



TPE – 40D – COPE BK UV

	ValueUnit	Test Standard
Physical properties		
Density	1110 kg/m ³	ISO 1183
Melt flow rate (MFR)	13.3 g/10 min	ISO 1133
MFR test temperature	220 °C	ISO 1133
MFR test load	2.16 kg	ISO 1133
Mold shrinkage - parallel	1.3 %	ISO 294-4
Water absorption (23°C-sat)	0.5 %	ISO 62
Mechanical properties	ValueUnit	Test Standard
Tensile modulus (1mm/min)	55 MPa	ISO 527-2/1A
Tensile stress at 50% strain (50mm/min)	7 MPa	ISO 527-2/1A
Tensile stress at break (50mm/min)	21 MPa	ISO 527-2/1A
Tensile strain at break (50mm/min)	650 %	ISO 527-2/1A
Flexural modulus (23°C)	46 MPa	ISO 178
Flexural modulus (-40°C)	270 MPa	ISO 178
Flexural modulus (100°C)	26 MPa	ISO 178
Flexural stress @ 3.5% strain	2 MPa	ISO 178
Charpy impact strength @ 23°C	NB kJ/m ²	ISO 179/1eU
Charpy impact strength @ -30°C	NB kJ/m ²	ISO 179/1eU
Charpy notched impact strength @ 23°C	NB kJ/m ²	ISO 179/1eA
Charpy notched impact strength @ -30°C	NB kJ/m ²	ISO 179/1eA
Unnotched impact str (Izod) @ 23°C	N kJ/m ²	ISO 180/1U
Unnotched impact str (Izod) @-30°C	N kJ/m ²	ISO 180/1U
Notched impact strength (Izod) @ 23°C	NB kJ/m ²	ISO 180/1A
Notched impact strength (Izod) @-30°C	N kJ/m ²	ISO 180/1A
Notched impact strength (Izod) @-40°C	N kJ/m ²	ISO 180/1A
Shore hardness A scale 15 sec value	92 -	ISO 868
Shore hardness D scale 15 sec value	40 -	ISO 868
Bayshore resilience	58 %	Internal
Ross flex	>1000000 cycles	Internal
Thermal properties	ValueUnit	Test Standard
Melting temperature (10°C/min)	192 °C	ISO 11357-1,-2,-3
DTUL @ 0.45 MPa	47 °C	ISO 75-1/-2
Flammability at thickness h	HB class	UL94
thickness tested (h)	1.5 mm	UL94
Electrical properties	ValueUnit	Test Standard
Relative permittivity - 1 MHz	4.9 -	IEC 60250
Volume resistivity	2E10 Ohm*m	IEC 60093
Surface resistivity	2E14 Ohm	IEC 60093
Electric strength	26 kV/mm	IEC 60243-1
Comparative tracking index CTI	>600 -	IEC 60112
Mechanical-TPE properties	ValueUnit	Test Standard
Stress at 10% elongation	3.2 MPa	ISO 527-1/-2
Stress at 50% elongation	6.6 MPa	ISO 727-1/2
Stress at 100% elongation	7.7 MPa	ISO 527-1/-2
Stress at 300% elongation	12.7 MPa	ISO 527-1/-2
Strain at break	650 %	ISO 527-1/-2
Stress at break	21 MPa	ISO 527-1/-2
Shore D hardness (15s)	40 -	ISO 868
Tear strength (Die C, parallel)	84.8 kN/m	ISO 34-1