

Mechanical Properties of Technora T200 (M)

Introduction

The Technora p-aramid fiber is developed by Teijin and is commercially available since 1987. The Technora yarns differ from the Twaron yarns in such a way that an extra monomer gives the yarn a higher elongation and a lower modulus. Even as the Twaron p-aramid fibers, the Technora yarns are excellently suited for our variety of applications in the mechanical rubber goods market. Technora yarns have the correct balance between high specific strength and a relatively low modulus. Specifically for belts, where fatigue plays a dominant role, the Technora yarns are a real buster. Technora yarns are also available in a wide range of linear densities to make

effective and efficient use of the fiber of choice.

The standard delivery program for Technora T200 (M) is:

- 800 dtex Z120
- 1100 dtex Z120
- 1670 dtex Z90
- 2500 dtex Z75 (Technora T200M)

This publication provides detailed data on the properties of Technora T200 (M) yarn. The mechanical properties of Technora yarns are determined according to standard procedures as described in "Test methods for Twaron yarns (issue SMA 2005)".

Properties of Technora yarns.

Technora T200(M) (dtex)		800	1100	1670	2500
		f267	f667	f1000	f667
Linear density	dtex	805	1110	1686	2520
Breaking strength	N	180	264	408	579
Elongation at break	%	3.9	4.2	4.4	4.1
Force at specified elongation 1%	N	44	58	89	119
Chord modulus	GPa	80	79	76	79
Measured at twist level	tpm	120	120	90	75

Representative force/elongation diagram of Technora types

