



## Celcon® LM90Z

Celanese Corporation - Acetal (POM) Copolymer

Saturday, November 2, 2019

### General Information

#### Product Description

Celcon® LM90Z is a UV stable, nominal 9 melt flow acetal copolymer which is capable of being permanently marked by a laser. It gives protection against property and color deterioration in applications where significant UV exposure is anticipated from sunlight or artificial lighting. Parts molded from Celcon® LM90Z can be lasermarked with barcodes, identification numbers, designs, 2-D symbology, etc.

#### General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Laser Markable	• UV Resistant	
RoHS Compliance	• Contact Manufacturer		

### ASTM & ISO Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density	1.41	g/cm <sup>3</sup>	ISO 1183
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	8.00	cm <sup>3</sup> /10min	ISO 1133
Water Absorption (Saturation, 73°F)	0.75	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.20	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	392000	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)	387000	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	2.2	ft-lb/in <sup>2</sup>	ISO 179/1eA
Notched Izod Impact Strength (73°F)	2.5	ft-lb/in <sup>2</sup>	ISO 180/1A
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (264 psi, Unannealed)	203	°F	ISO 75-2/A
Vicat Softening Temperature	322	°F	ISO 306/B50
Melting Temperature <sup>2</sup>	333	°F	ISO 11357-3
Melting Temperature	333	°F	
CLTE - Flow	5.6E-5	in/in/°F	ISO 11359-2
CLTE - Transverse	6.1E-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
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	

# Celcon® LM90Z

## Celanese Corporation - Acetal (POM) Copolymer

Injection	Nominal Value	Unit
Back Pressure	< 580	psi

### Injection Notes

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

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 10°C/min