

### Typical Technical Data of Twaron

Yarn Type	Linear Density f (nominal) [dtex]	Linear Density (effective) [dtex]	Finish Content [%]	Elongation at Break [%]	Breaking Tenacity [MPa]	Breaking Strength [N]	Modulus [GPa]	Tube Size [mm]	Number of Bobbins x Weight per Bobbin [kg]
1000	1100	1135	0.8	3.45	3045	240	78	290x94	6 x 4.5 / 90 x 4.5
1000	1680	1730	0.8	3.50	2913	350	71	290x94	6 x 4.5 / 90 x 4.5 / 54 x 9.0
1000	3360	3460	0.8	3.70	2863	688	67	290x94	6 x 4.5 / 90 x 4.5 / 48 x 10.0
1001	1680	1730	1.1 (DSP)	3.30	2788	335	---	290x94	6 x 4.5 / 90 x 4.5 / 54 x 9.0
1040	1680	1730	0.8	3.55	2913	350	70	290x94	6 x 4.5 / 90 x 4.5
1041	1680	1730	1.1 (DSP)	3.40	2705	325	---	290x94	90 x 4.5
1111	420	440	0.7	2.80	2815	86	98	290x94	8 x 2.2
1111	1260	1350	0.7	3.10	2987	280	91	290x94	6 x 4.5 / 90 x 4.5
1111	1680	1720	0.7	3.10	2980	356	93	290x94	48 x 10.0
1111	2520	2600	0.7	3.10	2963	535	91	290x94	48 x 10.0
1055	405	420	0.8	2.20	2762	80	115	216x94	8 x 0.5
1055	1210	1310	0.8	2.40	2823	255	110	216x94	4 x 4.5 / 92 x 4.5
1055	1610	1660	0.8	2.50	2926	335	110	216x94	4 x 4.5 / 92 x 4.5
1055	8050	8350	0.8	2.60	2778	1600	104	216x94	3 x 5.5 / 92 x 5.5
1056	8050	8350	0.4	2.60	2778	1600	104	273x77	54 x 9.0
2200	210	230	0.8	2.65	2817	45	110	290x94	8 x 0.5
2200	405	440	0.8	2.80	2945	90	105	290x94	8 x 2.0
2200	1210	1300	0.8	2.80	3157	285	108	216x94	4 x 4.7
2200	1610	1720	0.8	2.70	3014	360	105	216x94	4 x 4.7 / 92 x 4.7
2200	2420	2600	0.8	2.80	2991	540	105	216x94	4 x 4.7 / 92 x 4.7
2200	3220	3440	0.8	2.90	2930	700	102	216x94	3 x 5.6 / 92 x 5.6
2200	8050	8600	0.8	2.90	2930	1750	99	216x94	3 x 5.5 / 64 x 5.5

All values are average batch values measured at twisted yarns according to Standard Test Methods of Twaron IN 97/7180 Version 4. Assembled, twisted and tangled material can be delivered on request.

Property	Unit	Value
Flammability	LOI-Index	0.29
Hot air shrinkage (15 min. at 190°C)	%	0.1
Heat resistance (48 h at 200°C)	%	90
Decomposition temperature	°C	> 450
Coefficient of thermal expansion	10 <sup>-6</sup> /K	-3.5