

Brand name	Tenax™
Production site	Europe
Product designation	TPUD PEEK-6-34-IMS65 P12 24K-UD-146
Product key	6015
Carbon Fiber	Tenax™-E IMS65 P12 24K 830tex Density: 1.78 g/cm ³
Matrix	PEEK (Polyetheretherketone) Density: 1.30g/cm ³



Semi-finished Product

Total Areal Weight	221 g/m ²
Fiber Areal Weight	146 g/m ²
Matrix Content	34 wt%
Nom. Consolidated Ply Thickness	.0055" 0.14 mm
Width	12" and 24" (304.8 mm and 609.6 mm) Slitting on request

Press Cycle Recommendations

Consolidation Temp.	390 °C 734 °F
Consolidation Pressure	20 bar 290 psi
Consolidation Time	20 min.

Properties (Test Direction)		Test Temperature/ Conditioning	Typical Values	
Glass Transition Temperature	onset	23 °C / 50 % r.h.	143 °C	289 °F
Tensile (0°) EN ISO 527-5	Strength	23 °C / 50 % r.h.	2900 MPa	406 ksi
	Modulus	23 °C / 50 % r.h.	150 GPa	23 Msi
Tensile (90°) EN ISO 527-5	Strength	23 °C / 50 % r.h.	90 MPa	13.1 ksi
	Modulus	23 °C / 50 % r.h.	10 GPa	1.5 Msi
Flexure (0°) EN ISO 14125	Strength	23 °C / 50 % r.h.	1500 MPa	217.6 ksi
	Modulus	23 °C / 50 % r.h.	140 GPa	20.3 Msi
Flexure (90°) EN ISO 14125	Strength	23 °C / 50 % r.h.	160 MPa	23.2 ksi
	Modulus	23 °C / 50 % r.h.	9.8 GPa	1.4 Msi
In-Plane Shear (+45°/-45°) EN ISO 14129	Strength	23 °C / 50 % r.h.	80 MPa	11.6 ksi
	Modulus	23 °C / 50 % r.h.	5.0 GPa	0.7 Msi

- All data shown are typical values representative of the material and cannot be guaranteed. Properties may vary depending on samples preparation and test methods.
- For each shipment an inspection certificate 3.1 according to DIN EN 10204 is generated and supplied.
- A detailed customer specification is arranged on request.
- The export or transfer of carbon fiber products can be subject to authorization, depending on end-use and final destination.