



FLAME-RETARDANT COTTON COATED POLYESTER CORE-SPUN SEWING THREAD

Poly-Strong PC CFR®

DURAK Poly-Strong(PC) CFR® is a cotton coated continuous polyester core sewing thread produced by adding flame-retardant characteristics. The thread surface is coated with flame retardant chemicals in accordance with the standards of chemical coating method. Even after 20 washes, it can maintain its flame-retardant property according to NFPA 701. The flammability of the thread is reduced thus when it's removed from the heat source, flames will extinguish immediately instead of spreading as in regular polyester goods. Finishing process that increases sewing performance, regular structure, optimum hairiness level and various thickness according to different fabrics, provides perfect sewing appearance on every surface from thin fabrics to thick denim fabrics.



Product Properties

- ✦ Flame retardant structure.
- ✦ Continuous filament core provides high tenacity.
- ✦ Superior seamless sewing performance.
- ✦ Prevents needle heating thanks to its cotton surface.
- ✦ Ideal for flame retardant clothing which requires seams without compromising strength.

Poly-Strong PC CFR®

Areas of Use

- Occupational Safety
- Decoration Products
- Furniture
- Home Textile

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 against most mineral acids.

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

Organic solvents: Unaffected by normal solvents, soluble in some phenolic compounds. Cotton swells in caustic, no 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



Presentation

DURAK Poly-Strong(PC) CFR® offers a wide range of colors in a variety of meters size and thicknesses.

Storage Conditions

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



Color Fastness

Washing fastness at 60°C	ISO 105 C06	Min. 4
Water fastness	ISO 105 E01	Min. 4
Friction 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

• NFPA 701: Standard Methods of Fire Tests for Flame Propagation of Textiles and Films

POLYSTRONG(PC) CFR	LOSS OF MASS	BURN TIME
Before washing	%6,61	No drippings
After 10 washes	%3,09	No drippings
After 15 washes	%2,80	No drippings
After 20 washes	%1,64	No drippings



Poly-Strong PC CFR[®]

Thickness and Strength Chart

Tkt No.	Nominal Tex	Strength CN	Elongation %	Needle Size (Nm)
20	120	5.900	20	120 - 140
30	105	4.900	20 - 28	120 - 140
36	75	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 cospun sewing thread. It provides high tenacity thanks to its continuous polyester core while its cotton surface prevents needle heating.

Poly-Strong PC WR[®]

Cotton coated polyester cospun sewing thread with water repellent. It has a PCF-free water repellent surface coating.

Poly-Strong PC UV[®]

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