CELCON® FM2020

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CELCON® FM2020 is a MoS2 modified wear resistance for general injection molding. It is suitable for parts requiring strong friction and wear resistance and high stiffness.

Product information

Resin Identification	POM		ISO 1043
Part Marking Code	>POM<		ISO 11469

Rheological properties

Melt mass-flow rate	11	g/10min	ISO 1133
Melt mass-flow rate, Temperature	374	°F	
Melt mass-flow rate, Load	4.76	lb	
Molding shrinkage, parallel	2.0	%	ISO 294-4, 2577

Typical mechanical properties

Tensile stress at yield, 50mm/min	9400	psi	ISO 527-1/-2
Tensile strain at yield, 50mm/min	9.5	%	ISO 527-1/-2
Nominal strain at break	20	%	ISO 527-1/-2
Flexural modulus	390000	psi	ISO 178
Flexural strength	13100	psi	ISO 178
Charpy notched impact strength, 23°C	2.62	ftlb/in^2	ISO 179/1eA

Thermal properties

Melting temperature, 10°C/min	329	°F	ISO 11357-1/-3

Electrical properties

Volume resistivity	1E12	Ohm.m	IEC 62631-3-1
Surface resistivity	1E16	Ohm	IEC 62631-3-2

Physical/Other properties

Humidity absorption, 2mm	0.2	%	Sim. to ISO 62
Density	0.0516	lb/in^3	ISO 1183

Injection

Drying Recommended	no	
Drying Temperature	212	°F
Drying Time, Dehumidified Dryer	3 - 4	h
Processing Moisture Content	≤0.2	%
Melt Temperature Optimum	383	°F
Min. melt temperature	356	°F
Max. melt temperature	410	°F
Max. screw tangential speed	≤0.3	m/s
Mold Temperature Optimum	158	°F
Min. mold temperature	140	°F
Max. mold temperature	176	°F
Hold pressure range	8700 - 17400	psi

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Hold Pressure Time (h is the max. wall thickness of the part in mm)	$2h^2$-3 s

Characteristics

Processing	Injection Molding
Special characteristics	Low wear / Low friction

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