

# Datasheet Twaron® 1000

## Aramid yarn

### Properties

Linear density (nominal) [dtex]	840	1100	1680	3360
Linear density (effective) [dtex]	860	1135	1730	3460
Number of filaments	500	1000	1000	2000
Breaking force [N]	174	240	350	688
Elongation at break [%]	3.4	3.5	3.6	3.7
Modulus [GPa]	78	78	71	67

The properties are measured on twisted yarns as directed in ASTM D7269. The linear densities are measured according to ASTM D1907 option 1 for the effective values.

### Make-up and packaging information

Yarn length [m]	58,100	39,700/ 70,500	52,000/ 56,600	27,800
Tube length [mm]	290	290	290	216/ 290
Tube inner diameter [mm]	94	94	94	94
Bobbin diameter [mm]	181	174/ 215	225/ 233	263/ 231
Number of bobbins per box x weight per bobbin [kg]	90 x 5.0	90 x 4.5/ 54 x 8.0	54 x 9.0/ 54 x 9.8	52 x 9.6

Box dimensions (L x W x H) [mm]	Large	1200 x 1040 x 980
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Boxes are delivered on CP1 pallets with a height of 138 mm.

### General characteristics

Amount of finish [%]	0.65-0.8
Density [g/cm <sup>3</sup> ]	1.44
Decomposition temperature yarn [°C]	> 450*
Hot air shrinkage (15 min at 180°C) [%]	< 0.1
Flammability LOI-Index	> 34**
Coefficient of thermal expansion [10 <sup>-6</sup> /K]	- 4.8

\* Based on thermogravimetric analysis

\*\* Based on yarn

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