Celanese
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CELCON® TX-81DT

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CELCON® TX-81DT is a friction & wear-resistance (medium-viscosity) grade for general injection molding. Suitable for uses requiring reduced wear noise and a good friction and wear resistance without sacrificing mechanical properties.

Product information

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

Rheological properties

Melt mass-flow rate	6	g/10min	ISO 1133
Melt mass-flow rate, Temperature	190	°C	
Melt mass-flow rate, Load	2.16	kg	
Moulding shrinkage, parallel	2.0	%	ISO 294-4, 2577

Typical mechanical properties

Tensile modulus	2600	MPa	ISO 527-1/-2
Tensile stress at yield, 50mm/min	64	MPa	ISO 527-1/-2
Tensile strain at yield, 50mm/min	10	%	ISO 527-1/-2
Nominal strain at break	34	%	ISO 527-1/-2
Flexural modulus	2450	MPa	ISO 178
Flexural strength	85	MPa	ISO 178
Charpy notched impact strength, 23°C	7	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	6	kJ/m²	ISO 179/1eA
Poisson's ratio	0.38[C]		

[C]: Calculated

Thermal properties

Melting temperature, 10°C/min	165	°C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	96	°C	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	120	E-6/K	ISO 11359-1/-2

Flammability

Burning Behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	3.2	mm	IEC 60695-11-10

Electrical properties

Electric strength	19	kV/mm	IEC 60243-1

Physical/Other properties

Humidity absorption, 2mm	0.2	%	Sim. to ISO 62
Density	1410	kg/m³	ISO 1183

Characteristics

Processing	Injection Moulding
Delivery form	Pellets
Special characteristics	Low wear / Low friction

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