

TPC-ET

72 Shore D, Injection Molding

Properties	Typical Data	Unit	Test Method
RHEOLOGICAL PROPERTIES			
Melt volume-flow rate	15	cm ³ /10min	ISO 1133
Temperature	230	°C	ISO 1133
Load	2.16	kg	ISO 1133
MECHANICAL PROPERTIES			
Shore D Hardness (3s)	72	-	ISO 868
Tensile modulus	1000	MPa	ISO 527-1/-2
Stress at break	38	MPa	ISO 527-1/-2
Stress at 5% strain	31.2	MPa	ISO 527-1/-2
Stress at 10% strain	34.4	MPa	ISO 527-1/-2
Stress at 50% strain	24.9	MPa	ISO 527-1/-2
Charpy notched impact strength (+23°C)	10	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	6	kJ/m ²	ISO 179/1eA
Izod notched impact strength (23°C)	9	kJ/m ²	ISO 180/1A
THERMAL PROPERTIES			
Melting temperature (10°C/min)	221	°C	ISO 11357-1/-3
Temp. of deflection under load (0.45 MPa)	120	°C	ISO 75-1/-2
Vicat softening temperature (50°C/h 50N)	160	°C	ISO 306
Vicat softening temperature (50°C/h 10N)	210	°C	ISO 306
Coeff. of linear therm. expansion (parallel)	1.65	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	1.65	E-4/°C	ISO 11359-1/-2
Burning Behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.6	mm	IEC 60695-11-10
ELECTRICAL PROPERTIES			
Relative permittivity (100Hz)	3.7	-	IEC 60250
Relative permittivity (1 MHz)	3.3	-	IEC 60250
Dissipation factor (1 MHz)	300	E-4	IEC 60250
Volume resistivity	1E13	Ohm*m	IEC 60093
Surface resistivity	>1E15	Ohm	IEC 60093
Electric strength	23	kV/mm	IEC 60243-1
Comparative tracking index	600	-	IEC 60112
OTHER PROPERTIES			
Density	1290	kg/m ³	ISO 1183
Water absorption	0.6	%	Sim. to ISO 62
Humidity absorption	0.15	%	Sim. to ISO 62

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