Brand name	**Tenax™**
Production site	**Europe**
Product designation	**TPUD HT 03 0145 610002**
Product key	**610002**
Carbon Fiber	**Tenax™-E HTS45 P12 12K 800tex**
	Density: 1.77 g/cm³
Matrix	**PPS** (Polyphenylene sulphide)
	Density: 1.35 g/cm³

Semi-finished Product

Total Areal Weight	220 g/m²
Fiber Areal Weight	145 g/m²
Matrix Content	34 wt%
Nominal 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.	330 °C 626 °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.	90 °C	194 °F
Tensile (0°) EN ISO 527-5	strength	23 °C / 50 % r.h.	2200 MPa	319.1 ksi
	modulus	23 °C / 50 % r.h.	140 GPa	20.3 Msi
Flexure (0°) EN ISO 14125	strength	23 °C / 50 % r.h.	1750 MPa	253.8 ksi
	modulus	23 °C / 50 % r.h.	115 GPa	16.7 Msi
Flexure (90°) EN ISO 14125	strength	23 °C / 50 % r.h.	110 MPa	16 ksi
	modulus	23 °C / 50 % r.h.	9.5 GPa	1.4 Msi
Compression (0°) EN 2850 B1/B2	strength	23 °C / 50 % r.h.	1260 MPa	182.7 ksi
	modulus	23 °C / 50 % r.h.	123 GPa	17.8 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.