



Coats Protos

Coats Protos is a high strength, high modulus fire retardant sewing thread made from 100% spun Kevlar® or para-aramid fibre. Coats Protos offers exceptionally high strength retention even at elevated heat ageing temperatures and can be used to stitch durable protective seams that can withstand burning flames, ballistic resistance and exposure to high temperatures. Coats is the only thread manufacturer that spins, twists, dyes and finishes the para-aramid fibre in a vertically integrated aramid manufacturing system to produce threads with excellent sewability and in difficult-to-dye colours.

FIRE RETARDANT
STAPLE SPUN
PARA-ARAMID

Product Information



Main Uses:

- Mattress tape edge seams
- Fire resistant and cut and slash industrial gloves
- Insulation and engine covers
- High temperature air bags
- Aerospace
- Bullet-proof vests and ballistic body armour
- Military protective garments

Why choose Protos?

- Made from 100% Kevlar® or para-aramid fibre with a high melting point of 450°C.
- Stronger than steel, para-aramid is a high tenacity, high modulus fibre.
- High retained strength after heat ageing at elevated temperatures.
- Unique spinning capability for low fault para-aramid yarn.
- Low elongation.
- One of the few thread manufacturers that can dye para-aramid and hence deliver thread in a range of shades.
- Meets Coats restricted substance list.

Technical Services

Our team of experts deliver innovative solutions globally.





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Tex	Ticket	Ply	Strength cN	Elongation % Min - Max	Needle Size Metric
40	75	2	3000	3 - 5	75 - 90
45	60	2	3775	3 - 5	80 - 90
60	50	3	4800	3 - 5	90 - 110
80	35	4	7105	3 - 5	100 - 120
90	30	5	8430	3 - 5	110 - 140
105	25	6	9775	3 - 5	120 - 160

Thermal Properties:

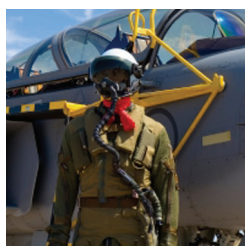
- Decomposes at 450°C - Does not burn but self-extinguishes on removal of flame
- High modulus low elongation fibre
- Stronger than steel
- Low ultra violet resistance, loses strength on exposure to prolonged sunlight
- Excellent cut and slash resistance

Chemical Properties:

- Excellent resistance to oils and petro chemicals
- Excellent chemical resistance

Fastness Properties:

- Wash fastness (95°C): ISO 105 C04 (DIN 54011) Grade 3
- Rub fastness: ISO 105 X12 (DIN 54021) Grade 3



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.

