

One of the most creative and innovative techniques applied in the denim industry is laser fading technology, which is used to create patterns and a worn appearance on denim fabrics. This technology works by degrading the indigo dye on the fabric surface at specific points using laser beams, resulting in a contrast of light and dark areas.

However, during these processes, the high heat and energy intensity of the laser beams can damage certain seam areas. Durak Laser Safe thread is specially designed as a non-melting, long-lasting sewing thread that maintains its strength during laser treatments and provides superior durability in denim products. With its structure unaffected by the high energy of the laser, it not only supports the aesthetic appearance of denim garments but also delivers high performance and durability in the seams.

- It is resistant to laser fading processes and maintains its strength across different laser energy levels.
- Durak Laser Safe sewing thread has been tested under four different laser intensities (light, medium, heavy, very heavy) and retains more than half of its strength even after very heavy laser applications.
- Thanks to its special and optimized core structure, it provides long-lasting durability in denim garments.
- Its polyester-cotton blend offers resistance to high temperatures.
- By preserving its aesthetic appearance, it helps denim garments stay looking new for longer.

MAXIMUM PROTECTION AGAINST LASER DAMAGE

Durak Laser Safe

DURAK



Durak Laser Safe



Denim



Mattress /
Quilting



Underwear



Suit / Shirt



Workwear



Home Textile



Furniture

FASTNESS

Washing Fastness	ISO 105-C06	Min.:4
Water Fastness	ISO 105-E01	Min.:4
Rubbing Fastness	ISO 105-X12	Min.:4
Hypochlorite Fastness	ISO 105 N01	Min.:4
Perspiration Fastness	ISO 105-E04	Min.:4
Light Fastness	ISO 105 B02	Min.:4

PHYSICAL CHARACTERISTICS

Melting Point	260°C
Softening Point	220 - 240°C
Shrinkage	Less than 1% at 150°C

CHEMICAL PROPERTIES

Mineral Acids	Resistant to most mineral acids.
Alkalies	Polyester is resistant to mild alkalis, moderately resistant to strong alkalis.
Organic Solvents	Unaffected by normal solvents; may dissolve in some phenolic compounds. Cotton swells in caustic soda without significant strength loss
Bleaching	Polyester unaffected by bleaching; cotton bleaches with hypochlorite and peroxides.
Microorganisms (Mildew, Rot)	Polyester : Unaffected Cotton : Degrades but can be treated with special finishes.
Washing / Dry Cleaning	Unaffected.
Moisture Regain	0.4%

THICKNESS AND STRENGTH CHART

TKT	Nominal Tex	Strenght CN	Elongation %	Needle Size
30	90	2100	10-15	110-130

STORAGE CONDITIONS

*Store away from high heat, humidity, and direct sunlight to
maintain quality.



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