



FLAME-RETARDANT
100% CONTINUOUS FILAMENT
POLYESTER SEWING THREAD

# **Durafix CFR®**

Durak Durafix CFR® is a 100% high tenacity continuous filament polyester 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. 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
- High tenacity
- Superior seamless sewing performance
- Ideal for flame retardant clothing which requires very fine seams without compromising strength





#### Areas of Use

- Occupational Safety Clothing
- **○** Furniture
- Home Textiles
- Decoration Products
- Footwear

### **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 Solutions: Unaffected by normal solvents, soluble

in some phenolic compounds

Bleaching: Unaffected.

Micro Organisms / (Fungus, mold): Unaffected.

Washing / Dry Cleaning: Unaffected.

Moisture Regain: %0.4

#### **Presentation**

Durak Durafix 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 Testsfor Flame Propagation of Textiles and Films

DURAFIX 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



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### **Thickness and Strength Chart**

Ticket No.	Nominal Tex	Strength CN	Elongation %	Needle Size (Nm)
6	500	31.000	25 - 35	160-280
8	330	22.000	25 - 35	160-280
10	280	18.000	25 - 35	160-280
11	270	15.000	25 - 35	160-280
15	175	11.000	25 - 35	140-160
20	135	9.200	25 - 35	140-160
30	80	5.500	14-26	130-140
40	60	4.700	15-23	100-110
50	55	3.500	14-24	100-110
60	45	2.950	14-24	90-100
70	40	2.650	14-20	90-100
80	35	2.280	14-20	75-90
100	27	1.800	14-20	70-90
120	24	1.600	14-20	70-90
150	20	1.200	14-20	70-90
180	16	950	14-20	65-75
200	12	760	14-20	65-75
300	10	650	14-20	55-60
400	6	450	14-20	55-60

#### **Other Durafix Sub-Brands**

**Durafix WR**® 100% high tenacity continuous filament polyester sewing thread with water repellent.

It has a PCF-free water repellent surface coating.

**Durafix AS®** Antistatic sewing thread made of 100% high tenacity continuous filament polyester,

pre-stabilized together with a conductive material. It is designed for use in applications

where electrostatic charge is a problem.

**Durafix UV** ® 100% high tenacity continuous filament polyester sewing thread with UV resistance.

Durafix  $UV^{\scriptsize{\circledR}}$  minimizes UV destructions such as discoloration,

low abrasion resistance and loss of tenacity.

**Durafix OS®** 100% high-tenacity continuous filament polyester sewing thread with special finishing processes

in order to provide high sewing performance in the most challenging conditions. A controlled lubrication process is applied by excluding substances such as silicone, grease, graphite,

wax and paraffin during the finishing process.

**Durafix Multicolor**® Multicolor sewing thread made of 100% high-tenacity continuous filament polyester.

It is injection dyed up to four different colors to give a multi-colored effect on the thread.

**Durafix Recycled**<sup>®</sup> High-tenacity polyester sewing thread, produced from 100% recycled polyester.

It provides all the benefits a sustainable sewing thread has to offer without compromising

from its sewing performance.

