

PEI 1010 Technical Data Sheet(TDS)

Physical	Conditions	Test Method	Typical
Density		ISO 1183	1.27 g/cm ³
Melt Volume-Flow Rate (MVR)	360 / 5.0 kg	ISO 1183	13.0 cm ³ / 10 min
	340 / 5.0 kg	ISO 1183	13.0 cm ³ / 10 min
Modling Shrinking- Flow			0.50 to 0.70%
Water Absorption	Saturation, 23	ISO 62	1.30%
	Equilibrium, 23 ,50%RH	1.30%	0.70%

MECHANICAL

Tensile modulus		ISO 527-2/1	3200 MPa
Tensile Stress	Yield	ISO 527-2/1	105 MPa
	Break		85.0 Mpa
Tensile Strain	Yield	ISO 527-2/50	6.00%
	Break		60%
Flexural Modulus		ISO 178	3300 Mpa
Flexural Stress		ISO 178	160MPa
Taber Abrasion Resistance	1000 cycles , 1000 g	Internal Method	10.0mg

IMPACT

Notched Izod Impact Strength	23	ISO 180/1U	5.0 KJ/m ²
Unotched Izod Impact Strength	23	ISO 180/1A	No Break

Hardness

Ball Indentation Hardness		ISO 2039-1	140MPa
---------------------------	--	------------	--------

Thermal

Heat Deflection Temperature	0, 45 MPa , Unannealed,	ISO 75-2/ Be	200°C
	1.8 MPa,	ISO 75-2/ Ae	190°C
Vicat Softenting Temperature		ISO 306/A50	215°C
		ISO 306/B50	211°C

		ISO 306/B120	212°C
Ball Pressure Test	125°C	IEC 60695-10-2	Pass
CLTE		ISO 11359-2	
Flow	23°C to 150°C		5.0E-5 cm/cm/°C
Transverse	23°C to 151°C		5.0E-5 cm/cm/°C
Thermal Conductivity		ISO 8302	0,21 W/m/K
RTI Elec		UL 746	170°C
RTI Imp		UL 746	170°C
RTI STr		UL 746	170°C
Flammability			
Flame Rating	1.50 mm	UL94	V-0
	3.00 mm		5VA
Glow Wire Flammability Index	3.20 mm	IEC 60695-2-12	960°C
Oxygen Index		ISO 4589-2	47%

Updated on November 11, 2022