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	374	°F	
Melt mass-flow rate, Load	4.76	lb	
Molding shrinkage, parallel	2.0	%	ISO 294-4, 2577

Typical mechanical properties

Tensile modulus	377000	psi	ISO 527-1/-2
Tensile stress at yield, 50mm/min	9300	psi	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	355000	psi	ISO 178
Flexural strength	12300	psi	ISO 178
Charpy notched impact strength, 23°C	3.33	ftlb/in^2	ISO 179/1eA
Charpy notched impact strength, -30°C	2.85	ftlb/in^2	ISO 179/1eA

Thermal properties

Melting temperature, 10°C/min	329	°F	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	205	°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	0.1260	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/in^3	ISO 1183

Characteristics

Processing	Injection Molding
Special characteristics	Low wear / Low friction

Revised: 2025-07-10 Source: Celanese Materials Database

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