



## WATER REPELLENT COTTON COATED POLYESTER CORESPUN SEWING THREAD

### Poly-Strong PC WR<sup>®</sup>

DURAK Poly-Strong (PC) WR<sup>®</sup> is a water-repellent, cotton-coated polyester sewing thread. It features a specially formulated finish that provides a high level of water resistance, making it an excellent choice for outdoor products, shoes, and accessories. Thanks to its PFC-free water-repellent coating, capillary action is prevented and water absorption by the thread is avoided. When the correct sewing tension is applied, the transfer of water through the needle holes is prevented. Its high breaking strength and optimum elongation properties produce smooth and attractive seams, particularly in leather footwear applications.



### Product Properties

- Water passing through the needle holes is prevented when the correct sewing tension is applied.
- Provides superior sewing performance through its high-technology finishing processes and lubricants..
- Prevents needle heating thanks to its cotton surface.
- Ensures a natural appearance without compromising its strength, thanks to its high-tenacity core.

# Poly-Strong PC WR<sup>®</sup>

## Areas of Use

- Leather products
- Protective Footwear
- Walking Footwear
- Safety Footwear
- Furniture
- Protective clothing such as raincoat and coat

## Physical Properties

Melts at 260°C and softens at 220 - 240°C.

Shrinkage is less than 1% at 150°C.

## Chemical Properties

**Mineral acids:** Resistant to most mineral acids.

**Alkalis:** Unaffected by weak alkalis, moderately resistant to strong alkalis.

**Organic solvents:** Unaffected by common solvents, soluble in some phenolic compounds. Cotton swells in caustic solutions without significant loss of tenacity.

**Bleaching:** Polyester part is unaffected while the cotton part bleaches with hypochlorite and peroxides.

**Microorganisms (Mildew/Rot):** Unaffected.

**Washing / Dry Cleaning:** Unaffected.

**Moisture regain:** 0.4%



## Product Options

DURAK Poly-Strong(PC) WR<sup>®</sup> offers a wide range of colors in a variety of meter sizes and thicknesses.

## Color Fastness

Washing fastness at 60°C	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
Dry cleaning fastness	ISO 105 D01	Min. 4
Perspiration fastness	ISO 105 E04	Min. 4
Artificial light fastness	ISO 105 B02	Min. 4

## Storage Conditions

Must be stored away from heat, humidity and direct sunlight.



# Poly-Strong PC WR®

## Thickness and Strength Chart

Tkt No.	Nominal Tex	Strength CN	Elongation %	Needle Size (Nm)
20	120	5.900	20 - 28	120 - 140
30	105	4.900	20 - 28	120 - 140
36	78	3.950	20 - 28	110 - 130
50	60	2.800	20 - 28	100 - 120
75	40	2.000	18 - 24	90 - 100
120	24	1.020	18 - 24	75 - 90



## Other Poly-Strong PC Sub-Brands

### Poly-Strong PC®

Cotton coated polyester corespun sewing thread. It provides high tenacity thanks to its continuous polyester core while its cotton surface prevents needle heating.

### Poly-Strong PC UV®

Cotton coated polyester corespun sewing thread with UV resistance. Poly-Strong(PC)UV® minimizes UV degradation such as discoloration, low abrasion resistance and loss of tenacity.

### Poly-Strong PC CFR®

Cotton coated polyester corespun sewing thread produced by adding flame-retardant characteristics. The thread surface is coated with flame retardant chemical in accordance with the standards of chemical coating method.