

**Tenax Next™-E HTS45 E23 24K 1600tex**

Teijin Carbon develops reliable, high-performance materials that enable our partners to achieve their sustainability goals. This Tenax Next™ product is produced with 35 % less CO<sub>2</sub> emissions than conventional carbon fiber. Our well-known quality standards (e.g. traceability) are guaranteed. This high tenacity fibers have excellent and balanced mechanical laminate properties.



Product designation	Sizing type	Sizing based on	Size level [%]	Twist [t/m]	Origin
Tenax Next™-E HTS45 E23 24K 1600tex	E23	Epoxid	1.2	0	Europe (E)

**Properties****internal test method**

Number of filaments	[n]	24,000	-
Nominal linear density (without Sizing)	[tex]	1,600	TAV PQL 07.01
Tensile strength	[MPa]	4,800	TAV PQL 06.01
Tensile modulus	[GPa]	240	TAV PQL 06.01
Elongation at break	[%]	1.7	TAV PQL 06.01
Size level	[%]	1.2	TAV PQL 07.01
Density	[g/cm <sup>3</sup> ]	1.79	TAV PQL 10.01
Filament diameter	[μm]	7.0	-
Electrical resistance	[Ω/m]	18	TAV PQL 12.01
Specific electrical resistivity	[10 <sup>-3</sup> Ωcm]	1.6	TAV PQL 12.01

	Running length	Standard bobbin weight, net [kg]*							
Bobbin weight	[m/kg]	0.2	0.5	1.0	2.0	4.0	6.0	8.0	10.0
Tenax Next™-E HTS45 E23 24K 1600tex	625	-	-	-	-	x	x	x	-

\*Availability on request

- All data are typical values representative of the material and cannot be guaranteed. Properties may vary depending on samples preparation and test methods.
- 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.