



Smart Textile Applications



Decorative Applications



Protective Clothing



Sportswear



Custom-Designed Products

FASTNESS

Washing Fastness	ISO 105-C06	Min.:3
Water Fastness	ISO 105-E01	Min.:3
Rubbing Fastness	ISO 105-X12	Min.:3
Hypochlorite Fastness	ISO 105 N01	Min.:3
Perspiration Fastness	ISO 105-E04	Min.:3
Light Fastness	ISO 105 B02	Min.:2-3

PHYSICAL CHARACTERISTICS

Melting	Melts at 260°C
Softening	Softens at 220–240°C
Shrinkage	Less than 1% at 150°C

CHEMICAL PROPERTIES

Mineral Acids	Resistant to most mineral acids.
Alkalis	Generally unaffected by weak alkalis, but not resistant to strong alkalis, particularly at high temperatures.
Organic Solvents	Generally unaffected, but soluble in some phenolic mixtures.
Bleaching	Unaffected.
Microorganisms	(Fungi, Mold) Unaffected.
Washing / Dry Cleaning	Unaffected.
Moisture Regain	0.4%

THICKNESS AND STRENGTH CHART

TKT	Nominal Tex	Breaking Force CN	Elongation at Break %
30	105	5400	18-26
50	60	2750	18-26
120	28	1250	12-20

STORAGE CONDITIONS

*Keep away from high temperatures, moisture, and direct sunlight.



Today, innovative and functional properties are becoming just as important as aesthetic appeal in textile products. Particularly in fashion- and design-oriented applications, materials that respond to temperature changes add a dynamic and eye-catching character to products.

Durak Heat-Sense® is a special embroidery thread that changes color in response to temperature changes. When a certain temperature level is reached, the thread changes color, creating a distinctive visual effect. As the temperature decreases again, the thread can return to its original appearance, allowing the effect to be repeated.

Thanks to this feature, Durak Heat-Sense® enables the development of creative and innovative designs, particularly in fashion, decorative applications, and smart textile products.

- Features heat-sensitive color-changing properties.
- Creates a dynamic visual effect in response to temperature changes.
- Developed using special dyeing and finishing processes.
- Suitable for smart textile applications.
- Can be used in decorative design and fashion applications.
- Different colors may have different temperature activation levels.

Heat-Activated Color-Changing Embroidery Thread

Durak Heat-Sense®

DURAK

