

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/m ²	ISO 179/1eA
Charpy notched impact strength, -30 °C	6 kJ/m ²	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
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Physical/Other properties

Humidity absorption, 2mm	0.2 %	Sim. to ISO 62
Density	1410 kg/m ³	ISO 1183

Characteristics

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

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Page: 2 of 2

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