CELCON® F25-03

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CELCON® F25-03 is a medium-low viscosity grade for general injection molding.

Product information

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

Rheological properties

Melt mass-flow rate	13	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 modulus	399000	psi	ISO 527-1/-2
Tensile stress at yield, 50mm/min	9400	psi	ISO 527-1/-2
Tensile strain at yield, 50mm/min	9	%	ISO 527-1/-2
Nominal strain at break	31	%	ISO 527-1/-2
Flexural modulus	384000	psi	ISO 178
Charpy notched impact strength, 23°C	2.85	ftlb/in²	ISO 179/1eA
Charpy notched impact strength, -30°C	2.62	ftlb/in²	ISO 179/1eA
Poisson's ratio	0.379		

Thermal properties

Melting temperature, 10°C/min	329	°F	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	212	°F	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	0.67	E-4/°F	ISO 11359-1/-2

Flammability

Burning Behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	0.1181	in	IEC 60695-11-10

Electrical properties

Electric strength	483	kV/in	IEC 60243-1

Physical/Other properties

Humidity absorption, 2mm	0.2	%	Sim. to ISO 62
Density	0.0509	lb/in³	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

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

Automotive

OEM	STANDARD	ADDITIONAL INFORMATION
Hyundai	MS237-14 Type A	Ulsan, Korea
Renault	EP03-3-S1, Ulsan, Korea, Bumper Technical Parts, No Spec, Special Part Approval, See Your CE Account Manager.	
Renault	IP13f-S5, Ulsan, Korea, Seat Handles, No Spec, Special Part Approval, See Your CE Account Manager.	
Renault	IP13g-S3, Ulsan, Korea, Seat Component, No Spec, Special Part Approval, See Your CE Account Manager.	
Renault	UB03f-S1, Ulsan, Korea, Fuel Supply System, No Spec, Special Part Approval, See Your CE Account Manager.	
Stellantis	B62 0300 / 61/207E/207M/H507E	01994_19_00367

Characteristics

Processing	Injection Molding

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