

Technologies used in military and security fields are continually evolving. At the forefront of these innovations is IR (infrared) technology. IR technology operates beyond the visible light spectrum, in the 700-1200 nm wavelength range, invisible to the human eye but detectable by many sensors.

In military and security applications, invisibility is a critical factor. Poly-Strong PC-IR's advanced composition ensures superior camouflage by remaining undetectable by IR cameras in the far-infrared region, offering substantial benefits in military environments where avoiding detection is crucial. Processed with unique reflection values, this thread helps users remain unseen by IR sensors.

- Provides excellent camouflage without detection by IR cameras within the 700-1200 nm wavelength range.
- The polyester core ensures long-lasting durability without tearing or wearing.
- Special reflection values have been achieved through special components.
- The dark military green tone is ideal for stitching military clothing and camouflage products.
- Maintains product integrity, minimizing unwanted visibility.
- Available in standard Poly-Strong PC thicknesses to meet users' needs.
- Resists movement and stress, ensuring safe usage.

# INVISIBILITY TO INFRARED RAYS **Poly-Strong PC-IR**

**DURAK**





## Poly-Strong PC-IR



Military Clothing



Hunting Apparel



Tent & Tarp



Camouflage Clothing

### 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
Sweat 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.
Alkalis	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
36	78	3950	20-28	110-130
50	60	2800	20-28	100-120
75	40	2000	18-24	90-100

### STORAGE CONDITIONS

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



# DURAK

