



Celcon® LW90FS-K

Celanese Corporation - Acetal (POM) Copolymer

Saturday, November 2, 2019

General Information

Product Description

Celcon® acetal copolymer grade LW90FS-K is wear resistant grade of M90 based on both silicone and a high level of PTFE to give excellent slip and wear resistance properties in demanding applications.

General

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

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.51	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	1.1	%	
Flow	0.90	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	305000	psi	ISO 527-2/1A
Tensile Stress (Yield)	6380	psi	ISO 527-2/1A/50
Tensile Strain (Yield)	17	%	ISO 527-2/1A/50
Flexural Modulus (73°F)	297000	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	1.9	ft-lb/in ²	ISO 179/1eA
Charpy Unnotched Impact Strength (73°F)	29	ft-lb/in ²	ISO 179/1eU
Notched Izod Impact Strength (73°F)	2.1	ft-lb/in ²	ISO 180/1A
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (264 psi, Unannealed)	189	°F	ISO 75-2/A
Melting Temperature ²	331	°F	ISO 11357-3
CLTE - Flow	6.1E-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
Drying Time	3.0 to 4.0	hr
Rear Temperature	338 to 356	°F
Middle Temperature	347 to 365	°F
Front Temperature	356 to 374	°F
Nozzle Temperature	365 to 392	°F
Processing (Melt) Temp	356 to 392	°F
Mold Temperature	176 to 248	°F

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Injection	Nominal Value	Unit
Injection Rate	Slow-Moderate	
Back Pressure	< 290	psi

Injection Notes

Zone4 temperature: 185 to 195°C

Notes

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

² 10°C/min