



Celcon® LW90-F2

Celanese Corporation - Acetal (POM) Copolymer

Saturday, November 2, 2019

General Information

Product Description

Celcon® LW90-F2 is an acetal copolymer formulated with a nominal 9 melt flow rate base polymer and a standard level of polytetrafluoroethylene filler (PTFE). It is designed for use in wear applications against plastic, metal, glass, or ceramic mating surfaces where silicone lubricants can not be tolerated.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• PTFE Lubricant		
Features	• Wear Resistant		
RoHS Compliance	• Contact Manufacturer		

ASTM & ISO Properties ¹

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
Across Flow	1.9	%	
Flow	2.3	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	384000	psi	ISO 527-2/1A
Tensile Stress (Yield)	9140	psi	ISO 527-2/1A/50
Tensile Strain (Yield)	9.0	%	ISO 527-2/1A/50
Flexural Modulus (73°F)	377000	psi	ISO 178
Flexural Stress (3.5% Strain)	10400	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	2.4	ft·lb/in ²	ISO 179/1eA
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	57	ft·lb/in ²	
73°F	57	ft·lb/in ²	
Notched Izod Impact Strength (73°F)	2.4	ft·lb/in ²	ISO 180/1A
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (264 psi, Unannealed)	208	°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	5.6E-5	in/in/°F	ISO 11359-2
CLTE - Transverse	5.0E-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

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Injection	Nominal Value	Unit
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	176 to 248	°F
Injection Rate	Slow-Moderate	
Back Pressure	< 290	psi

Injection Notes

Zone4 temperature: 190 to 200°C
Hot runner temperature: 180 to 200°C

Notes

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

² 10°C/min