

**Brand name** Tenax™  
**Production site** Europe  
**Product designation** TPUD HT 03 0115 610003  
**Product key** 610003  
**Carbon Fiber** Tenax™-E HTS45 P12 12K 800tex  
 Density: 1.77 g/cm<sup>3</sup>  
**Matrix** PPS (Polyphenylene sulphide)  
 Density: 1.35 g/cm<sup>3</sup>



**Semi-finished Product**

Total Areal Weight	192 g/m <sup>2</sup>
Fiber Areal Weight	115 g/m <sup>2</sup>
Matrix Content	40 wt%
Nominal Consolidated Ply Thickness	.0047" 0.12 mm
Width	12" and 24" (304.8 mm and 609.6 mm) Slitting on request

**Press Cycle Recommendations**

Consolidation Temp.	325 °C 617 °F
Consolidation Pressure	25 bar 218 psi
Consolidation Time	20 min.

**Properties (Test Direction)**

		Test Temperature/ Conditioning	Typical Values	
Glass Transition Temperature	onset	23 °C / 50 % r.h.	90 °C	194 °F
Tensile (0°) EN ISO 527-5	strength	23 °C / 50 % r.h.	1900 MPa	275.6 ksi
	modulus	23 °C / 50 % r.h.	120 GPa	17.4 Msi
Compression (0°) EN 2850 B1/B2	strength	23 °C / 50 % r.h.	1100 MPa	160 ksi
	modulus	23 °C / 50 % r.h.	115 GPa	16.7 Msi
In-Plane Shear (+45°/-45°) EN ISO 14129	strength	23 °C / 50 % r.h.	75 MPa	10.9 ksi
	modulus	23 °C / 50 % r.h.	5.0 GPa	0.7 Msi

- Product development according to aviation standard EN 9145:2019-02
- 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.