



## FLAME-RETARDANT 100% NYLON 6.6 SEWING THREAD

# **Duralon CFR®**

DURAK Duralon CFR® is a high tenacity nylon 6.6 sewing thread produced by providing flame retardant characteristic. It has a soft structure which reduces the effects of needle heat and provides excellent abrasion resistance. 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. 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.
- High sewing elasticity.
- **9** Ideal for flame retardant clothing which requires very fine seams without compromising strength.



## **Duralon CFR®**

#### Areas of Use

- **9** Occupational Safety
- **5** Furniture
- **Decoration Products**
- **D** Home Textiles
- **D** Footwear



### **Physical Properties**

Melts at 260°C and softens at 190°C. Shrinkage is less than 1% at 150°C.

#### **Chemical Properties**

**Mineral acids:** Soluble by strong mineral acids, resistant to weak acids.

**Alkalis:** Resistant to weak alkalis but it can be damaged by strong alkalis at high temperatures.

Organic solvents: Generally unaffected.

Bleaching: Unaffected.

Microorganisms (Mildew/Rot): Unaffected.

Moisture regain: %0.4

#### **Presentation**

Durak Duralon CFR<sup>®</sup> 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

DURALON 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)
8	400	25.000	20 - 35	160 - 200
10	250	19.000	22 - 32	160 - 200
15	180	14.500	22 - 32	120 - 160
20	150	10.250	22 - 32	120 - 140
30	105	6.630	22 - 32	110 - 130
40	70	5.000	18 - 28	100 - 120
60	45	3.420	18 - 28	90 - 100
80	35	2.500	12 - 25	75 - 90

### **Other Duralon Sub-Brands**

Duralon $WR^{\mathbb{R}}$	100% high tenacity nylon 6.6 sewing thread with water repellent. It has a PCF-free water repellent surface coating.
Duralon AS <sup>®</sup>	Antistatic sewing thread made of 100% high tenacity nylon 6.6, pre-stabilized together with a conductive material. It is designed for use in applications where electrostatic charge is a problem.
Duralon UV <sup>®</sup>	100% high tenacity nylon 6.6 sewing thread with UV resistance. Duralon UV® minimizes UV destructions such as discoloration, low abrasion resistance and loss of tenacity.
Duralon OS <sup>®</sup>	100% high-tenacity nylon 6.6 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.

DURAK

