

COATS
*gramax
protect*



ANTI-MICROBIAL
TEXTURED POLYESTER

Coats® Gramax™ Protect

Gramax Protect is a 100% polyester continuous filament textured thread. It 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.

WHY CHOOSE COATS GRAMAX PROTECT?

- Gramax Protect provides good seam coverage and softness for neat, comfortable seams with the added benefit of anti-microbial properties
- Fights mould and mildew
- Inhibits bacteria that causes odour
- Helps prevent product deterioration
- Stain resistant, with no residue
- Coats Protect threads tested against AATCC 100 Anti-Microbial Test, exhibited excellent Anti-Microbial Resistance at 96% post 75 washes.
- Meets Fungi Resistance Test - No growth of mould culture *Aspergillus Brasiliensis* (ATCC 9642), *Penicillium Pinophilum* (ATCC 11797), *Chaetomium Globosum* (ATCC 6205), *Gliocladium Virens* (ATCC 9645) and *Aureobasidium Pullulans* (ATCC 15233).

- Standard 100 by Oeko-Tex® Class I

MAIN USES:

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



Coats Gramax Protect

PRODUCT RANGE

Art/Tkt	Ticket	Tex	Lenght	Average Strength cN	Elongation % Min - Max
5AC3160	160	18	5,000 M	620	20 - 32
5AC2160	160	18	2,500 M	620	20 - 32
5AC3140	140	21	5,000 M	780	20 - 32
5AC2140	140	21	2,500 M	780	20 - 32

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 60°C	ISO 105-C10 C	Grade 4
Water Fastness	ISO 105-E01	Grade 4
Hypochlorite Fastness	ISO 105-NO1	Grade 4
Dry Cleaning Fastness	ISO 105-DO1	Grade 4
Perspiration Fastness	ISO 105-EO4	Grade 4
Artificial Light Fastness	ISO 105-BO2	Grade 4

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



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Since conditions and applications vary considerably in the use of a product, the customer and/or user should assure themselves 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 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 for 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. © Copyright reserved 2021



Coats Gramax Protect

EXPERT REAL WORLD SUPPORT

The final cost of any thread also includes hidden costs, fuelled by the methods and tools applied to it. Our experts know exactly how to reduce those costs, save time and increase productivity.



Seamworks

Install our Seamworks software to accurately calculate costs prior to production, putting an end to the risk of over or under ordering materials, and incurring unnecessary extra costs. The Seamworks tool is provided with installation, training and ongoing support included.



One to One Visits

There's no need to come to us, our experts will travel to your site. In person, online or via the phone, our trained consultants deal with the kind of issues any busy factory may face, providing a solution for today and a blueprint for future efficiency.



Training and Presentations

From thread selection to stitch formation, the use of colour to solutions for common production issues, we take the learning gathered through years of hands on experience and present it in the form of high impact seminars, workshops and presentations.



Embroidery Service Centre

Our Embroidery Service Centre makes embroidering a design much easier, increasing productivity at the same time as enhancing the design itself. Email the design and any problematic issues to us and our technicians will email the improved design right back.



Innovation Hub

Collaborate directly with expert R&D technologists at our Innovation Hub to create pioneering and tailored solutions for products ranging from Performance Materials to Apparel and Footwear. Equipped with state-of-the-art technology, we quickly turn ideas into prototype designs ready for manufacturing.

To drive your hidden costs down, talk to Coats. From thread audits in pre-production to the latest technical bulletins, we'll provide support that achieves measurable results.

For more information, talk to your Coats representative today or visit www.coats.com/gramax-protect

OTHER PRODUCTS IN THE GRAMAX RANGE

To complement the Gramax range, we also have a selection of specialist Gramax threads. Each of these have additional benefits specific to the end use.

Product Name	Description
Gramax	100% polyester continuous filament textured thread.
Gramax RD	100% polyester continuous filament textured thread for children's nightwear.
Gramax Ecoverde	100% recycled polyester continuous filament textured thread.

Special use Gramax products are typically available across a select range of ticket sizes and technical information will in some cases vary from the above table.



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