COATS
helios s

ULTRA HIGH MOLECULAR WEIGHT POLYETHYLENE

Coats® Helios S™

Coats Helios S is made from Ultra High Molecular Weight Polyethylene (UHMWPE) and commercially available premium gel-spun, self-lubricating thread. It is manufactured with a new generation raw material that is used in highly demanding aerospace and military applications.

Coats Helios S is a highly abrasion-resistant, cut-proof and an extremely light thread. These performance characteristics make Coats Helios S an ideal thread for a range of industrial products.

The main applications are aerospace, blimps and parachutes, boat sails, body armour and workwear, cut-proof footwear, gloves and filtration.

WHY CHOOSE HELIOS S?

- Coats Helios S is a highly abrasion-resistant, cut-proof and an extremely light thread. These performance characteristics make Coats Helios S an ideal thread for a range of industrial products.
- Coats Helios S has exceptional strength and rigidity. Size for size, Coats Helios S is 10 times and 40% stronger than high grade steel and aramids respectively.
- Coats Helios S delivers unique properties including high tensile strength and modulus, combined with cut-resistance.
- Coats Helios S has low density - less than 1 gram per cubic centimetre, making it float on water - giving it a high strength to weight ratio.
- Coats Helios S has extremely high abrasion resistance, yet is soft and durable.

MAIN USES

- Aerospace
- Blimps and parachutes
- Boat sails
- X-ray garments
- Body armour and workwear
- Cut-proof footwear and gloves
- Filtration
- Fishing lines
- Kite flying strings
- Military equipment
- Security bags
- Specially engineered yarns

COATS

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PRODUCT RANGE

Tex	Ticket	Length	dtex/ply	Strength cN	Elongation % (Min-Max)	Needle Size Metric
50	60	1750m	250 x 2	10500	4 –7	90 – 100
70	40	1250m	250 x 3	15000	4 –7	90 – 100
120	20	750m	440 x 3	30100	4 –7	100 – 120

THERMAL PROPERTIES

Thermally stable at temperatures ranging from -150°C to +110°C (melts at 150°C)

CHEMICAL PROPERTIES

Solvents:	Chemically inert - does not react with most substances
Envrionment:	Extremely durable and is unaffected by salt, water and other atmospheric conditions
UV rays:	Highly resistant to UV radiation
Insects / microorganisms (mildew, rot):	Highly resistant to micro-organisms

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.

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 yarn 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.

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/helios-s**

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