



# Fire-Safe

**FLAME RETARDANT – WATER REPELLENT  
100% STAPLE SPUN PARA ARAMID  
SEWING THREAD**

## **P-Aramid WR®**

DURAK Fire safe P-Aramid WR® is a sewing thread that has a permanent flame retardant and water repellent features. DURAK Fire safe P-Aramid WR®, which is presented in various thickness alternatives, is a product made of 100% staple spun para aramid filament that provides high resistant up to 500 °C. It is an excellent choice for outdoor products, shoes and accessories as it has a specially formulated surface that provides a high water resistance. It prevents water from being absorbed by the thread thanks to PFC-free water-preventing coating material. This coating prevents the water from flowing through the stitch holes when the correct sewing tension is used.



### **Product Properties**

- ❖ Water passing through the pinhole is prevented when the correct sewing tension is used.
- ❖ Shows superior sewing properties against impacts in protective clothing with its low elongation and high strength values.
- ❖ Specially developed to meet heat safety standards in many industries such as aviation, automotive and insulation.
- ❖ Tested and certified according to EN ISO 15025 non-flammability standard.
- ❖ Excellent resistance to flame, heat and electric sparks.



# P-Aramid WR®

## Areas of Use

- ✦ Military Protective Clothing
- ✦ Filters
- ✦ Safety Footwear
- ✦ Flame Retardant Safety Workwear
- ✦ Tape-Edge Applications
- ✦ Thermal Insulation
- ✦ Protective Gloves
- ✦ Firefighter Apparel



## Physical and Chemical Properties

- Soluble at 500°C, when it's removed from the heat source, flames will extinguish immediately instead of spreading
- UV resistance is quite low. It suffers loss of color and tenacity when exposed to sunlight for a long time.
- If exposed to UV rays for 40-60 weeks, it may lose about 50% of its strength.
- High resistance to lubricants and bleaches.
- Good abrasion resistance.
- **Para Aramid should not be exposed to UV rays.**

## Presentation

DURAK Fire safe P-Aramid WR® is offered in various meter sizes and thicknesses.

## Storage Conditions

Must be stored in a place away from heat, sunlight, humidity and in black bags.

## Color Fastness

Washing fastness at 95 °C	ISO 105 C06	Min. 3
Friction fastness	ISO 105 X12	Min. 3

# P-Aramid WR<sup>®</sup>

## Thickness and Strength Chart

Tkt No.	Nominal Tex	Strength CN	Elongation %	Needle Size (Nm)
30/1	19	1.300	2 - 5	*
16/2	70	5.000	2 - 8	*
50	60	4.800	3 - 6	90 - 110
70	40	3.000	3 - 6	75 - 90

