World of Coats protos plus

Coats *protos plus* is a long staple spun para-aramid sewing thread which can be used for the sewing of heat and flame protection equipment like blast furnace wear, fire fighter wear, safety shoes as well as for protection wear for cut and ballistic protection, for example cut protective gloves or bullet proof vests. The para-aramid fibres used to make Coats *protos plus* are five times stronger than steel, and are self-extinguishing and flame retardant up to 425°C.

Main Uses:

- Flame retardant protective clothing
- Flame retardant protective footwear
- Cut and ballistic protective wear
- Fire fighter wear
- Bullet proof vests

- Cut protection gloves
- Safety shoes
- Airbags
- Filtration
- Heat insulation



Features and Benefits:

- Outstanding strength for protective apparel providing optimum cut and puncture resistance
- High temperature resistance of up to 425°C, does not melt and is self-extinguishing

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 *protos plus* with quality audited by a centrally located team.

www.coatsindustrial.com

LONG **STAPLE SPUN** PARA-ARAMID product Informatio

COATS

protos plus



Product Guidelines:

Tex No.	Ticket No. (Nm)	Ply	Average Strength		Elongation % Min - Max	Recommended Needle Size*	
			cN	Grams		Singer	Metric
40 60 80	70 50 35	2 3 4	4,800 7,700 10,000	4,895 7,852 10,197	3 - 5 3 - 5 3 - 5	14 - 16 16 - 18 18 - 21	90 - 100 100 - 110 110 - 130

* 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.





Thermal Properties:

Decomposes at 425°C

Chemical Properties:

- Acids:
- Alkalis:
- Organic solvents:
- Bleaching: •
- UV:

Additional Information:

• Para-aramid is affected by UV-rays: The natural yellow shade turns light brown. The temperature resistance remains unaffected, but the strength of the fiber decreases. The loss of strength is approximately 50% after 40 - 60 weeks of UV exposure. Therefore para-aramid should not be exposed to UV-rays

Average resistance

Excellent resistance

Good resistance

Low resistance

Low resistance



COATS protos plus



LONG **STAPLE SPUN** PARA-ARAMID



