



ANTI-MICROBIAL
POLYESTER
CORESPUN WITH
POLYESTER WRAP

Product Information

Coats Epic Protect

Coats Epic Protect sewing thread is treated with an innovative process to give the finished thread anti-microbial / anti-fungal properties. The anti-microbial process creates a "zone of inhibition" that prevents the growth of odour and stain causing bacteria and pathogens around sewn seams, where microbes like to harbour, leaving seam crevices clean and fresh.

There are many products such as hospital furnishings, operating theatre beds, medical / hospital gowns, muscle supports, that need ongoing protection from microbes and odour causing bacteria. Outdoor goods such as tents, sports goods, backpacks and accessories can also benefit from enhanced protection in seams from mould and bacteria, causing staining and product deterioration.

Coats Epic Protect now combines enhanced anti-microbial protection with the advantages of a superior corespun thread. This polyester-wrapped thread with a polyester filament core provides maximum tenacity and excellent sewing performance where good appearance, fineness and high seam strength are required.



Main Uses:

- Medical light mattresses
- Medical supports
- Medical / hospital gowns
- Tents
- Backpacks
- Sports gloves
- Sports apparel
- Uniforms
- Workwear

Why choose Epic Protect?

- Specially finished to deliver outstanding sewing performance in the most demanding applications with the added benefit of anti-microbial properties.
- Coats Epic Protect fights mould and mildew.
- Inhibits bacteria that causes odour.
- Coats Epic Protect is stain resistant.
- The high strength polyester filament core allows the use of finer thread sizes, giving better seam appearance without compromising seam strength.
- Excellent abrasion resistance.
- Coats Protect threads meet a number of recognised anti-bacteria and fungi test standards including: AATCC TM90 and ASTM M90 (microbiology activity), ASTM G21 and MIL-Std-810G (fungi), EN/ISO 20743 (anti-bacterial) and the Japanese SEK Blue Label accreditation.
- Meets Coats restricted substance list.

Technical Services

Our team of experts deliver innovative solutions globally.





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Tex	Ticket	Strength cN	Elongation % Min - Max	Needle Size Metric
18	180	780	17 - 22	65 - 75
21	150	980	17 - 22	65 - 75
24	120	1190	17 - 22	70 - 90
30	100	1490	17 - 22	75 - 90
40	80	1960	18 - 24	75 - 90
40 *	80	1780	18 - 24	75 - 90
60	50	3530	18 - 25	100 - 120
60 *	50	3040	18 - 25	100 - 120
80	40	3940	18 - 25	100 - 120
105	30	4790	18 - 25	110 - 130
105	28	5910	18 - 25	110 - 130
120	25	6080	18 - 25	120 - 140
135	20	7150	18 - 25	120 - 140
150	18	8040	18 - 25	130 - 160
180	16	9570	18 - 25	130 - 160
210	12	9800	20 - 25	130 - 160
240	10	14700	20 - 26	160 - 200

* Indicates 3 ply thread.

Thermal Properties:

- Melts at 250 - 260°C, softens at 220 - 240°C
- Shrinkage less than 1% @ 150°C

Chemical Properties:

- Mineral acids: Resistant to most mineral acids
- Alkalis: Essentially unaffected by weak alkalis, but less resistant to stronger alkalis, especially at higher temperatures
- Organic solvents: Generally unaffected, but soluble in some phenolic compounds
- Bleaching: Unaffected
- Insects / microorganisms (mildew, rot): Unaffected
- Laundering / dry cleaning: Unaffected
- Moisture regain: 0.4%

Fastness Properties:

- | | | |
|------------------------------|-----------------|---------|
| • Wash fastness: | (ISO 105 C10 C) | Grade 4 |
| • Water fastness: | (ISO 105 E01) | Grade 4 |
| • Rub fastness: | (ISO 105 X12) | Grade 4 |
| • Hypochlorite fastness: | (ISO 105 N01) | Grade 4 |
| • Dry cleaning fastness: | (ISO 105 D01) | Grade 4 |
| • Perspiration fastness: | (ISO 105 E04) | Grade 4 |
| • Artificial light fastness: | (ISO 105 B02) | Grade 4 |

These fastness grades represent minimum performance levels and, in practice, the majority of shades will exceed these levels.

Our sewing threads with the Coats Protect technology, have been tested to be effective up to 100 laundry wash cycles (per AATCC TM 150). Effectively this means the anti-microbial performance will endure for the lifetime of the product.



Since conditions and applications vary considerably in the use of a product, the customer and/or user should assure herself or himself that the product meets end customer requirements and is suitable for the intended end use. Coats accepts no liability for unsuitable or improper use or application of products.

Information provided above is based on current averages and should be taken only as indicative. Coats accepts no liability for the preciseness and correctness of the information provided.

Product information sheets are updated from time to time, please be sure you are referring to the most recent publication. Coats supports customers with advice on individual applications on request; if you have any questions or concerns, please contact us.

