



**100% STAPLE SPUN POLYESTER  
SEWING THREAD**

**Poly-Jet WR®**

DURAK Poly-Jet WR® is a sewing thread made of high-tenacity staple spun polyester. 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 minimized. 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 ensure smooth and attractive seams, particularly in leather footwear applications. Special lubrication is applied to achieve a high strength-to-fineness ratio and a smooth, refined appearance. This lubrication also contributes to excellent sewing performance during stitching.



## Product Properties

- Reliable sewing thread with natural appearance.
- Special finishing applications provide flawless sewing.
- High resistance to washing and chemical agents.
- Water transfer through the needle holes is prevented when the correct sewing tension is applied.

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# Poly-Jet WR®

## 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.

**Bleaching:** Unaffected.

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

**Washing / Dry Cleaning:** Unaffected.

**Moisture regain:** 0.4%

## Product Options

Durak Poly-Jet WR® 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. 5

## Storage Conditions

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



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## Thickness and Strength Chart

Ticket No.	Nominal Tex	Strength CN	Elongation %	Needle Size (Nm)
30	80	3.450	18 - 26	110 - 130
50	55	2.250	16 - 24	100 - 120
80	40	1.500	16 - 24	80 - 100
120	27	950	16 - 22	75 - 90
150	18	700	12 - 18	65 - 75



## Other Poly-Jet Sub-Brands

### Polyjet UV®

100% staple spun polyester sewing thread with UV resistance. Polyjet UV® minimizes UV degradation such as discoloration, low abrasion resistance and loss of tenacity.

### Polyjet OS®

100% staple spun 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.

### Polyjet CFR®

100% staple spun 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.

### Polyjet Multicolor®

Multicolor staple spun sewing thread made of 100% polyester filament. It is injection dyed in up to four different colors to give a multi-colored effect on the thread.

### Polyjet Eco®

100% staple spun polyester sewing thread, produced by 100% recycled polyester. It offers all the advantages of a sustainable sewing thread without compromising sewing performance.