Celcon® MR50B

Celanese Corporation - Acetal (POM) Copolymer

Sunday, November 3, 2019

General Information

Product Description

Celcon® MR50B is a specialty media resistant grade developed for improved bleach resistance and improved toughness.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Good Toughness		
RoHS Compliance	• Contact Manufacturer		

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.41	g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	4.00	cm³/10min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	2.0	%	
Flow	2.5	%	
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	377000	psi	ISO 527-2/1A
Tensile Stress (Yield)	9140	psi	ISO 527-2/1A/50
Tensile Strain (Yield)	11	%	ISO 527-2/1A/50
Flexural Modulus (73°F)	363000	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (73°F)	3.8	ft·lb/in²	ISO 179/1eA
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	55	ft·lb/in²	
73°F	66	ft·lb/in²	
Notched Izod Impact Strength (73°F)	3.8	ft·lb/in²	ISO 180/1A
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature (264 psi, Unannealed)	199	°F	ISO 75-2/A
Melting Temperature [2]	331	°F	ISO 11357-3
CLTE - Flow	5.0E-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
Middle Temperature	356 to 374	°F
Front Temperature	356 to 374	°F
Nozzle Temperature	356 to 392	°F
Processing (Melt) Temp	356 to 392	°F
Mold Temperature	176 to 248	°F

Celcon® MR50B
Celanese Corporation - Acetal (POM) Copolymer

Injection	Nominal Value	Unit
Injection Rate	Slow	
Back Pressure	< 580	psi

Injection Notes

Zone4 temperature: 180 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