

Industrial yarns

Product information



www.nexisfibers.com

Nexis Fibers is a major global player in industrial yarns

Nexis Fibers is developing tomorrow's products, based on a century of know-how in yarn and polymer manufacturing and processing, in order to serve high demanding applications in automotive, aquaculture, safety, building, and leisure sectors.

✓ Humenné, Slovakia (Headquarters)

✓ Daugavpils, Latvia

Spinning, Twisting,
Air Texturing

Specialty Polymer
production

Spun Dyed

30 KT | 4,3 KT

PA6 & PA6.6 & PA6.10 yarns

PA6.10 & PA6.12 polymers

 **NEXIS** Member of
ARKERO
GROUP

www.nexisfibers.com



**Manufactured
in Europe**



**IATF 16949
certification**



**ISO 9001
certification**



**ISO 14001
certification**



**Awarded
Corporate Social
Responsibility**



**Bluesign® approved
products**



**OEKO-TEX®
approved Nylon 6
products**



**The International
Sustainability
and Carbon
Certification**



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.

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
Latvia
USA

Humenné, Production & Headquarters
Daugavpils, Production
Atlanta, GA, Business office



Sales contact

barbara.danak@nexis-fibers.com
laura.salatova@nexis-fibers.com



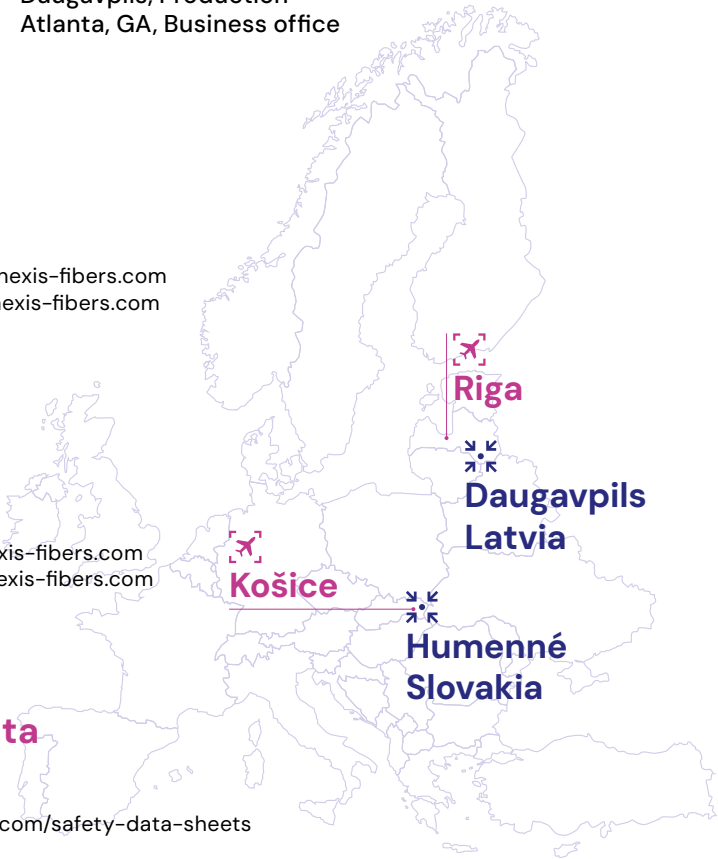
Technical contact

tomas.krsko@nexis-fibers.com
juraj.dluzanin@nexis-fibers.com



Safety Data Sheets

www.nexisfibers.com/safety-data-sheets



www.nexisfibers.com

TECHNICAL INFORMATION

Physical characteristics of man-made fibers and natural fibers	8
Yarn description	9
Conversion factors for SI, metric, English and American units	10
Test methods for technical multifilament yarns	11
Product Information	13
• PA6 Spun-Dyed for Ropes, Nets and Weaving applications	15
• PA6 Spun-Dyed Neon Colors for Ropes, Nets and Weaving applications	17
• PA6 Spun-Dyed	19
• Infrared Invisible Spun-Dyed	21
• PA6 Hydrophobic yarn	23
• PA6 For Ropes and Weaving applications	25
• PA6 For Nets applications, Industrial Ropes applications	27
• PA6, PA6.6 For Tyres, Mechanical Rubber Goods applications & Industrial Ropes	29
• PA6.10 White & Spun dyed	31
• PA66 For Broad and Narrow Weaving, Sewing Thread applications	33
• PA66 For Air Bag applications	35
• Nexis Fibers Twisting Capabilities	37
• Nexis Fibers Texturing Capabilities	39
• PA6.10 & PA6.12 Polymers	41



Physical characteristics of man-made and natural fibers

Type of fibre	Code	Density (g/cm ³)	Mois- ture ab- sorption 65% RH 20°C	Melting tem- pera- ture (°C)	Glass tran- sition tem- pera- ture dry (°C)	Chemical resistance + = resistant o = relatively resistant - = unresistant			
						Acids	Alka- lis	Or- ganic sol- vents	Hy- dro- 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. (2500)	-	+	+	+	+
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 sulfide	PPS	1.38	0.2	295	90	+	+	+	+
Polyether - ether -keton	PEEK	1.3	0.15	335	143	+	+	+	+
Aramid	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	-
Polyeth- ylene-naph- thalate	PEN	1.36	0.2	268	123	+	o	+	o
Polybuty- lene-tere- phthalate	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:

- a) the twist direction
- b) 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/rn)

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):

$$a(dtex) = n/100 \times \sqrt{dtex} \quad n = T / m$$

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 N-Lbs	Pounds-force (lbs) x 4.4480 = Newtons (N) Newtons (N) x 0.2248 = Pounds-Force (lbs)
Yarn count:	Den-dtex Dtex-den	Denier (den) x 1.111 = Decitex (dtex) Decitex (dtex) x 0.900 = Denier (den)
Tenacity:	g/d-cN/Tex cN/Tex	Grams-Force / denier (g/d) x 8.830 = centiNewtons / Tex (cN/Tex) centiNewtons / Tex (cN/Tex) 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 Lbs-Kg	Kilogram (kg) x 2.2046 = Pounds (lbs) 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±2°C
- relative humidity: 65±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/Tex 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/Tex
 - test speed:
 - 50 mm/min (25 mm/min) if elongation at break ≤ 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 ≥ 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/Tex): Tenacity (cN/Tex) = 1000 x Breaking force (N) / linear density (dtex)

5. FORCE AT SPECIFIED ELONGATION (FASE)

- This is the force necessary to stretch the yarn to a define 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/Tex 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 1 cN/Tex 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/T ex 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/Tex 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/Tex.

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:

- Skeins are prepared on a standard reel with a circumference of 1 m to obtain a 5,000 dtex equivalent. The length of the skeins are measured under 1 cN/Tex 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/Tex 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	Tyre reinforcement	Mechanical rubber goods	Airbag fabrics	Weaving	Curing tapes	Ropes	Nets	Sewing threads
Type Polyamide 6.6								
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								
550				X	X			X
550I				X	X			X
583				X	X			X
687				X				X

For all types of PA6 and PA66 yarns, we can offer chemically recycled yarns, 100% substitution of fossil with sustainability-certified recycled material in the value chain marked under type XXX Cc

Standard	
PA6.10	PA6.12
7005	8030
7011	8040
7031	8050
7030	8060
7033	8070
7035	8005
7037	8011
7040	
7050	
7060	

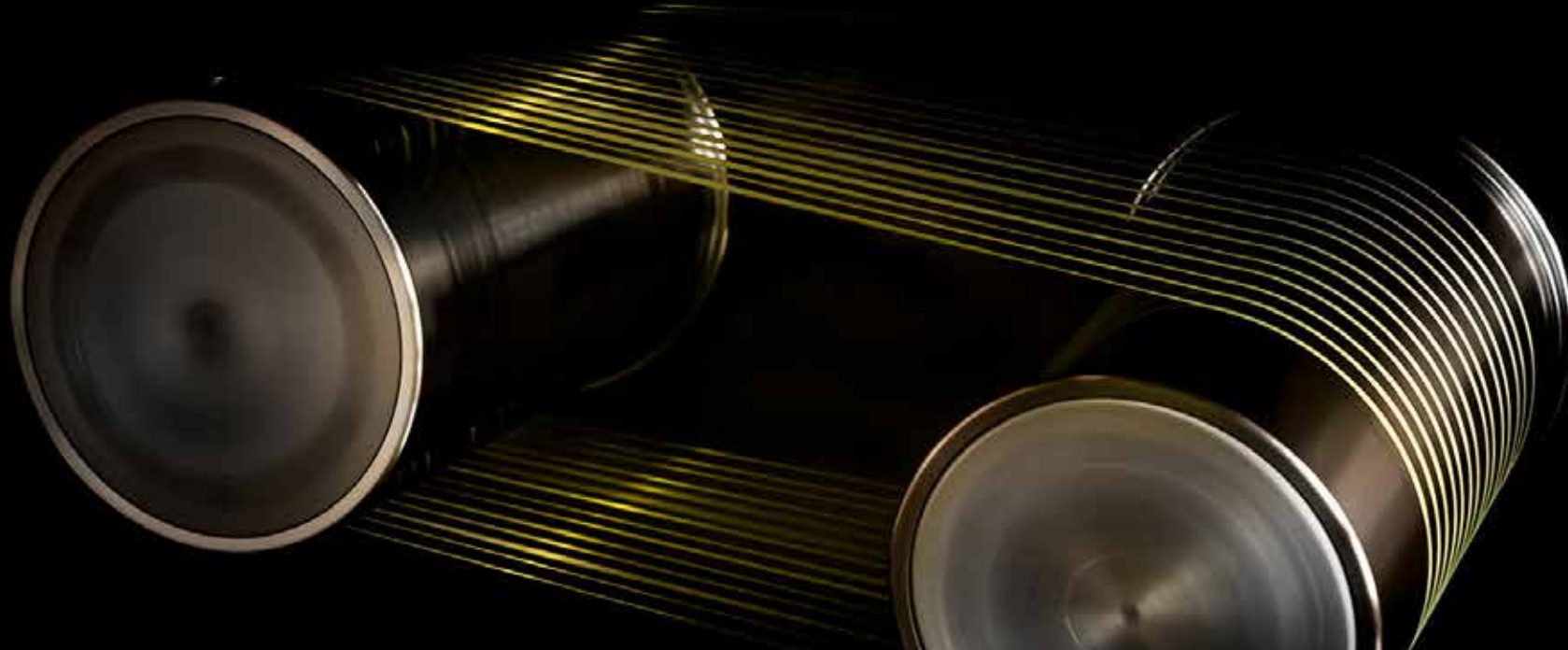
Industrial Yarns	Tyre reinforcement	Mechanical rubber goods	Airbag fabrics	Weaving	Curing tapes	Ropes	Nets	Sewing threads
Type Polyamide 6								
51				X		X	X	
051H				X		X		
52				X		X	X	
052H				X		X		
323						X		
370				X		X	X	
371				X		X	X	
372						X		
373						X		
851	X	X				X		
851P						X		
372H				X		X		
UNDER DEVELOPMENT								
025								
051I				X		X	X	
322						X		
322H						X		
325						X		
551	X	X		X				
853	X	X				X		

For all types of PA6 and PA66 yarns, we can offer chemically recycled yarns, 100% substitution of fossil with sustainability-certified recycled material in the value chain marked under type XXX Cc

Industrial Yarns	Tyre reinforcement	Mechanical rubber goods	Airbag fabrics	Weaving	Curing tapes	Ropes	Nets	Sewing threads
Type Polyamide 6.10								
123						X		
923						X		
951	X	X		X		X	X	
953						X	X	

All yarns can be twisted or air-jet textured in house





Product Information

Main end-use areas

PA6 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)							(%)	BISFA (%)	
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																		
025	940 f 136 – CXXX	-	X	940	846	55,0	12,4	58,5	6,6	35,0	11,0	11,5	21	1,00	Y73/292	9100	20,1	255
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 one color to another.

Color	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	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	STN EN ISO 105-X12	STN 80 0143	STN EN ISO 105-B02
C – 123°	Yellow	5	5	5 / 5 / 5	6-7	C – 623	Golf	5	5	5 / 4-5 / 4-5	8
C – 124	Yellow Shadow **	5	5	5 / 5 / 5	8	C – 662	Grass	5	5	5 / 4-5 / 4	8
C – 125	Lemon Grass	5	5	5 / 5 / 4-5	8	C – 664°	Emerald	5	5	5 / 5 / 4-5	6
C – 201°	Goldenrod	5	5	5 / 4 / 4-5	6	C – 667°	Dark Green	5	5	4 / 2-3 / 2-3	5-6
C – 203°	Orange	5	5	5 / 5 / 5	6-7	C – 672	Khaki	5	5	5 / 5 / 5	8
C – 215°	Carrot	5	5	5 / 5 / 5	5	C – 680	Rifle Green	5	5	5 / 5 / 5	7-8
C – 308°	Desert Flower **	5	5	4-5 / 3-4 / 2	1	C – 681	Martini	5	5	5 / 5 / 5	7-8
C – 316°	Red **	4-5	3	3-4 / 1 / 1	2-3	C – 682	Pino	5	5	5 / 5 / 5	7-8
C – 320	Raspberry	5	5	5 / 5 / 5	8	C – 686	Olive Dust	5	5	5 / 5 / 5	8
C – 332°	Fire	5	4-5	4-5 / 4-5 / 4	7	C – 721°	Gold	5	5	5 / 5 / 5	6
C – 403°	Ruddy Pink **	5	5	5 / 5 / 5	4-5	C – 725°	Brown Gold **	5	5	5 / 4-5 / 5	6
C – 407°	Pink	5	5	5 / 5 / 5	5	C – 730°	Desert	5	5	5 / 5 / 5	6
C – 414°	Frozen Lavender **	5	5	5 / 5 / 5	4-5	C – 750°	Olive Brown	5	5	5 / 5 / 5	5-6
C – 432	Violet	5	5	5 / 5 / 4-5	8	C – 780	Chocolate	5	5	5 / 4-5 / 4	8
C – 476	Purple **	5	4	5 / 4-5 / 4-5	7	C – 801°	Shark	5	5	4-5 / 5 / 4-5	6-7
C – 516°	Skylight	5	5	5 / 5 / 4-5	6-7	C – 824	Mirage **	5	5	5 / 5 / 5	7-8
C – 525	Royal	5	5	5 / 5 / 5	7	C – 833	Steel	4	4	5 / 4-5 / 4-5	8
C – 539	Marine	5	5	5 / 5 / 5	8	C – 850	Mouse Grey	5	5	5 / 5 / 5	8
C – 543°	Navy Blue	5	4-5	4-5 / 5 / 4-5	8	C – 864	Dark Grey **	5	5	5 / 5 / 5	7-8
C – 551	Blizzard **	5	5	5 / 5 / 5	7-8	C – 875	Basalt	4-5	4-5	5 / 5 / 4-5	8
C – 562°	Baby Blue **	5	5	5 / 5 / 4-5	5	C – 905	Black	5	5	5 / 5 / 5	8
C – 581	Ice Mint	5	5	5 / 5 / 4-5	8	C – 907	Black	4-5	4-5	4-5 / 4 / 4	7-8
C – 585	Caribbean Blue	5	5	5 / 4-5 / 4	7-8	Under development					
C – 591°	Turquoise **	5	5	5 / 5 / 5	5-6	C – 335	Carmine Red**	5	5	3-4 / 4-5 / 4-5	7
C – 607°	Mint **	5	5	5 / 4-5 / 4-5	3	C – 559°	Dark Blue **	5	4-5	5 / 4-5 / 4-5	7-8
C – 614	Dark Lime	5	5	5 / 4-5 / 4-5	8	C – 618	Green **	5	5	5 / 5 / 5	7
C – 620°	Boa	5	5	5 / 4-5 / 5	6-7	C – 670	Khaki Light **	5	5	5 / 5 / 5	7-8
						C – 728	Metallic Copper **	5	5	5 / 4-5 / 4-5	8
						C – 828	Metallic Silver **	5	5	5 / 4-5 / 4-5	8
						C – 886	Forest Grey **	5	5	5 / 5 / 4-5	7-8
						C – 930	Black **	5	5	5 / 4 / 4	7-8
						C – 824	Mirage **	5	5	5 / 5 / 5	7-8
						C – 833	Steel	4	4	5 / 4-5 / 4-5	8

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

Packaging			
Packing ID P11-04	Pallet		
	LxWxH	No. of cylinders	Gross weight (kg)
P12-07	1100 x800 x1700	60	580

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 Team with special inquiries.



P12-07

NEXIS

bluesign® APPROVED



PA6

**Spun Dyed for Ropes, Nets
and Weaving applications**

**T051
T025**

PA6 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

Color		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		STN EN ISO 105-X12		STN 80 0143		STN EN ISO 105-B02	
		Dry	Wet	eqv. ISO 105-E01			
N - 115	Neon Yellow	4	4-5	4 / 2-3 / 3		3	
N - 204	Neon Apricot**	5	5	5 / 5 / 5		1	
N - 255	Neon Orange	5	5	4 / 4 / 4		2-3	
N - 325	Neon Pink	5	4-5	4-5 / 4 / 4-5		2-3	
N - 351	Neon Rose**	4	3	4 / 1 / 1		1	
N - 366	Neon Buble Gum**	5	5	5 / 4 / 4-5		3	
N - 381	Neon Coral	5	5	5 / 2-3 / 2		2	
N - 635	Neon Green	5	4	3 / 2-3 / 4-5		3-4	

** Bluesign in progress

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	580



P12-07

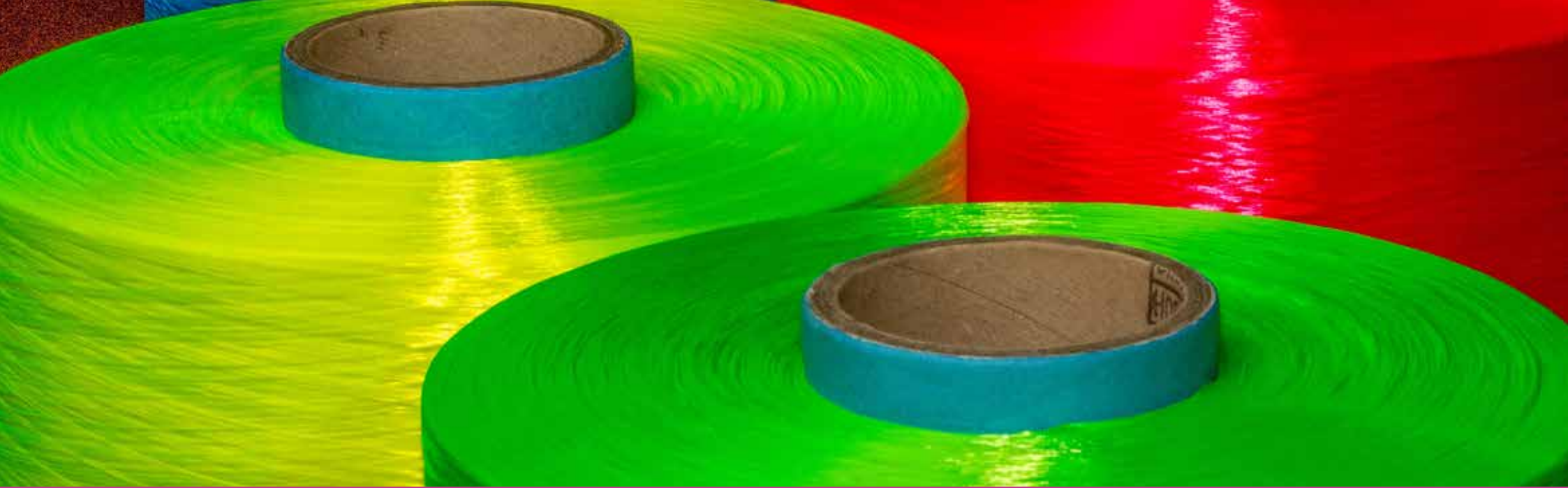
Note: Non-standard packaging is subject to special agreement.

All colors can be delivered plied and twisted, or Air- jet textured.

Please contact Technical Support Team with special inquiries.

 NEXIS





PA6

**Spun Dyed Neon Colors
for Ropes, Nets & Weaving
applications**

T052

PA6.6 Spun dyed

TYPE	Product	Heat resistant	Light pro- tected	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)	
UNDER DEVELOPMENT																		
550	940 f 140 CXXX	X	X	940	846	57,3	12,9	61,0	6,9	21,0	6,0	5,5	21	1,00	Y73/292	9200	20,3	280
550	1400 f210 CXXX	X	X	1400	1260	86,0	19,3	61,5	7,0	20,0	5,0	4,5	19	1,00	Y73/292	9200	20,3	280

° The characteristics can vary from 1 color to another

Color	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	STN EN ISO 105-X12	STN 80 0143		STN EN ISO 105-B02
	Dry	Wet	eqv. ISO 105-E01	
UNDER DEVELOPMENT				
C - 864	Dark Grey	5	5	5 / 4-5 / 4-5
C - 907	Black	5	5	5 / 4-5 / 4-5
C - 930	Black	5	4-5	5 / 4 / 4

Packaging				
Packing ID	Pallet			Yarn support Type
	LxWxH	No. of cylinders	Gross weight (kg)	
P11-02	1200x800x1750	55	710	T550 - Y73/292

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 Team with special inquiries.





PA6.6

**Spun dyed for
Weaving applications**

T550

PA6 & PA6.6 Infrared Invisible Spun – Dyed

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)	
UNDER DEVELOPMENT																		
05II	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
550I	940 f 140 CXXX	X	X	940	846	57,3	12,9	61,0	6,9	21,0	6,0	-	21	1,00	Y73/292	9200	20,3	280

° The characteristics can vary from 1 color to another

Color		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		STN EN ISO 105-X12		STN 80 0143		STN EN ISO 105-B02	
		Dry	Wet	eqv. ISO 105-E01			
UNDER DEVELOPMENT							
C – 640	Mimicry Green**	5	5	5 / 5 / 4-5		7-8	
C – 655	Crocodile**	5	5	5 / 4-5 / 4-5		8	
C – 675	Lizard Green**	5	5	5 / 4-5 / 5		7-8	
C – 678	Moss Green**	5	5	5 / 5 / 5		7	
C – 745	Military Teak**	5	5	5 / 4-+5 / 4-5		7-8	
C – 748	Military Olive**	5	5	5 / 5 / 4-5		8	
C – 981	IRI Black**	5	5	5 / 5 / 5		7	
C – 986	IRI Black II**	5	5	5 / 5 / 5		7-8	

** Bluesign in progress

Packaging			
Packing ID	Pallet		
	LxWxH	No. of cylinders	Gross weight (kg)
P12-07	1100x800x1700	60	580



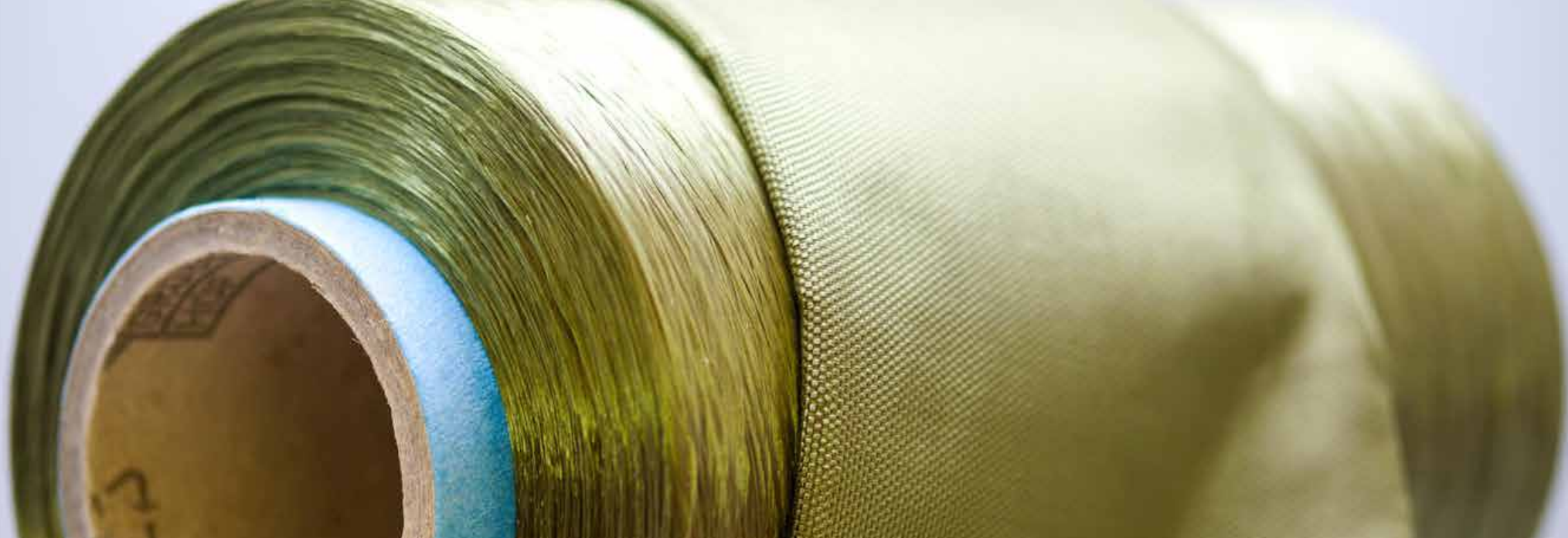
P12-07

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 Team with special inquiries.

 NEXIS

 bluesign®
APPROVED



PA6 & PA6.6

**Infrared Invisible
Spun-Dyed**

**T051I
T550I**

PA6 Hydrophobic yarn

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)	
372H	940 f 136	-	X	940	846	67	15,0	71,0	8,0	23	9,5	10	20	1,00	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	1,00	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	1,00	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	1,00	Y73/292	9100	20,1	255
UNDER DEVELOPMENT																		
322H	1400 f 204	-	X	1400	1260	69,3	15,6	49,5	5,6	41,5	8,1	10	16	1,00	Y73/292	9100	20,1	255

C-XXX - yarn properties Force & Elongation and H. air sh. can slightly vary from color to color for more information please contact Technical support

Packaging				
Packing ID	Pallet			Yarn support Type
	LxWxH	No. of cylinders	Gross weight (kg)	
P12-07	1100x800x1700	60	580	T321, T372, T051H, T052H T372, T051H, T052H
P12-05	1100x800x2000	72	720	T321, T372, T851, T853
P11-04	1100x800x1700	55	550	T370, T371, T373, T372H HUM

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 Team with special inquiries.



P11-04 , P12-07





PA6

Hydrophobic yarn

T051H

T052H

T372H

PA6 for Ropes and 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)	
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
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	1400f210	-	X	1400	1260	111,0	25,0	79,3	9,0	21	13,5	14	10	0,90	Y73/312	9900	21,8	272
373	2100 f 272	-	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
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
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
325	940 f 136	-	X	940	846	45,0	10,1	48	5,4	44,7	8,6	7,5	21	1,00	Y73/292	9100	20,1	254
325	1400 f 136	-	X	1400	1260	63,0	14,2	45	5,1	52,0	7,0	7,5	15	1,00	Y73/292	9100	20,1	254
325	2100 f 272	-	X	2150	1935	100,0	22,5	47	5,3	49,0	7,6	7,5	15	1,00	Y73/292	9100	20,1	254
370	2100 f 272	-	X	2128	1915	168,1	37,8	79	9,0	23,0	7,1	7,9	15	1,00	Y73/292	10200	22,5	275
371Cc	940 f 136	-	X	946	851	76,6	17,2	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	114,2	25,7	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
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	80	9,0	21,0	13,5	14	16	1,00	Y73/292	9100	20,1	254

C-XXX - yarn properties Force & Elongation and H. air sh. can slightly vary from color to color for more information please contact Technical support

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



P11-04 , P12-07



P12-05, 143

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 Team with special inquiries.





PA6

**For Ropes and Weaving
applications**

T322 T371
T323 T372
T325 T373
T370

PA6 for Nets 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)	
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	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	168,1	37,8	79	9,0	23,0	7,1	7,9	15	1,00	Y73/292	10200	22,5	275
371Cc	940 f 136	-	X	946	851	76,6	17,2	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	114,2	25,7	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

PA6 for Industrial Ropes 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)	
851	940 f 136	X	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	X	1400	1260	120,0	27,0	86	9,7	21,0	10,0	11,0	17	1,00	Y73/292	9100	20,1	254
851	1880 f 272	X	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	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
851P	1400 f 204	X	X	1430	1287	121	27,2	85	9,6	21,0	11,0	11,0	17	1,00	Y73/292	9100	20,1	255
UNDER DEVELOPMENT																		
851Cc	1400 f 204	X	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	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	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	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

C-XXX - yarn properties Force & Elongation and H. air sh. can slightly vary from color to color for more information please contact Technical support

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

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 Team with special inquiries.



P11-04, P12-07



P12-05, 143

 NEXIS

 bluesign
SYSTEM PARTNER



PA6

For Nets applications

For Industrial Ropes applications

T370 T851

T371 T851P

T325 T853

PA6.6 for Tyres and Mechanical Rubber Goods 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)	
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	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	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	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

Packaging				
Packing ID	Pallet			Yarn support Type
	LxWxH	No. of cylinders	Gross weight (kg)	
P11-O2	1200 x800 x1750	55	710	T650, T656 - Y73/292
V11-O2	1200 x800 x1050	33	370	T650, T653, T654 - Y94/290

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 Team with special inquiries.



P11-O2, P12-O6



PT1-O1, PT6-O1, PS1-O1, V11-O2

PA6 for Tyres, Mechanical Rubber Goods applications & Industrial Ropes

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)	
851	940 f 136	X	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	X	1400	1260	120,0	27,0	86	9,7	21,0	10,0	11,0	17	1,00	Y73/292	9100	20,1	254
851	1880 f 272	X	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	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
551	470 f 70	X	X	472	425	35,8	8,0	76	8,6	24,0	7,5	8,5	22	1,00	Y73/292	8700	19,2	255
851P	1400 f 204	X	X	1430	1287	121	27,2	85	9,6	21,0	11,0	11,0	17	1,00	Y73/292	9100	20,1	255
UNDER DEVELOPMENT																		
851Cc	1400 f 204	X	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	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	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	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	7,5	8,5	20	1,00	Y75/290.5	9100	20,1	255

Packaging				
Packing ID	Pallet			Yarn support Type
	LxWxH	No. of cylinders	Gross weight (kg)	
P12-O7	1100 x800 x1700	60	600	T851; T853 - Y73/292
P12-O5	1100 x800 x2000	72	720	T851, T853 - Y73/292

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 Team with special inquiries.



P11-O4, P12-O7



PT12-O5,143





PA6.6

**For Tyres and Mechanical
Rubber Goods applications**

T650, T653, T654, T656

PA6

**For Tyres, Mechanical Rubber Goods
applications & Industrial Ropes**

T851, T851P, T853, T551

PA6.10

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)							(%)	(g)	
UNDER DEVELOPMENT																		
923	1400 f 136	X	-	1400	1260	84	18,9	60,0	6,8	22,0	13,8	7,5	15	1,00	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	1,00	Y73/292	9100	20,1	255
951	1400 f 204	X	-	1410	1269	95	21,4	67,5	7,6	18,5	12	6,5	17	1,00	Y73/292	9100	20,1	255
951	1880 f 272	X	-	1880	1692	128	28,7	68,0	7,7	20	12	6,5	16	1,00	Y73/292	9100	20,1	255
953	940 f 136	X	-	940	846	65	14,6	69,0	7,8	18,5	9,1	5	15	1,00	Y73/292	9100	20,1	255
953	1880 f 272	X	-	1880	1692	130	29,2	69,0	7,8	20	9	5	15	1,00	Y73/292	9100	20,1	255

Packaging				
Packing ID	Pallet			Yarn support Type
	LxWxH	No. of cylinders	Gross weight (kg)	
P12-07	1200 x800 x1750	60	600	T923, T951, T953
P12-05	1100 x800 x2000	72	720	T923, T951, T953

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 Team with special inquiries.



P11-04, P12-07



PT12-05, 143

PA6.10 Spun dyed

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)	
UNDER DEVELOPMENT																		
123	940 f 136 - CXXX	-	X	940	846	51,0	11,5	54,0	6,1	22,5	13,0	7,0	21	1,00	Y73/292	9100	20,1	255

° : The characteristics can vary from one color to other

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

Packaging				
Packing ID	Pallet			Yarn support Type
	LxWxH	No. of cylinders	Gross weight (kg)	
P12-07	1100 x800 x1700	60	600	T923, T951, T953

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 Team with special inquiries.



P12-07





PA6.10

White & Spun dyed

T923 T953

T951 T123

PA66 for Broad and Narrow Weaving, Sewing Thread applications

TYPE	Product	Heat resistant	Light protected	Titer		Breaking Strength*		Tenacity*		Elongation*	Elongation	H. air sh.	BWS	IMG	Oil	Tube	Weight		Diam.
				(dtex)	(Den)	(N)	(lbf)	(cN/Tex)	(gpd)								(%)	(g)	
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	235f34	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	235f34	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	470f68	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	235f34	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	470f68	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	470f68	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(I)	470f68 C-XXX	X	X	470	423	28,0	6,3	60	6,8	20,0	5,0	4,5	3	24	0,90	Y94/225	4600	10,1	225
583(I)	235f34 C-XXX	X	X	235	212	15,0	3,4	64	7,2	21,0	2,9	4,2	2,6	21	0,75	Y94/225	4680	10,3	221
583(I)	520f136 C-XXX	X	X	520	468	33,2	7,5	64	7,2	23,5	5,6	4,5	2,9	30	0,90	Y75/290	10000	22,0	270
683	520f136	X	X	520	468	38,0	8,5	73	8,3	26,0	5,5	4,5	3,95	23	0,80	Y75/290	10000	22,0	270
683	312f68	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
687	470f68	X	X	475	428	38,0	8,5	80	9,1	22,5	5,8	4,5	4,0	18	0,85	Y75/290	9160	20,2	270

C-XXX – colors from our product portfolio, for more info contact technical support

Packaging					
Packing ID	Pallet			Gross weight (kg)	Yarn support Type
	LxWxH	No. of cylinders	No. of cylinders		
S11-02	1200x800x1050	-	33	330	T683, T684, T685
S 15-01	1200x800x1050	-	60	310	T681, T683, T685, T583
S 08-01	1200x800x1050	-	32	300	T681, T683, T684, T685
S 16-01	1200x800x1050	-	48	250	T583, T685, T687
PT6-01	1200x800x1050	-	48	240	T640, T642



S15-01, S05-01



PT1-01, PS1-01, V11-02

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 Team with special inquiries.



PA66

**For Broad and Narrow Weaving
Sewing Thread applications**

**T640 T683 T687
T642 T684 T583
T681 T685**

PA66 for Air Bag applications

TYPE	Product	Heat resistant	Light protected	Titer		Breaking Strength ^o		Tenacity ^o		Elongation ^o	Elongation	H. air sh.	BWS	IMG	Oil	Tube	Weight		Diam.
				(dtex)	(Den)	(N)	(lbf)	(cN/Tex)	(gpd)								(%)	(g)	
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

C-XXX – colors from our product portfolio, for more info contact technical support

Packaging				
Packing ID	Pallet		Gross weight (kg)	Yarn support Type
	LxWxH	No. of cylinders		
S11-02	1200x800x1050	33	360	T682 - Y74/290
V11-03	1200x800x1030	33	370	T682 - Y94/290



PT1-01, S11-02

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



PA66

For Air Bag applications

T682

Nexis Fibers Twisting and Texturing Capabilities

'KNOTTED NETS – STANDARD TWINES									SPECIALTY ROPES, MARINE ROPES TWINES			HIGH TENACITY THREADS		OTHER TWISTED YARNS	
210 / n		denier / single ply	'denier / 3 ply'	Twist		Examples of constructions (twist values on request)	Nominal dtex		Examples of Constructions (twist values on request)	Final dtex	Marine finish available	Examples of Constructions (twist values on request)	Final dtex	Examples of Constructions (twist values on request)	Final dtex
single	total			1st	2nd		1st twist	2st twist							
6	18	1260	3780	425	230	1400x1S425 x3Z230	1400	4200	940 x1	940		110x1 Z75	110	PES 78f24 SD Z800 FIX	78
8	24	1680	5040	400	210	1880x1S400 x3Z210	1880	5640	1400 x2	2 800		110x1 Z300 FIX	110	PES 78f24 SD Z1050 FIX	78
10	30	2100	6300	380	195	(1400+940)x1S380 x3Z195	2340	7020	1400 x6	8 400		110x1 Z400 x2 S400	220	PES 83f36 TXT SD S120	83
12	36	2520	7560	360	185	1400x2S360 x3Z185	2800	8400	1400 x2 x3	8 400		235x1 Z140	235	PES 83f36 BR TXT S450 FIX	83
14	42	2940	8820	350	180	(1880+1400)x1S350 x3Z180	3280	9840	1400 x2 x4	11 200		235x1 S200 x2 Z200	470	PES 83f36 TXT BLK S600 FIX	83
16	48	3360	10080	300	160	1880x2S300 x3Z160	3760	11280	1400 x2 x5	14 000		235x1 S500 x2 Z380	470	PES 150 f48 TXT BR S400 FIX	150
18	54	3780	11340	275	145	1400x3S275 x3Z145	4200	12600	1400 x6 x3	25 200		470x1 Z150	470	PES 167f36 TXT SDS400 FIX	167
20	60	4200	12600	250	130	(1880+1400x2)x1S250 x3Z130	4680	14040	1400 x7 x3	29 400		470x1 Z280 FIX	470	PES 167f48 TXT BLK S400 FIX	167
22	66	4620	13860	350	167	(1880x2+1400) S350 x3Z167	5160	15480	1880 x2	3 760		700x1 Z100	700	PES 330f72 SD TXTS120 FIX	330
24	72	5040	15120	240	125	1880x3S240 x3Z125	5640	16920	1880 x5	9 400		PES 74f24x1 S830 x2 Z700	148	PES 330f96 BR Z150 FIX	330
30	90	6300	18900	225	120	1400x5S225 x3Z120	7000	21000	1880 x9	16 920		PES 150f48 x1 S630 x3 Z440	450	PES 330f72 SD TXT S120	330
32	96	6720	20160	220	115	1880x4S220 x3Z115	7520	22560	1880 x5 x3	28 200		PES 275f48 x1 S570 x3 Z380	825	PES 183f34x2 SD TXT S120	366
36	108	7560	22680	200	105	1400x6S200 x3Z105	8400	25200	1880 x18	33 840	X	PES 455f96 x1 S470 x3 Z325	1 365		
40	120	8400	25200	200	100	1880X5 S190 x3Z100	9400	28200	1400 x30	42 000	X	PES 1100x4 S80	4 400		
48	144	10080	30240	180	95	1400x8 S180 x3Z95	11200	33600	1880 x24	45 120	X				
64	192	13440	40320	170	85	1880X8 S170 x3Z85	15040	45120	1880 x9 x3	50 760					
84	252	17640	52920	140	70	1880X10 S140 x3Z70	18800	56400	1880 x27	50 760	X				
96	288	20160	60480	130	65	1880X12 S130 x3Z65	22560	67680	1880 x30	56 400	X				
128	384	26880	80640	100	55	1880X16 S100 x3Z55	30080	90240	1400 x2 x3 x 4/5/6	50 400	X				

Packaging options						
Knotted Nets			Specialty ropes, Marine ropes, High tenacity threads			Other twisted yarns
OD	ID	Weight	OD	ID	Weight	
mm	mm	Kg	mm	mm	Kg	On request
140	44	2,2	180	56	2,1	
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	

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

- Multiple possibilities to prepare sewing threads 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 70den to 100,000den = 78dtex to 110,000dtex.
- Twist level range: from 20 to 800tpm from 0,5 to 20tpm
- Plying capabilities: Up to 32 ply
- Overfinish capabilities; Marine Finish capabilities
- Air texturing capabilities for Polyester, Nylon. From 210den to 2700den = 235dtex to 3,000dtex.





Nexis Fibers Twisting Capabilities

Nexis Fibers Texturing Capabilities

Polymer	TYPE	Product	Spundied	Heat re- sistant	Light pro- tected	Titer		Breaking Strength		Tenacity		Elonga- tion (%)	H. air sh. (%)	BWS 95°C (%)	Tube (mm)	Weight			Diam. (mm)
						(dtex)	(Den)	(N)	(lbf)	(cN/Text)	(gpd)					(g)	(lbs)	(mm)	
PA66	6827	500f136	-	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	730f272	-	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	1100f408	-	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	1500f210	-	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	1010f136	-	-	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	1030f136	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	1500f204	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	3060f408	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	550f68 (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	
PA6	3217	3000f272	-	-	X	2970	2673	96,2	21,6	36,0	4,1	30,0	10,5	13	69/290	4600	10,1	300	
PA6	3217H	3000f408	-	-	X	2970	2673	98,9	22,2	37,0	4,2	22,0	11,5	12	69/290	4600	10,1	300	

All Air textured products can be shrunk in steam to lower shrinkage and higher elongation
 C-XXX - colors from our product portfolio. For more info, please contact Technical support



Nexis Fibers Texturing Capabilities

PA6.10 & PA6.12 Polymers

PRODUCT	POLYAMIDE 6.10		POLYAMIDE 6.12	
	7030	7050	8030	8070
Type	7030	7050	8030	8070
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	Cond.	DAM	Cond.	DAM - Dry As Moulded /	Cond. - Conditioned
Tensile modulus Et		2 100	1600	2 400	1650	2 470	1660	2 000	1600	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 α_y		4,5	21	4	20	4	18	4	19	%	ISO 527-2/1A/50
Nominal strain at break α_{tb}		> 50	> 50	> 50	> 50	> 50	> 50	> 50	> 50	%	ISO 527-2/1A/50
Flexural modulus Ef		2 000	1460	2 200	1550	2 100	1600	2 100	1600	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 α_{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 α_{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			Breaking Strength	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 %)								
8005	110	< 0,07		13	2,7	2,8	3,4	215	186
8011	125								
8030	138								
8040	160								
8050	180								
8060	200								
8070	220								

Packaging type	Packaging			
	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



PA6.10 & PA6.12 Polymers

Locations of Nexis Fibers

Slovakia
Latvia
USA

Humenné, Production & Headquarters
Daugavpils, Production
Atlanta, GA, Business office



Sales contact

barbara.danak@nexis-fibers.com
laura.salatova@nexis-fibers.com



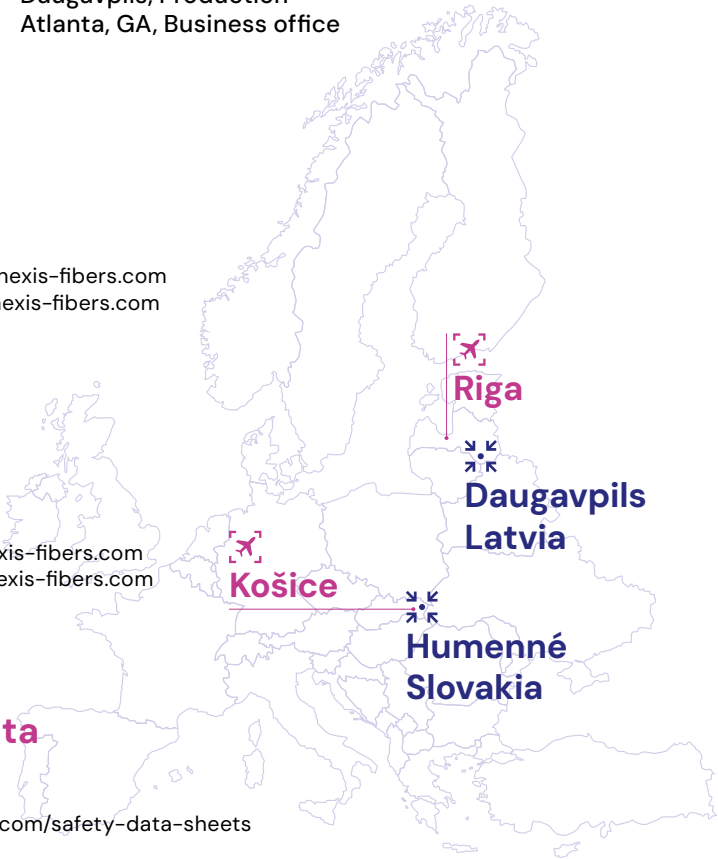
Technical contact

tomas.krsko@nexis-fibers.com
juraj.dluzanin@nexis-fibers.com



Safety Data Sheets

www.nexisfibers.com/safety-data-sheets



www.nexisfibers.com