# Technical Information for Sewing Thread.

Threads & Zips for Performance Wear

# firefly

# **Article Description**

*firefly* is a sewing thread made of 100% spun meta-aramide (e.g. Nomex or Conex) and offers an outstanding, permanent heat and flame protection up to 370°C at an excellent value.

*firefly* is tested according to EN 469, EN 531 und US-NFPA and is specified for firefighter uniforms and public authority garments.

### **Special Properties**

Sewing threads made from meta-aramide fibres do not melt, they are inherently flame retardant (carbonises at appr. 370°C), self-extinguishing and offer very good chemical and biological resistance.

## **Technical Details**

Ticket-No.:	40	70
Tex-No.:	75	51
Count, dtex:	approx. 250 x 3	approx. 170 x 3
Nm:	approx. 40/3	approx. 60/3
Strength:	approx. 2,100 cN	approx. 1,300 cN
Elongation:	approx. 28-30%	approx. 24-26%
Shrinkage (150°C):	approx. 0-1%	approx. 0-1%
Recommended Needle Size:		

### Dyeing / Fastness

- Water Fastness:	ISO 105 E01 (DIN 54006)	rating min. 4
- Wash (95°C) Fastness:	ISO 105 C04 (DIN 54011)	rating min. 4
- Perspiration Fastness:	ISO 105 E04 (DIN 54020)	rating min. 4
- Rub Fastness:	ISO 105 X12 (DIN 54021)	rating min. 4
- Hypochlorite Fastness:	ISO 105 N01 (DIN 54035)	rating min. 4

- Textile Care Labelling:



### Areas of Application

*firefly* is suitable for the sewing of heat and flame protective garments according to EN469 / US-NFPA (firefighters), EN470 (welding), EN531 (industrial heat and flame) as well as for public authority garments.

In the technical area *firefly* is offering a wide range of applications, for example for electrical isolations, filters and sealings.

### Available make-ups

Art. 9600.040 - cones of 2,500 m Art. 9700.070 - cones of 5,000 m

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