%	ISO 294-4
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2600	MPa	ISO 527-2/1A/1
Tensile Stress (Yield)	49.0	MPa	ISO 527-2/1A/50
Tensile Strain (Yield)	8.0	%	ISO 527-2/1A/50
Flexural Modulus (23°C)	2560	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	5.0	kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength			ISO 179/1eU
-30°C	90	kJ/m ²	ISO 179/1eU
23°C	110	kJ/m ²	ISO 179/1eU
Notched Izod Impact (23°C)	5.4	kJ/m ²	ISO 180/1A
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa, Unannealed)	90.0	°C	ASTM D648, ISO 75-2/A
Melting Temperature ¹	166	°C	ISO 11357-3
Linear thermal expansion coefficient			ISO 11359-2
Flow	1.0E-4	cm/cm/°C	ISO 11359-2
Lateral	1.0E-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	80.0 - 120	°C
Injection Pressure	60.0 - 120	MPa
Injection Rate	Slow-Moderate	
Holding Pressure	60.0 - 120	MPa
Back Pressure	0.00 - 0.500	MPa

Injection instructions

Manifold Temperature: 180 to 200°C Zone 4 Temperature: 190 to 200°C

NOTE

- 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

