

World of Coats *aptan*

COATS
aptan



CONTINUOUS
FILAMENT
NYLON 6.6

Product Information



Coats *aptan* is a lubricated nylon thread made from pre-stabilised continuous filament nylon 6.6. Coats *aptan* is an excellent sewing thread for all types of leather and offers excellent abrasion resistance. It incorporates a soft finish with a superior low friction lubrication which reduces the effects of needle heat and abrasion.

Main Uses:

- Leather goods
- Shoes uppers
- Sporting goods
- Seat belts, air bags
- Industrial filters
- Automotive interiors
- Multineedle quilting and mattresses
- Protective footwear
- Geotextiles and technical textiles



Features and Benefits:

- Coats *aptan* is 30% stronger than ordinary nylon thread. The higher strength to fineness ratio makes very fine seams possible in the footwear
- Coats *aptan* is treated with a specially formulated lubricant that offers excellent frictional characteristics during high speed sewing
- Controlled stretch characteristics yield excellent sewability with tight, firm stitches on multiple leather surfaces
- Coats *aptan* exhibits excellent loop formation, consistent stitch formation and neat seam appearance

World of Coats

- Coats is the world's leading industrial thread business with a 200 year history of pioneering innovation.
- Providing complementary and value added products and services to the apparel and footwear industries.
- Applying new techniques to manufacture and supply engineered threads and yarns to a wide range of speciality segments.
- With manufacturing plants in over 70 locations and sales and distribution in many more, Coats is uniquely placed to serve your thread needs anywhere in the world.
- Our range of value adding services and tools is being expanded to help customers adapt and meet the challenges of our industry today. For example, the award winning 'Coats Colour Express' sampling service enables a fast and accurate global thread sampling capability and is backed by Coats' well known advanced colour management systems.

One colour range. One specification. Worldwide.

Coats operates to a global specification for Coats *aptan* with quality audited by a centrally located team.

www.coatsindustrial.com



Product Guidelines:

Tex No.	Ticket No. (Nm)	Ply	Average Strength		Elongation % Min - Max	Recommended Needle Size*	
			cN	Grams		Singer	Metric
16	190	2	1,078	1,100	14 - 24	14 - 18	90 - 110
21	150	3	1,372	1,400	14 - 24	14 - 18	90 - 110
35	80	3	2,058	2,099	14 - 24	14 - 18	90 - 110
45	60	2	3,234	3,298	16 - 26	14 - 18	90 - 110
70	40	3	4,704	4,797	16 - 26	16 - 19	100 - 120
90	30	4	6,664	6,800	17 - 30	18 - 21	110 - 130
105	25	3	6,370	6,495	17 - 30	18 - 21	110 - 130
135	20	3	9,408	9,593	17 - 30	19 - 22	120 - 140
180	15	3	12,544	12,791	17 - 30	21 - 23	130 - 160
210	13	3	14,014	14,290	17 - 30	21 - 23	130 - 160
270	10	3	19,110	19,486	17 - 30	23 - 25	160 - 200
400	8	3	23,520	23,983	17 - 30	23 - 25	160 - 200
450	7	3	29,400	29,979	17 - 34	23 - 25	160 - 200
500	6	3	34,300	34,976	17 - 32	23 - 25	160 - 200
600	5	3	39,200	39,972	17 - 30	24 - 26	180 - 230

* Needle size recommendations are a guide only and ultimately depend on the sewing application.
Since conditions and applications vary considerably in the use of thread, the thread user should assure herself or himself by preliminarily testing that the thread is suitable for the end use intended. Technical information listed above is based on current averages and should be taken only as indicative.



Physical and chemical properties of continuous filament nylon 6.6:

Thermal Properties:

- Melts at 260°C, sticks at 190°C and above
- Shrinkage is less than 1% @ 150°C

Chemical Properties:

- Mineral acids: Decomposed by strong mineral acids but resistant to weak acids
- Alkalis: Essentially unaffected by weak alkalis, but less resistant to stronger alkalis, especially at higher temperatures
- Organic solvents: Generally unaffected
- Bleaching: Unaffected, deterioration dependant on conditions
- Insects / microorganisms (mildew, rot): Unaffected
- Moisture regain: Approximately 0.4%

Coats *aptan* fastness properties:

- | | | |
|-----------------------------|--------------------|-------------|
| • Wash Fastness | (ISO 105 C03) | Grade 4 |
| • Water Fastness | (ISO 105 E01:2010) | Grade 4 |
| • Rub Fastness | (ISO 105 X12:2001) | Grade 4 |
| • Artificial Light Fastness | (ISO 105 B02:1994) | Grade 3 - 4 |

These fastness grades represent minimum performance levels. For special fastness requirements, reference should be made to Coats Technical Services.

