

Brand name	Tenax™
Production site	Europe
Product designation	TPUD HT 03 0145 610009
Product key	610009
Carbon Fiber	Tenax™-E HTS45 P12 12K 800tex Density: 1.77 g/cm ³
Matrix	PPS (Polyphenylene sulphide) Density: 1.35 g/cm ³



Semi-finished Product

Total Areal Weight	242 g/m ²
Fiber Areal Weight	145 g/m ²
Matrix Content	40 wt%
Nominal Consolidated Ply Thickness	.0057" 0.154 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	30 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
In-Plane Shear (+45°/-45°) EN ISO 14129	strength	23 °C / 50 % r.h.	64 MPa	9.3 ksi
	modulus	23 °C / 50 % r.h.	4.3 GPa	0.6 Msi
Flexural (90°) EN ISO 14125	strength	23 °C / 50 % r.h.	95 MPa	13.8 ksi
	modulus	23 °C / 50 % r.h.	9.6 GPa	1.4 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.