

CF-PA6 Technical Data Sheet(TDS)

MECHANICAL PROPERTIES (DRY STATUS)			
Property	Method	Value	
		XY	Z
Young's Modulus	ISO 527, GB/T 1040	8637±211 MPa	3760±119 MPa
Tensile Strength	ISO 527, GB/T 1040	109.3±2.4 MPa	54±5.2 MPa
Breaking Elongation Rate	ISO 527, GB/T 1040	2.1±0.2 %	1.9±0.4 %
Bending Modulus	ISO 178, GB/T 9341	7038±205 MPa	N/A
Bending Strength	ISO 178, GB/T 9341	161±3.9 MPa	N/A
Notched Charpy Impact Strength	ISO 179, GB/T 1043	10.95±0.3 kJ/m ²	N/A

MECHANICAL PROPERTIES (WET STATUS)			
Property	Method	Value	
		XY	Z
Young's Modulus	ISO 527, GB/T 1040	2508±83 MPa	1056±128 MPa
Tensile Strength	ISO 527, GB/T 1040	54.7±1.1 MPa	25.5±1.2 MPa
Breaking Elongation Rate	ISO 527, GB/T 1040	7±0.9 %	6.7±1.7 %
Bending Modulus	ISO 178, GB/T 9341	2286±185 MPa	N/A
Bending Strength	ISO 178, GB/T 9341	64.9±4.9 MPa	N/A
Notched Charpy Impact Strength	ISO 179, GB/T 1043	35.6±1.2 kJ/m ²	N/A

THERMAL PROPERTIES

Property	Method	Value
Melt Index	300° C, 2.16kg	20.5g/10min
Melting Temperature	DSC, 10° C/min	219° C
Glass Transition Temperature	DSC, 10° C/min	74° C
Crystallization Temperature	DSC, 10° C/min	185° C
Heat Deflection Temperature	ISO 75, 1.8MPa	173° C
	ISO 75, 0.45MPa	215° C
Decomposition Temperature	TGA, 20° C/min	>370° C

OTHER PROPERTIES

Property, Conditions	Method	Value
Density, At 23° C	ISO 1183, GB/T 1033	1.17g/cm ³
Sheet Resistance in Moisture State	ASTM D991 (GB/T 2439, ISO 1853)	1-10 (10 ⁸ Ω/sq)

Updated on February 28, 2025