



INDUSTRIAL YARNS

PRODUCT INFORMATION





... Swiss-engineered products



... manufactured in Europe



... ISO 9001 certification



... ISO 14001 certification



... ISO IATF 16949 certification



... awarded Corporate Social Responsibility



... bluesign® approved Nylon 6 products



... OEKO-TEX® approved Nylon 6 products



... the International Sustainability and Carbon Certification



... Carbon Disclosure Project

SHAPING THE FUTURE

NEXIS FIBERS is the leading European manufacturer of industrial multifilament polyamide yarns, polymers, twisted and air-jet textured yarns.

OUR MISSION is to help to make our stakeholders (owners, employees, customers and local communities) successful, with our Swiss-engineered products, with our 100+ years of knowledge, and with our commitment to sustainable development.

OUR PLANTS are located in the European Union, and are held to the highest environmental, social, and ethical standards, being proved by our partnership with bluesign® & Oeko-tex® and confirmation of our performance in the field of Corporate Social Responsibility by Ecovadis.

OUR PRODUCTS are used in demanding applications, wherever high quality, consistent properties, and reliable service are required.

YOUR PARTNER FOR SUCCESS

NEXIS FIBERS is committed to supporting our customers with fast, innovative and customized solutions through strong, long-term partnerships. Our best-in-class European production facilities can offer you tailor-made product ranges that fit your needs and are shaped for future opportunities.

TYPICAL APPLICATIONS - YARNS

- Tyres and Mechanical Rubber Goods
- Airbag Fabrics
- Other Woven Fabrics
- Technical Textiles
- Sewing Threads
- Specialty Ropes (Mountaineering, Marine, Industrial Ropes, Lariats)
- Nets (Raschel and Knotted)

TYPICAL APPLICATIONS – POLYMERS

- Monofilaments
- Bristles, Brushes
- Compounding
- Engineering Plastics
- Paper Machine Clothing
- Abrasive Goods





Locations of Nexis Fibers:

Slovakia: Humenné, Production & Headquarters

Latvia: Daugavpils, Production

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Physical characteristics of man-made and natural fibres

Type of fibre	Code	Density	Moisture absorption 65% R.H. 20 °C	Molting temperature	Glass transition temperature (dry)	Chemical resistance + = resistant o = relatively resistant - = unresistant			
		[g/cm ³]	[%]	[°C]	[°C]	Acids	Alkalis	Organic solvents	Hydro lysis
Cotton	CO	1.50 - 1.54	7 - 11	decomp. (400)	-	-	o	+	+
Wool	WO	1.32	15 - 17	decomp.	-	o	-	+	+
Glass fibre	GF	2.4 - 2.6	0	-	850 - 950	o	o	+	+
Carbon	CF	1.9 - 2.18	0	decomp. (2 500)	-	+	+	+	+
Viscose	CV	1.52	11 - 14	decomp. (175 - 205)	-	-	o	+	+
Polyamide 4.6	PA 4.6	1.18	4.5 - 5.0	290	80	o	o	o	o
Polyamide 6	PA 6	1.14	3.5 - 4.5	215 - 220	80	-	+	o	o
Polyamide 6.6	PA 6.6	1.14	3.5 - 4.5	255 - 260	90	-	+	o	o
Polyamide 6.10	PA 6.10	1.07	2	216	50	o	o	+	o
Polyethylene	PE	0.95	0	125 - 135	-3.5	+	+	o	+
Polypropylene	PP	0.92	0	160 - 175	-10	+	+	o	+
Polyphenylene- sulfid	PPS	1.38	0.2	295	90	+	+	+	+
Polyether- ether-ke-ton	PEEK	1.3	0.15	335	143	+	+	+	+
Aramide	AR	1.38 - 1.44	3 - 7	decomp. (370 - 550)	280 - 300	o	o	+	o
Polyester	PET	1.38	0.2 - 0.5	250 - 260	90	+	-	o	-
Polyethylene- naphthalate	PEN	1.36	0.2	268	123	+	o	+	o
Polybutylene- terephthalate	PBT	1.30 - 1.34	0.4	221 - 225	30	o	-	o	-
Polyvinyl- alcohol	PVAL	1.25 - 1.30	3.5 - 5.0	decomp. (240 - 250)	75 - 130	+	+	o	-



Yarn description

Nexis uses International System Units to characterize its products:

Yarn count - Tex:

Basic Unit - Tex:

Mass in grams of 1'000 meters yarn length

Decimal fraction - dtex:

Mass in grams of 10'000 meters yarn length

Other common units:

Denier – den:

Mass in grams of 9'000 meters yarn length

Numerometric – Nm:

Length in meters of 1 gram of yarn

Twist conventions:

Twist:

The twist has two key elements :

- the twist direction
- the number of turns per meter

Twist direction:



Held vertically, the individual filaments of a Z-twisted yarn are twisted from right to left and appear as the diagonal of the letter "Z". The same applies in case of a multiple ply Z-twisted yarn;



Held vertically, the individual filaments of a S-twisted yarn are twisted from left to right and appear as the diagonal of the letter "S". The same applies in case of a multiple ply S-twisted yarn;

Number of turns:

Expressed in turns per meter (T.P.M or T/m)

Coefficient of twist:

Expresses the level of twist on a yarn.

It is defined by the multiplication of the number of turns by the square root of the count (direct system); or by the division of the number of turns by the square root of the count (indirect system):

$$\alpha (\text{dtex}) = n/100 \times \sqrt{\text{dtex}}$$

$$n = T / m$$

Doubling or assembling or plying:

Operation consisting in twisting two or more yarns together. The single ends twist and the resulting doubling twist are quoted.

Winding direction:

The winding direction of a yarn on a bobbin is noted by the letters p and q. The direction in which a yarn is wound up influences the unwinding in function of the direction of its twist.

p-winding:



Facing the front end of a bobbin, the end of the yarn falls on the left side: p-winding on an S-twisted yarn tends to open the yarn; p-winding on a Z-twisted yarn tends to close the yarn.

q-winding:



Facing the front end of a bobbin, the end of the yarn falls on the right side: q-winding on an S-twisted yarn tends to close the yarn; q-winding on a Z-twisted yarn tends to open the yarn.



Conversion factors for SI, metric, English and American units

Breaking Force :	Lbs – N	Pounds-force (lbs) x 4.4480 = Newtons (N)
	N – Lbs	Newtons (N) x 0.2248 = Pounds-Force (lbs)
Yarn count :	Den – dtex	Denier (den) x 1.111 = Decitex (dtex)
	Dtex – den	Decitex (dtex) x 0.900 = Denier (den)
Tenacity :	g/d – cN/Text	Grams-Force / denier (g/d) x 8.830 = centiNewtons / Tex (cN/Text)
	cN/Text	centiNewtons / Tex (cN/Text) x 0.1132 = Grams-Force / denier (g/d)
Temperatures :	F - °C	(Fahrenheit – 32) x 0.555 = Celsius grades (°C)
		(1.8 x Celsius grades + 32 = Fahrenheit (F)
Mass	Kg – lbs	Kilogram (kg) x 2.2046 = Pounds (lbs)
	Lbs – kg	Pounds (lbs) x 0.4536 = Kilogram (kg)

Test methods for industrial multifilament yarns

1. Test room conditions

The standard conditions according to BISFA are:

- temperature : $20 \pm 2^{\circ}\text{C}$
- relative humidity : $65 \pm 2\%$

All tests must be carried out in conditioned state (min. 10 hours).

All mentioned weights are defined according to BISFA rules.

2. Linear density (count or titer)

The linear density in decitex corresponds to the weight in grams of 10'000 m of yarn.

A sample of 25 or 100 meters is wound up on a standard reel under a pretension of 0.5 cN/Text and weighed on an analytical scale. The grams per 10'000 m yarn length are then calculated.

3. Breaking force and elongation at break

The breaking force is the force needed to be applied on a yarn to make it break. It is expressed in Newton (N).

The elongation at break is the increase of the length produced by stretching a yarn to its breaking point. It is expressed as a percentage of its initial length. The test is carried out on a dynamometer with a constant stretching speed, under the following conditions:

- length of yarn between clamps: 500 mm (or 250 mm);
- pretension of yarn between clamps: 0.5 cN/Text
- test speed:
 - 50 mm/min (25 mm/min) if elongation at break $\leq 8\%$
 - 500 mm/min (250 mm/min) if elongation at break is between 8 and 50%
 - 1000 mm/min (500 mm/min) if elongation at break $\geq 50\%$

Yarn with 0-twist is measured with Z60 for technical reasons.

4. Tenacity

Calculated from the breaking force and the linear density and expressed in centiNewton per tex (cN/Text):

Tenacity (cN/Text) = $1000 \times \text{Breaking force (N)} / \text{linear density (dtex)}$



5. Force at specified elongation (FASE)

This is the force necessary to stretch the yarn to a defined extension (usually 2% and 5%).

6. Hot air shrinkage

This is the yarn length reduction caused by hot air treatment, expressed as a percentage of the initial yarn length. We distinguish between free shrinkage and shrinkage under pretension:

a) Free shrinkage:

After the measurement of the yarn length (L1) under 1cN/Text pretension, the sample is submitted free of tension to a defined temperature (usually between 100°C and 200°C; for Nexis Fibers: 180°C) for 15 minutes.

After a cooling time of 1 hour under standard atmospheric conditions, the shrunk yarn is measured again under 1cN/Text pretension to define its shrunk length (L2).

The residual shrinkage is defined as $(L1-L2) \times 100 / L1$

b) Shrinkage under pretension: Nexis internal norm LP-3872-08

The yarn sample is introduced under a pretension of 0.1cN/Text into a heated channel. The induced yarn shrinkage, in percentage of the initially introduced yarn length, is read directly from a scale. The test conditions are:

- 15 minutes at 180°C for Polyamide 6 yarns;
- 10 minutes at 180°C for Polyamide 6.6 yarns < 940 dtex;
- 15 minutes at 180°C for Polyamide 6.6 yarns ≥ 940 dtex.

c) Shrinkage under pretension: BISFA norm

The yarn sample is introduced under a pretension of 0.5 cN/Text into a heated channel. The induced yarn shrinkage, in percentage of the initially introduced yarn length, is read directly from a scale. The test conditions are :

180°C; 2 minutes; pretension 0,5 cN/tex

7. Hot air shrinkage force

This is the shrinkage force in cN resulting from the hot air treatment at 180°C, under a pretension of 0.1cN/Text.

8. Hot water shrinkage (95°C)

This is the yarn length reduction caused by hot water treatment, expressed as a percentage of the initial yarn length, defined according to the following method:

- On a standard reel of 1m circumference, skeins are prepared for a 5'000 dtex equivalent. The length of the skeins are measured under 1 cN/Text pretension in order to define L1;
- The skeins are then boiled free of tension during 30 minutes in hot water (95°C), then dried and conditioned at standard conditions;
- The shrunk skeins are measured again under 1 cN/Text pretension in order to define L2;

The hot water shrinkage is expressed in percent as $(L1-L2) \times 100 / L1$

9. Intermingling

This is the number of points per meter of yarn, where filaments are interlaced. These filament entanglement points along the yarn are necessary to ensure a good unwinding and processability of a non-twisted yarn during any transformation process.



Product Information

Main end-use areas

Industrial Yarns	Main end-use areas							
	Tyre Reinforcement	Mechanical Rubber Goods	Air Bag Fabrics	Weaving	Curing Tapes	Ropes	Nets	Sewing Threads
Polyamide 6.6								
Type								
632				X				X
640		X			X			
642		X		X	X			
650	X	X		X				
653		X						
654	X	X		X				
656		X						
681		X		X	X			X
682		X	X					
683		X		X	X			X
684		X		X	X			X
685				X				
Under Development								
583				X				X

Polyamide 6								
Type								
051				X		X	X	
052				X		X		
370				X		X	X	
371				X		X	X	
372						X		
373						X		
851	X	X				X		
372H				X		X		
051H				X		X		
Under Development								
322						X		
323						X		
323Cc						X		
371Cc						X	X	
373Cc						X	X	
551	X	X		X				
851Cc								
851P						X		
853	X	X				X		

Cc - Chemically recycled, 100% substitution of fossil with sustainability-certified recycled material in the value chain

P - Developed for paper carrier ropes.

Polyamide 6.10								
Type								
123						X		
923						X		
951	X	X		X		X	X	
953						X	X	

All yarn can be twisted or air-jet textured in house.

Polymers for Engineering Plastics, Monofilaments

Standard		Under Development	
PA 6.10	PA 6.12	PA 6.10	PA 6.12
7005	8030	7033	8005
7011	8040	7037	
7031	8050		
7030	8060		
7035	8070		
7040			
7050			



PA 6 Spun-Dyed for Ropes, Nets & Weaving applications



TYPE	Product	Heat resistant	Light protected	Titer		Breaking Strength*		Tenacity*		Elongation*	H. air sh.*	BWS*	IMG	Oil	Tube	Weight		Diam.
				(dtex)	(Den)	(N)	(lbf)	(cN/Tex)	(gpd)							(%)	(g)	
051	940 f 136 - CXXX	-	X	940	846	68,8	15,5	72,5	8,2	22,7	9,5	11,0	21	1,00	Y73/292	9100	20,1	255
051	1160 f 136 - CXXX	-	X	1160	1044	80,0	18,0	69,0	7,8	24,0	9,0	10,5	22	1,00	Y73/292	9100	20,1	255
051	1400 f 204 - CXXX	-	X	1400	1260	101,5	22,8	72,5	8,2	22,5	10,0	11,0	18	1,00	Y73/292	9100	20,1	255
051	1880 f 272 - CXXX	-	X	1880	1692	136,3	30,6	72,5	8,2	22,5	10,0	11,0	18	1,00	Y73/292	9100	20,1	255
051	2100 f 272 - CXXX	-	X	2100	1890	153,3	34,5	72,5	8,2	24,0	9,5	11,0	15	1,00	Y73/292	9100	20,1	255
Under development																		
051	470 f 70 - CXXX	-	X	470	423	34,0	7,6	72,3	8,2	24,0	9,1	8,0	20	1,00	Y75/290.5	8900	19,6	255

* : The characteristics can vary from 1 color to another

Colour	Rub-Fastness - Crockmeter (1-5 grey scale)		Wet-Fastness (1-5 grey scale - shade fading / Stain on polyamide / Stain on Wool)		Light-Fastness (1-8 on blue scale after 300h)
	Dry	Wet	Wet	Wet	
Color codes	STN EN ISO 105-X12		STN 80 0143 eqv. ISO 105-E01		STN EN ISO 105-B02
C - 123 Yellow	5	5	5	5	7
C - 125 Lemon Grass	5	5	5	5 / 5 / 4-5	8
C - 201* Goldenrod	5	5	5	5 / 4 / 4-5	6
C - 203* Orange	5	5	5	5 / 5 / 5	6-7
C - 215* Carrot	5	5	5	5 / 5 / 5	5
C - 308* Desert Flower	5	5	5	5 / 5 / 5	1
C - 316* Red	4-5	3	3	3-4 / 1 / 1	3
C - 320 Raspberry	5	5	5	5 / 5 / 5	8
C - 332* Fire	5	4-5	4-5	4-5 / 4-5 / 4	7
C - 403* Ruddy Pink	5	5	5	5 / 5 / 5	4-5
C - 407* Pink	5	5	5	5 / 5 / 5	5
C - 414* Frozen Lavender	5	5	5	5 / 5 / 4-5	6
C - 432* Violet	5	5	5	5 / 5 / 4-5	6
C - 476* Purple	5	5	5	5 / 4-5 / 4-5	5-6
C - 516 Skylight	5	5	5	5 / 5 / 4-5	7
C - 525 Royal	5	5	5	5 / 5 / 5	7
C - 539 Marine	5	5	5	5 / 5 / 5	8
C - 543 Navy Blue	5	4-5	4-5	4-5 / 5 / 4-5	8
C - 551 Blizzard	5	5	5	5 / 5 / 5	7-8
C - 562* Baby Blue	5	5	5	5 / 5 / 4-5	5
C - 581 Ice Mint	5	5	5	5 / 5 / 4-5	8
C - 585 Caribbean Blue	5	5	5	5 / 4-5 / 4	7-8
C - 591* Turquoise	5	5	5	5 / 4-5 / 4-5	5
C - 607* Mint	5	5	5	5 / 4-5 / 4-5	3
C - 614 Dark Lime	5	5	5	5 / 4-5 / 4-5	8
C - 620* Boa	5	5	5	5 / 4-5 / 5	6-7
C - 623 Golf	5	5	5	5 / 4-5 / 4-5	8
C - 640 Mimicry Green	5	5	5	5 / 5 / 4-5	7-8
C - 655 Crocodile	5	5	5	5 / 4-5 / 4-5	8
C - 662 Grass	5	5	5	5 / 4-5 / 4	8
C - 664* Emerald	5	5	5	5 / 5 / 4-5	6
C - 667 Dark Green	4-5	5	5	5 / 4-5 / 4-5	8
C - 672 Khaki	5	5	5	5 / 5 / 5	8
C - 675 Lizard Green	5	5	5	5 / 4-5 / 5	7-8
C - 678 Moss Green	5	5	5	5 / 5 / 5	7
C - 680 Rifle Green	5	5	5	5 / 5 / 5	7-8
C - 686 Olive Dust	5	5	5	5 / 5 / 5	8
C - 721* Gold	5	5	5	5 / 5 / 5	6
C - 725* Brown Gold	5	5	5	5 / 4-5 / 5	6
C - 730* Desert	5	5	5	5 / 5 / 5	6
C - 748 Military Olive	5	5	5	5 / 5 / 4-5	8
C - 750* Olive Brown	5	5	5	5 / 5 / 5	6
C - 780 Chocolate	5	5	5	5 / 4-5 / 4	8
C - 801* Shark	5	5	5	4-5 / 5 / 4-5	6-7
C - 824 Mirage	5	5	5	5 / 5 / 5	7-8
C - 833 Steel	4	4	4	5 / 4-5 / 4-5	8
C - 850 Mouse Grey	5	5	5	5 / 5 / 5	8
C - 864 Dark Grey	5	5	5	5 / 5 / 5	7-8
C - 875 Basalt	4-5	4-5	4-5	5 / 5 / 4-5	8
C - 905 Black	5	5	5	5 / 5 / 5	8
C - 907 Black	5	5	5	5 / 5 / 5	7-8
C - 981 IRI Black	5	5	5	5 / 5 / 5	7
C - 986 IRI Black II	5	5	5	5 / 5 / 5	7-8

C-XXX* - It is recommended to check fastness properties on the final product. For end-uses that are particularly sensitive to wet fastnesses, or with very strict light fastness requirements, please consult with Nexis-Fibers' Technical Support Team.

Packaging			
Packing ID	Pallet		
	LxWxH	No. of cylinders	Gross weight (kg)
P12-07	1100x800x1700	60	600



P12-07

All colors can be delivered plied and twisted, or Air-jet textured. Please contact the Technical Support for all inquiries.



PA 6 Spun-Dyed Neon Colors for Ropes, Nets & Weaving applications



TYPE	Product	Heat resistant	Light protected	Titer		Breaking Strength°		Tenacity°		Elongation°	H. air sh.	BWS	IMG	Oil	Tube	Weight		Diam.
				(dtex)	(Den)	(N)	(lbf)	(cN/Tex)	(gpd)							(%)	BISFA (%)	
052	940 f 136 - NXXX	-	X	940	846	71,4	16,1	76	8,6	22,0	10,0	11,0	20	1,00	Y73/292	9100	20,1	255
052	1400 f 204 - NXXX	-	X	1400	1260	104,3	23,4	74,5	8,4	22,0	10,0	11,0	20	1,00	Y73/292	9100	20,1	255
Under development																		
052	470 f 70 - NXXX	-	X	470	423	34,0	7,6	72,3	8,2	24,0	9,1	8,0	20	1,00	Y75/290.5	8900	19,6	255
052	1880 f 272 - NXXX	-	X	1880	1692	136,3	30,6	72,5	8,2	22,5	10,0	11,0	18	1,00	Y73/292	9100	20,1	255
052	2100 f 272 - NXXX	-	X	2100	1890	153,3	34,5	72,5	8,2	24,0	9,5	11,0	15	1,00	Y73/292	9100	20,1	255

* The characteristics can vary from 1 color to another

Colour	Rub-Fastness - Crockmeter (1-5 grey scale)	Wet-Fastness (1-5 grey scale - shade fading / Stain on polyamide / Stain on wool)	Light-Fastness (1-8 on blue scale after 300h)
Color codes	Dry	Wet	
N - 115 Neon Yellow	4	4-5	3
N - 204 Neon Apricot	5	5	1
N - 255 Neon Orange	5	5	2-3
N - 325 Neon Pink	5	4-5	2-3
N - 351 Neon Rose	4	3	1
N - 366 Neon Bubble Gum	5	5	3
N - 381 Neon Coral	5	5	2
N - 635 Neon Green	5	4	3-4

It is recommended to check fastness properties of the final product.

For end-uses that are particularly sensitive to wet fastnesses, or with very strict light fastness requirements, please consult with Technical support team at Nexis Fibers.

Packaging			
Packing ID	Pallet		
	LxWxH	No. of cylinders	Gross weight (kg)
P12-07	1100x800x1700	60	600



P12-07

Note: Non-standard packaging is subject to special agreement.

All colors can be delivered plied and twisted, or Air-jet textured. Please contact Technical Support for all inquiries.



PA 6 Hydrophobic yarn



TYPE	Product	Heat resistant	Light protected	Titer		Breaking Strength		Tenacity		Elongation (%)	H. air sh. BISFA (%)	BWS 95°C (%)	IMG (kn./m)	Oil (%)	Tube (mm)	Weight		Diam. (mm)
				(dtex)	(Den)	(N)	(lbf)	(cN/Tex)	(gpd)							(g)	(lbs)	
372H	940 f 136	-	X	940	846	64	14,5	68,5	7,8	21	7,7	10	20	1	Y73/292	10200	22,5	275
372H	1400 f 204	-	X	1400	1260	101	22,7	72,0	8,2	21,5	9,5	10	20	1	Y73/292	10200	22,5	275
051H	940 f 136 C- XXX	-	X	940	846	63	14,3	67,5	7,6	24,5	9,8	10	21	1	Y73/292	9100	20,1	255
052H	940 f 136 C-XXX	-	X	940	846	64	14,4	68,0	7,7	24,5	10	10	21	1	Y73/292	9100	20,1	255

C-XXX - colors from our portfolio Force & Elongation can slightly move from color to color. For more information please contact Technical support team at Nexis Fibers.

Packaging				
Packing ID	Pallet			Yarn Type
	LxWxH	No. of cylinders	Gross weight (kg)	
P12-07	1100x800x1700	60	600	T321, T372, T851, T853
P11-04	1100x800x1700	55	550	T370, T371, T373, 372H HUM

Note: Non-standard packaging is subject to special agreement.



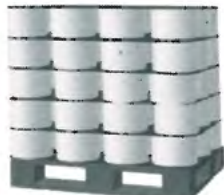
P11-04, P12-07

All types can be delivered plied and twisted up to 110 000 dtex and 940 dtex - 3 000 dtex can be delivered Air-jet textured. Please contact Technical Support for all inquiries.

PA 6 for Ropes and Weaving applications



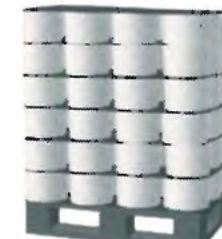
TYPE	Product	Heat resistant	Light protected	Titer		Breaking Strength		Tenacity		Elongation (%)	H. air sh. BISFA (%)	BWS 95°C (%)	IMG (kn./m)	Oil (%)	Tube (mm)	Weight		Diam. (mm)
				(dtex)	(Den)	(N)	(lbf)	(cN/Tex)	(gpd)							(g)	(lbs)	
370	940 f 136	-	X	946	851	74,0	16,6	78	8,9	24,0	6,9	7,9	20	1,00	Y73/292	10200	22,5	275
370	1400 f 204	-	X	1405	1265	113,0	25,4	80	9,1	24,5	7,3	7,7	15	0,90	Y73/292	10200	22,5	275
370	1880 f 272	-	X	1905	1715	153,0	34,4	80	9,1	23,5	6,6	7,9	15	0,90	Y73/292	10200	22,5	275
371	470 f 70	-	X	472	425	36,4	8,2	77	8,7	22,0	9,6	11,8	20	0,90	Y75/290.5	8900	19,6	255
371	700 f 140	-	X	702	632	56,0	12,6	80	9,1	22,0	9,6	11,8	20	0,90	73/312	9900	21,8	272
371	940 f 140	-	X	946	851	77,0	17,3	81	9,2	22,5	9,6	11,8	20	0,90	73/312	9900	21,8	272
371	1160 f 140	-	X	1161	1045	92,5	20,8	80	9,1	22,5	9,6	11,8	20	0,90	73/312	9900	21,8	272
371	1400 f 210	-	X	1410	1269	114,0	25,6	81	9,2	22,5	9,6	11,8	20	0,90	73/312	9900	21,8	272
371	1880 f 280	-	X	1905	1715	152,0	34,2	80	9,1	22,5	9,6	11,8	20	0,90	73/312	9900	21,8	272
371	2100 f 280	-	X	2128	1915	168,0	37,8	79	9,0	22,5	9,6	11,8	20	0,90	73/312	9900	21,8	272
371	2800 f 420	-	X	2820	2538	225,6	50,7	80	9,1	22,5	9,6	11,8	15	0,90	73/312	9900	21,8	272
372	940 f 136	-	X	940	846	78,0	17,5	83	9,4	21,5	9,7	12,0	15	1,00	Y73/292	9100	20,1	254
372	1400 f 204	-	X	1400	1260	117,0	26,3	84	9,5	21,5	10,2	12,0	15	1,00	Y73/292	9100	20,1	254
372	1880 f 272	-	X	1880	1692	157,0	35,3	84	9,5	21,5	10,3	12,0	15	1,00	Y73/292	9100	20,1	254
372	2100 f 272	-	X	2130	1917	175,0	39,3	82	9,3	21,0	10,0	12,0	15	1,00	Y73/292	9100	20,1	254
372H	940 f 136	-	X	940	846	66,7	15,0	71,0	8,0	23	9,5	11	20	1,00	Y73/292	10200	22,5	275
372H	1400 f 204	-	X	1400	1260	100,8	22,7	72,0	8,2	21,5	9,5	11	20	1,00	Y73/292	10200	22,5	275
373	1400 f 210	-	X	2130	1917	168,0	37,8	79	8,9	21,0	13,0	15,0	16	1,00	Y73/292	9100	20,1	254
373	2100 f 280	-	X	2130	1917	168,0	37,8	79	8,9	21,0	13,5	15,5	16	1,00	Y73/292	9100	20,1	254
551	470 f 70	X	X	472	425	35,8	8,0	76	8,6	24,0	8,0	9,0	22	1,00	Y75/290.5	8900	19,6	255
Under development																		
322	1400 f 136	-	X	1400	1260	78,4	17,6	56	6,3	38,0	9,4	13,0	17	1,00	Y73/292	9100	20,1	254
323	1400 f 136	-	X	1400	1260	89,6	20,1	64	7,3	30,0	11,5	14,0	17	1,00	Y73/292	9100	20,1	254
323Cc	1400 f 136	-	X	1400	1260	89,6	20,1	64	7,3	30,0	11,5	13,0	17	1,00	Y73/292	9100	20,1	254
370	2100 f 272	-	X	2128	1915	168,0	37,8	79	8,9	23,0	7,1	7,9	15	1,00	Y73/292	10200	22,5	275
371Cc	940 f 136	-	X	946	851	77,0	17,3	81	9,2	22,0	9,5	10,5	20	1,00	Y73/292	9100	20,1	254
371Cc	1400 f 204	-	X	1410	1269	114,0	25,6	81	9,2	22,5	9,5	10,5	20	1,00	Y73/292	9100	20,1	254
371Cc	1880 f 272	-	X	1905	1715	154,3	34,7	81	9,2	22,5	9,5	10,5	15	1,00	Y73/292	9100	20,1	254
373	1400 f 204	-	X	1400	1260	114,8	25,8	82	9,3	19,0	13,5	15,5	15	1,00	Y73/292	9100	20,1	254
373Cc	1400 f 204	-	X	1400	1260	108,5	24,4	78	8,8	22,0	12,9	14,0	15	1,00	Y73/292	9100	20,1	254
373Cc	2100 f 272	-	X	2130	1917	169,3	38,1	79	9,0	21,0	13,5	14	16	1,00	Y73/292	9100	20,1	254
551	940 f 140	X	X	945	851	71,6	16,1	76	8,6	26,0	13,5	7,5	20	1,00	Y75/290,5	8900	19,6	255



P11-04, P12-07

Packaging				
Packing ID	Pallet			Yarn Type
	LxWxH	No. of cylinders	Gross weight (kg)	
P12-07	1100x800x1700	60	600	T321, T372, T851, T853, T373
P12-05	1100x800x2000	72	720	T321, T372, T851, T853
P11-04	1100x800x1700	55	550	T370, T371, T372H
143	1140x800x2060	66	740	T370, T371, T373 DGS

Note: Non-standard packaging is subject to special agreement.



P12-05, 143

All types can be delivered plied and twisted up to 110 000 dtex.
700 dtex and 940 dtex can be delivered Air-jet textured.
Please contact Technical Support for all inquiries.



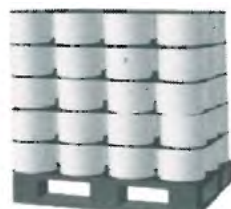
PA 6 for Nets applications



TYPE	Product	Heat resistant	Light protected	Titer		Breaking Strength		Tenacity		Elongation (%)	H. air sh. BISFA (%)	BWS 95°C (%)	IMG (kn./m)	Oil (%)	Tube (mm)	Weight		Diam. (mm)
				(dtex)	(Den)	(N)	lbf	(cN/Tex)	(gpd)							(g)	(lbs)	
370	1400 f 204	-	X	1405	1265	113,0	25,4	80	9,1	24,5	7,3	8,0	15	0,90	Y73/292	10200	22,5	275
370	1880 f 272	-	X	1905	1715	153,0	34,4	80	9,1	23,5	6,6	8,0	15	0,90	Y73/292	10200	22,5	275
371	700 f 140	-	X	702	632	56,0	12,6	80	9,1	22,0	9,6	11,0	20	0,90	73/312	9900	21,8	272
371	940 f 140	-	X	946	851	77,0	17,3	81	9,2	22,5	9,6	11,0	20	0,90	73/312	9900	21,8	272
371	1160 f 140	-	X	1161	1045	92,5	20,8	80	9,1	22,5	9,6	11,0	20	0,90	73/312	9900	21,8	272
371	1400 f 210	-	X	1410	1269	114,0	25,6	81	9,2	22,5	9,6	11,0	20	0,90	73/312	9900	21,8	272
371	1880 f 280	-	X	1905	1715	152,0	34,2	80	9,1	22,5	9,6	11,0	20	0,90	73/312	9900	21,8	272
Under development																		
370	2100 f 272	-	X	2128	1915	168,0	37,8	79	8,9	23,0	7,1	8,0	15	1,00	Y73/292	10200	22,5	275
371Cc	940 f 136	-	X	946	851	77,0	17,3	81	9,2	22,0	9,5	10,5	20	1,00	Y73/292	9100	20,1	254
371Cc	1400 f 204	-	X	1410	1269	114,0	25,6	81	9,2	22,5	9,5	10,5	20	1,00	Y73/292	9100	20,1	254
371Cc	1880 f 272	-	X	1905	1715	154,3	34,7	81	9,2	22,5	9,5	10,5	15	1,00	Y73/292	9100	20,1	254

PA 6 for Industrial Ropes applications

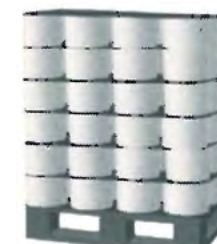
TYPE	Product	Heat resistant	Light protected	Titer		Breaking Strength		Tenacity		Elongation (%)	H. air sh. BISFA (%)	BWS 95°C (%)	IMG (kn./m)	Oil (%)	Tube (mm)	Weight		Diam. (mm)
				(dtex)	(Den)	(N)	lbf	(cN/Tex)	(gpd)							(g)	(lbs)	
851	940 f 136	X	-	940	846	80,0	18,0	85	9,6	21,0	9,5	11,0	17	1,00	Y73/292	9100	20,1	254
851	1400 f 204	X	-	1400	1260	118,0	26,5	84	9,6	21,0	9,9	11,0	17	1,00	Y73/292	9100	20,1	254
851	1880 f 272	X	-	1880	1692	159,0	35,7	85	9,6	22,0	9,2	11,0	18	1,00	Y73/292	9100	20,1	254
851	2100 f 272	X	-	2130	1917	177,0	39,8	83	9,4	22,0	9,5	11,0	16	1,00	Y73/292	9100	20,1	254
Under development																		
851P	1400 f 204	X	-	1430	1287	121	27,2	84	9,6	21,0	11,0	11,0	17	1,00	Y73/292	9100	20,1	255
851Cc	1400 f 204	X	-	1400	1260	118	26,5	84	9,6	21,0	10,0	11,0	17	1,00	Y73/292	9100	20,1	254
853	940 f 136	X	-	940	846	77,0	17,3	82	9,3	24,0	6,5	7,0	17	1,00	Y73/292	9100	20,1	254
853	1400 f 204	X	-	1400	1260	118,0	26,5	84	9,6	22,0	6,1	7,0	17	1,00	Y73/292	9100	20,1	254
853	1880 f 272	X	-	1880	1692	156,0	35,1	83	9,4	24,0	6,0	7,0	16	1,00	Y73/292	9100	20,1	254



P11-04, P12-07

Packaging				
Packing ID	Pallet			Yarn Type
	LxWxH	No. of cylinders	Gross weight (kg)	
P12-07	1100x800x1700	60	600	T321, T372, T851, T853, T373
P12-05	1100x800x2000	72	720	T321, T372, T851, T853
P11-04	1100x800x1700	55	550	T370, T371, T372H
143	1140x800x2060	66	740	T370, T371, T373 DGS

Note: Non-standard packaging is subject to special agreement.



P12-05, 143

All types can be delivered plied and twisted up to 110 000 dtex. 700 dtex and 940 dtex can be delivered Air-jet textured. Please contact Technical Support for all inquiries.



PA 6.6 for Tyres and Mechanical Rubber Goods applications

TYPE	Product	Heat resistant	Light protected	Titer		Breaking Strength		Tenacity		Elongation (%)	H. air sh. BISFA (%)	BWS 95°C (%)	IMG (kn./m)	Oil (%)	Tube (mm)	Weight		Diam. (mm)
				(dtex)	(Den)	(N)	(lbf)	(cN/Tex)	(gpd)							(g)	(lbs)	
650	940 f 140	X	X	952	857	80,7	18,1	85	9,6	19,5	7,4	8,0	16	1,00	Y73/292	10500	23,1	280
650	940 f 140	X	X	952	857	80,7	18,1	85	9,6	19,5	7,4	8,0	16	1,00	Y94/290	10750	23,7	300
650	1400 f 210	X	X	1415	1274	122,0	27,4	86	9,8	20,5	6,2	7,0	15	1,00	Y73/292	10500	23,1	280
650	1400 f 210	X	X	1415	1274	122,0	27,4	86	9,8	20,5	6,2	7,0	15	1,00	Y94/290	10750	23,7	300
650	1880 f 280	X	X	1900	1710	165,0	37,1	87	9,8	21,0	6,4	7,5	13	1,00	Y94/290	10750	23,7	300
650	2100 f 280	X	X	2115	1904	182,0	40,9	86	9,8	21,0	6,6	7,5	9	1,00	Y94/290	10750	23,7	300
650	2800 f 420	X	X	2850	2565	250,0	56,2	88	9,9	21,0	6,4	7,0	11	1,00	Y94/290	9000	19,8	280
653	940 f 140	X	X	952	857	79,0	17,8	83	9,4	21,0	4,8	5,0	16	1,00	Y94/290	10750	23,7	300
653	1400 f 210	X	X	1400	1260	120,0	27,0	86	9,7	22,0	4,7	5,0	11	1,00	Y94/290	10750	23,7	300
653	1880 f 280	X	X	1900	1710	160,0	36,0	84	9,5	22,5	4,6	5,0	13	1,00	Y94/290	10750	23,7	300
653	2100 f 280	X	X	2115	1904	182,0	40,9	86	9,8	21,5	4,7	5,0	10	1,00	Y94/290	10750	23,7	300
654	940 f 140	X	X	952	857	86,0	19,3	90	10,2	20,0	5,8	6,5	16	1,00	Y94/290	10750	23,7	300
654	1400 f 210	X	X	1415	1274	130	29,3	92	10,4	20,0	6,1	6,5	13	1,00	Y94/290	10750	23,7	300
654	2100 f 280	X	X	2115	1904	196,0	44,1	93	10,5	19,5	6,8	6,5	9	1,00	Y94/290	10750	23,7	300
656	940 f 140	X	X	950	855	82,5	18,5	87	9,8	18,0	7,9	7,5	15	1,00	Y73/292	10500	23,1	280
Under Development																		
654	1880 f 280	X	X	1920	1728	175,0	39,3	91	10,3	20,0	6,0	6,5	9	1,00	Y94/290	10750	23,7	300
654	2800 f 420	X	X	2800	2520	257,6	57,9	92	10,4	20,0	6,0	6,5	9	1,00	Y94/290	10750	23,7	280



P11-02, V11-04

Packaging				
Packing ID	Pallet			Yarn Type - support
	LxWxH	No. of cylinders	Gross weight (kg)	
V11-04	1200x800x1750	55	615	T650, T653, T654 - Y94/290
P11-02	1200x800x1750	55	615	T650, T656 - Y73/292
V11-02	1200x800x1050	33	370	T650, T653, T654 - Y94/290

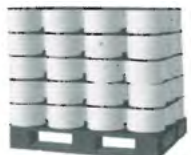
Note: Non-standard packaging is subject to special agreement.



V11-02

PA 6 for Tyres, Mechanical Rubber Goods applications & Industrial Ropes

TYPE	Product	Heat resistant	Light protected	Titer		Breaking Strength		Tenacity		Elongation (%)	H. air sh. BISFA (%)	BWS 95°C (%)	IMG (kn./m)	Oil (%)	Tube (mm)	Weight		Diam. (mm)
				(dtex)	(Den)	(N)	(lbf)	(cN/Tex)	(gpd)							(g)	(lbs)	
851	940 f 136	X	-	940	846	80,0	18,0	85	9,6	21,0	9,5	11,0	17	1,00	Y73/292	9100	20,1	254
851	1400 f 204	X	-	1400	1260	118,0	26,5	84	9,6	21,0	9,9	11,0	17	1,00	Y73/292	9100	20,1	254
851	1880 f 272	X	-	1880	1692	159,0	35,7	85	9,6	22,0	9,2	11,0	18	1,00	Y73/292	9100	20,1	254
551	470 f 70	X	X	2130	1917	177,0	39,8	83	9,4	22,0	9,5	11,0	16	1,00	Y73/292	9100	20,1	254
Under development																		
851P	1400 f 204	X	-	1430	1287	121	27,2	84	9,6	21,0	11,0	7,0	17	1,00	Y73/292	9100	20,1	255
851Cc	1400 f 204	X	-	1400	1260	118	26,5	84	9,6	21,0	9,9	11,0	17	1,00	Y73/292	9100	20,1	254
853	940 f 136	X	-	940	846	77,0	17,3	82	9,3	24,0	6,5	7,0	17	1,00	Y73/292	9100	20,1	254
853	1400 f 204	X	-	1400	1260	118,0	26,5	84	9,6	22,0	6,1	7,0	17	1,00	Y73/292	9100	20,1	254
853	1880 f 272	X	-	1880	1692	156,0	35,1	83	9,4	24,0	6,0	7,0	16	1,00	Y73/292	9100	20,1	254
551	940 f 140	X	X	945	851	71,6	16,1	76	8,6	26,0	13,5	7,5	20	1,00	Y75/290,5	8900	19,6	255



P12-07

Packaging				
Packing ID	Pallet			Yarn Type - support
	LxWxH	No. of cylinders	Gross weight (kg)	
P12-07	1100x800x1700	60	600	T851; T853, T851Cc, T851P
P12-05	1100x800x2000	72	720	T851, T853 - Y73/292

Note: Non-standard packaging is subject to special agreement.



P12-05

All types can be delivered plied and twisted up to 110 000 dtex. 940 dtex can be delivered Air-jet textured. Please contact Technical Support Team with special inquiries.



PA 6.10																		
TYPE	Product	Heat resistant	Light protected	Titer		Breaking Strength		Tenacity		Elongation	H. air sh.	BWS	IMG	Oil	Tube	Weight		Diam.
				(dtex)	(Den)	(N)	(lbf)	(cN/Tex)	(gpd)							(%)	BISFA (%)	
Under development																		
923	1400 f 136	X	-	1400	1260	86	19,2	61,1	6,9	21,0	12	7	15	1	Y73/292	9100	20,1	255
951	940 f 136	X	-	940	846	67	15,0	71,0	8,0	18,5	11,5	6,5	15	1	Y73/292	9100	20,1	255
951	1400 f 204	X	-	1410	1269	95	21,2	67,0	7,6	18,5	12	6,5	17	1	Y73/292	9100	20,1	255
951	1880 f 272	X	-	1880	1692	132	29,6	70,0	7,9	21,5	12	6,5	16	1	Y73/292	9100	20,1	255
953	940 f 136	X	-	940	846	65	14,6	69,0	7,8	18,5	9	5	15	1	Y73/292	9100	20,1	255
953	1880 f 272	X	-	1880	1692	130	29,2	69,1	7,8	20,5	9	5	16	1	Y73/292	9100	20,1	255



P12-07

Packaging				
Packing ID	Pallet			Yarn Type
	LxWxH	No. of cylinders	Gross weight (kg)	
P12-07	1100x800x1700	60	600	T923, T951, T953
P12-05	1100x800x2000	72	720	T923, T951, T953

Note: Non-standard packaging is subject to special agreement.



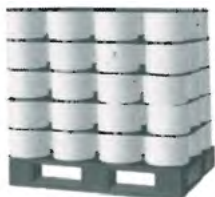
P12-05

All types can be delivered plied and twisted up to 110 000 dtex. 700 dtex and 940 dtex can be delivered Air-jet textured. Please contact the Technical Support for all inquiries.

PA 6.10 Spun-Dyed																	bluesign [®] approved	
TYPE	Product	Heat resistant	Light protected	Titer		Breaking Strength°		Tenacity°		Elongation°	H. air sh.°	BWS°	IMG	Oil	Tube	Weight		Diam.
				(dtex)	(Den)	(N)	(lbf)	(cN/Tex)	(gpd)							(%)	BISFA (%)	
123	940 f 136 - CXXX	-	X	940	846	51,0	11,5	54,0	6,1	22,5	13,0	-	21	1,00	Y73/292	9100	20,1	255

° : The characteristics can vary from 1 color to another

C-XXX° - It is recommended to check the fastness properties on the final product. For end-uses that are particularly sensitive to wet fastnesses, or with very high light fastness requirements, please consult with Nexis-Fibers' Technical Support.



P12-07

Packaging			
Packing ID	Pallet		
	LxWxH	No. of cylinders	Gross weight (kg)
P12-07	1100x800x1700	60	600

Note: Non-standard packaging is subject to special agreement.

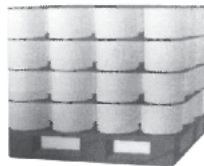
All colors can be delivered plied and twisted, or Air-jet textured. Please contact the Technical Support for all inquiries. Please contact Technical Support Team with special inquiries.



PA 6.6 for Broad and Narrow Weaving, Sewing Threads applications

TYP	Product	Heat resistant	Light protected	Titer		Breaking Strength		Tenacity		Elongation	FASE 5%	H. air sh.	BWS	IMG	Oil	Tube	Weight		Diam.
				(dtex)	(Den)	(N)	(lbf)	(cN/Tex)	(gpd)								(%)	(N)	
640	117 f 17	X	X	120	108	7,5	1,7	63	7,1	18,7	2,1	8,7	6,6	20	0,70	Y94/290	4300	9,5	220
642	110 f 17	X	X	110	99	7,7	1,7	70	7,9	19,0	1,4	4,1	3	27	0,60	Y94/290	4500	9,9	212
642	110 f 34	X	X	110	99	7,2	1,6	65	7,4	22,0	1,5	4,6	3	26	0,55	Y94/290	4300	9,5	225
681	235 f 34	X	X	235	212	17,2	3,9	73	8,3	23,5	2,5	6,5	6,6	24	0,70	Y94/225	4680	10,3	228
683	235 f 34	X	X	235	212	17,5	3,9	74	8,4	25,0	2,4	4,2	3,5	24	0,70	Y94/225	4680	10,3	232
683	470 f 68	X	X	470	423	34,2	7,7	73	8,2	23,7	4,8	4,1	3,8	24	0,75	Y75/290	9160	20,2	265
685	235 f 34	X	X	235	212	17,0	3,8	72	8,2	23,5	2,4	7,5	7,3	25	0,70	Y94/225	9280	20,5	305
685	470 f 68	X	X	475	428	34,5	7,8	73	8,2	23,0	5,7	8,0	7,2	24	0,70	Y75/290	9160	20,2	265
684	470 f 68	X	X	470	423	34,8	7,8	74	8,4	24,9	5,2	4,1	4,1	15	0,75	Y75/290	9160	20,2	265
Under development																			
583	470 f 68 C-XXX	X	X	470	423	29,5	6,6	63	7,1	20,5	5,0	4,1	3	24	0,75	Y94/225	4580	10,1	225
683	312 f 68	X	X	315	284	24,9	5,6	79	9,0	24,5	4,0	4,4	4,0	25	0,75	Y94/225	9160	20,2	300

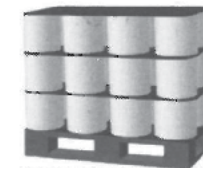
C-XXX - colors from our product portfolio, for more info contact Technical Support.



S15-01, S08-01

Packaging					
Packing ID	LxWxH	Pallet			Yarn Type
		No. of boxes	No. of cylinders	Gross weight (kg)	
S11-02	1200x800x1050	-	33	360	T683, T684, T685
S15-01	1200x800x1050	-	60	300	T681, T683, T685, T583
S08-01	1200x800x1050	-	32	300	T681, T683, T684, T685
PT6-01	1200x800x1050	-	48	240	T681, T683, T684, T685

Note: Non-standard packaging is subject to special agreement.



PT6-01, S11-02

All types and counts can be delivered plied and twisted, 470 dtex also Air-jet textured.

PA 6.6 for Air Bag applications

TYPE	Product	Heat resistant	Light protected	Titer		Breaking Strength		Tenacity		Elongation (%)	FASE 5% (N)	H. air sh. BISFA (%)	BWS 95°C (%)	IMG (kn./m)	Oil (%)	Tube (mm)	Weight		Diam. (mm)
				(dtex)	(Den)	(N)	(lbf)	(cN/Text)	(gpd)								(g)	(lbs)	
682	350 f 136	X	X	355	320	29,0	6,5	82	9,3	23,0	4,9	5,7	5	30	1,00	Y75/290	10000	22,0	280
682	470 f 136	X	X	477	429	40,0	9,0	85	9,6	23,0	6,1	5,0	5	30	0,90	Y75/290	10000	22,0	270
682	470 f 136	X	X	477	429	40,0	9,0	85	9,6	23,0	6,1	5,0	5	30	0,90	Y94/290	10000	22,0	290
682	700 f 105	X	X	712	641	59,6	13,4	85	9,6	23,0	8,8	5,0	5	15	0,90	Y75/290	10000	22,0	270
682	700 f 105	X	X	712	641	59,8	13,4	84	9,5	23,0	8,8	5,0	5	15	0,75	Y94/290	10000	22,0	290
Under development																			
682	235 f 68	X	X	242	218	20,9	4,7	85	10	23,0	3,5	5,0	5	22	1,00	Y75/290	10000	22,0	270
682	470 f 272	X	X	476	428	35	7,9	74	8	24,0	5,5	4,5	5	25	1,00	Y75/290	10000	22,0	270



S 11-02, V11-03

Packaging				
Packing ID	Pallet			Yarn Type - support
	LxWxH	No. of cylinders	Gross weight (kg)	
S11-02	1200x800x1050	33	360	T682 - Y74/290
V11-03	1200x800x1030	33	335	T682 - Y94/290

Note: Non-standard packaging is subject to special agreement.

Nexis Fibers Twisting Capabilities

KNOTTED NETS - STANDARD TWINES								
210 / n		denier / single ply	denier / 3 ply	Twist		Examples of constructions (twist values on request)	Nominal dtex	
single	total			1st	2nd		1st twist	2nd twist
6	18	1260	3780	425	230	1400x15425 x3Z230	1400	4200
8	24	1680	5040	400	210	1880x15400 x3Z210	1880	5640
10	30	2100	6300	380	195	(1400+940)x15380 x3Z195	2340	7020
12	36	2520	7560	360	185	1400x25360 x3Z185	2800	8400
14	42	2940	8820	350	180	(1880+1400)x15350 x3Z180	3280	9840
16	48	3360	10080	300	160	1880x25300 x3Z160	3760	11280
18	54	3780	11340	275	145	1400x35275 x3Z145	4200	12600
20	60	4200	12600	250	130	(1880+1400x2)x15250 x3Z130	4680	14040
22	66	4620	13860	350	167	(1880x2+1400) S350 x3Z167	5160	15480
24	72	5040	15120	240	125	1880x35240 x3Z125	5640	16920
30	90	6300	18900	225	120	1400x55225 x3Z120	7000	21000
32	96	6720	20160	220	115	1880x45220 x3Z115	7520	22560
36	108	7560	22680	200	105	1400x65200 x3Z105	8400	25200
40	120	8400	25200	200	100	1880x5 S190 x3Z100	9400	28200
48	144	10080	30240	180	95	1400x8 S180 x3Z95	11200	33600
64	192	13440	40320	170	85	1880x8 S170 x3Z85	15040	45120
84	252	17640	52920	140	70	1880x10 S140 x3Z70	18800	56400
96	288	20160	60480	130	65	1880x12 S130 x3Z65	22560	67680
128	384	26880	80640	100	55	1880x16 S100 x3Z55	30080	90240

SPECIALTY ROPES, MARINE ROPES TWINES		
Example of Constructions (twist values on request)	Final dtex	Marine finish available
940 x1	940	
1400 x2	2 800	
1400 x6	8 400	
1400 x2 x3	8 400	
1400 x2 x4	11 200	
1400 x2 x5	14 000	
1400 x6 x3	25 200	
1400 x7 x3	29 400	
1880 x2	3 760	
1880 x5	9 400	
1880 x9	16 920	
1880 x5 x3	28 200	
1880 x18	33 840	X
1400 x30	42 000	X
1880 x24	45 120	X
1880 x9 x3	50 760	
1880 x27	50 760	X
1880 x30	56 400	X

HIGH TENACITY THREADS	
Example of Constructions (twist values on request)	Final dtex
110x1 Z75	110
110x1 Z300 FIX	110
110x1 Z400 x2 S400	220
235x1 Z140	235
235x1 S200 x2 Z200	470
235x1 S500 x2 Z380	470
470x1 Z150	470
470x1 Z280 FIX	470
700x1 Z100	700
PES 74f24x1 S830 x2 Z700	148
PES 150f48 x1 S630 x3 Z440	450
PES 275f48 x1 S570 x3 Z380	825
PES 455f96 x1 S470 x3 Z325	1 365
PES 1100x4 S80	4 400

OTHER TWISTED YARNS	
Examples of Constructions (twist values on request)	Final dtex
PES 78f24 SD Z800 FIX	78
PES 78f24 SD Z1050 FIX	78
PES 83f36 TXT SD S120	83
PES 83f36 BR TXT S450 FIX	83
PES 83f36 TXT BLK S600 FIX	83
PES 150 f48 TXT BR S400 FIX	150
PES 167f36 TXT SDS400 FIX	167
PES 167f48 TXT BLK S400 FIX	167
PES 330f72 SD TXTS120 FIX	330
PES 330f96 BR Z150 FIX	330
PES 330f72 SD TXT S120	330
PES 183f34x2 SD TXT S120	366

Packaging options						
Knotted Nets			Specialty Ropes, Marine Ropes, High Tenacity Threads			Other twisted yarns
OD mm	ID mm	Weight Kg	OD mm	ID mm	Weight Kg	
140	44	2,2	180	56	2,1	On request
180	56	3,7	200	56	3,2	
214	44	5,3	250	56	4,6	
270	73	10	270	73	9,2	
275	73	12,5	275	73	12,5	

- Multiple sewing threads and twine constructions capabilities: x2, x3, x4, x5
- Heatsetting capabilities: in autoclave (vapor); in hot chambers (dry air)
- Type of materials and count range: continuous filament yarn (Polyester, Nylon, Acetate). From 70 den to 100 000 den = 78 dtex to 110 000 dtex
- Twist level range: from 20 to 3 000 t/m = from 0.5 to 75 tpi
- Plying capabilities: up to 32 ply
- Overoiling capabilities: Marine Finish capabilities
- Air-jet texturing capabilities for Polyester, Nylon: from 210 den to 2700 den = 235 dtex to 3 000 dtex

Note: Non-standard package weight on agreement.



Nexis Fibers Air-texturing Capabilities

Polymer	TYPE	Product	Spun-Dyed	Heat resistant	Light protected	Titer		Breaking Strength		Tenacity		Elongation	H. air sh.	BWS	Tube	Weight		Diam.
						(dtex)	(Den)	(N)	(lbf)	(cN/Tex)	(gpd)					(%)	(%)	
PA66	6827	500 f 136	-	X	X	490	441	23,0	5,2	47	5,3	16,0	7,0	4,0	69/290	5000	11,0	300
PA66	6827	730 f 272	-	X	X	730	657	40,0	9,0	55	6,2	16,0	7,5	5,0	69/290	3300	7,3	260
PA66	6827	1100 f 408	-	X	X	1100	990	59,0	13,3	54	6,1	16,0	7,3	5,0	69/290	3300	7,3	280
PA66	6507	1500 f 210	-	X	X	1480	1332	66,6	15,0	45	5,1	14,0	8,0	5,0	69/290	3500	7,7	235
PA6	3727	1010 f 136	-	-	X	1005	905	50,3	11,3	50	5,7	19,0	13,0	9,0	69/290	4600	10,1	300
PA6	0517 C-XXX	1030 f 136	X	-	X	1010	909	56,0	12,6	55	6,3	24,0	12,0	9	69/290	4600	10,1	300
PA6	0517 C-XXX	1500 f 204	X	-	X	1470	1323	85,0	19,1	58	6,6	23,0	12,0	9	69/290	4600	10,1	300
PA6	0517 C-XXX	3060 f 408	X	-	X	3000	2700	180,0	40,5	60	6,8	24,0	12,0	9	69/290	4600	10,1	300
Under development																		
PA66	5837 C-XXX	550 f 68 (136)	X	X	X	550	495	25,0	5,6	43 (47)	4,8 (5,3)	20,0	6,0	4	69/290	4600	10,1	300
PA66	5837H C-XXX	550 f 68	X	X	X	550	495	23,3	5,2	47,0	5,3	30,0	6,5	4	69/290	5000	11,0	300
PA6	3217	3000 f 272	-	-	X	2970	2673	96,2	21,6	36,0	4,1	30,0	10,5	13	69/290	4600	10,1	300
PA6	3217H	3000 f 408	-	-	X	2970	2673	98,9	22,2	37,0	4,2	22,0	11,5	12	69/290	4600	10,1	300

All products can be fixed in steam to lower shrinkage and higher elongation.

C-XXX - colors from our product portfolio - for more info please contact Technical Support.

PA 6.10 & PA 6.12 Polymers

PRODUCT	POLYAMIDE 6.10		POLYAMIDE 6.12	
	7030	7050	8030	8070
Type				
Designation	SH 00 D134	SH 00 PC223	DH 00 D134	DH 00 PC220

General properties					Unit	Method
Density	1,07	1,07	1,06	1,06	g/cm ³	ISO 1183-1
Viscosity number, formic acid 90 %	138	223	138	220	ml/g	ISO 307
Water absorption, saturation in water 23°C	< 2	< 2	< 2	< 2	%	ISO 62
Moisture absorption, sat. in 23°C / 50% r.h. atm.	< 1	< 1	< 1	< 1	%	ISO 62

Thermal properties					Unit	Method
Melting temperature, DSC	223	223	215	215	°C	ISO 11357-1/-3
Solidification point	192	192	186	186	°C	ISO 11357-1/-3

Mechanical properties	DAM		Cond.		DAM		Cond.		DAM - Dry As Moulded / Cond. - Conditioned		
	DAM	Cond.	DAM	Cond.	DAM	Cond.	DAM	Cond.			
Tensile modulus E_t	2 100	1 600	2 400	1 650	2 470	1 660	2 000	1 600	MPa	ISO 527-2/1A/1	
Yield stress σ_y	62	48	65	50	60	50	60	50	MPa	ISO 527-2/1A/50	
Yield strain ϵ_y	4,5	21	4	20	4	18	4	19	%	ISO 527-2/1A/50	
Nominal strain at break ϵ_{tb}	> 50	> 50	> 50	> 50	> 50	> 50	> 50	> 50	%	ISO 527-2/1A/50	
Flexural modulus E_f	2 000	1 460	2 200	1 550	2 100	1 600	2 100	1 600	MPa	ISO 178	
Flexural strength σ_{fM}	83	58	87	60	83	62	81	61	MPa	ISO 178	
Flexural strength σ_{fC}	65	43	70	45	68	48	67	48	MPa	ISO 178	
Charpy impact strength a_{CU}	23 °C	No break	No break	No break	No break	No break	No break	No break	No break	kJ/m ²	ISO 179-1/1eU
	-30 °C	No break	No break	No break	No break	No break	No break	No break	No break	kJ/m ²	
Charpy notched impact strength a_{cA}	23 °C	5	8	5	10	5	8	5	8	kJ/m ²	ISO 179-1/1eA
	-30 °C	4	5	6	7	4,5	5	5	6	kJ/m ²	

TYPE	Viscosity number	Moisture Content		Chip Weight	Chip Dimension			Melting Point	Solidification Point
	(ml/g)	(%)		(mg)	(mm)			(°C)	(°C)
PA 6.10	* Viscosity ISO-Std.307, VI (Formic Acid 90 %)								
7005	113	< 0,30	< 0,07	13	2,7	2,8	3,4	223	192
7011	125								
7031	133,5								
7030	138								
7033	147								
7035	154								
7037	170								
7040	189								
7050	223								
7060	248								
PA 6.12	* Viscosity ISO-Std.307, VI (Sulfuric Acid 96 %)								
8030	138	< 0,07	13	2,7	2,8	3,4	215	186	
8040	160								
8050	180								
8060	200								
8070	220								
Under Development									
8005	113	< 0,07	13	2,7	2,8	3,4	215	186	

Packaging				
Packaging type	Sacks / Big Bags / Octabins		Pallet	
	Dimensions (mm x mm x mm)	Net weight (kg)	L x W (mm x mm)	Number/ Pallet
Sacks	810x390x120	25	1200x800	28
Big Bags	950x950x1700	1000	1100x1100	1
Octabins	1105x1105x945	700	1140x1140	1

Note: Non-standard packaging is subject to special agreement.





Locations of Nexis Fibers:

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Latvia: Daugavpils, Production
USA: Atlanta, GA, Sales office

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<http://www.nexisfibers.com/safety-data-sheets>

