







## **SPUN ARAMID PRODUCT RANGE** Sewing threads for personal protection

#### For heat and flame protection

Personal protective equipment (PPE) requires a broad spectrum of functional thread solutions. Optimum sewability, tear- and abrasion resistance and particularly high heat resistance are important properties. These are complemented by special requirements for safety and protection, for example, cut-resistant and bulletproof clothing, heat- and flame resistant apparel, as well as ABC protective clothing. Wherever reliable performance and safety are the priorities, our aramid threads are the best choice as they meet these requirements. Besides, they also convince through their outstanding functionality, durability, a high degree of wearing comfort and an appealing look enabling modern and fashionable protective wear.

#### Why to prefer our spun aramid threads?

- Tear resistant threads for all sewing applications
- Highly heat resistant 100 % meta-aramid fibres
- Reliable temperature resistance up to approx. 360 °C
- Self-extinguishing and non-melting
- Highly durable: decomposition temperature starts at 371 °C – permanent temperature resistance up to approx. 260 °C
- Good chemical resistance against low-strength acids
  and alkalines
- OEKO-TEX<sup>®</sup> STANDARD 100 and DIN EN ISO 15025 certified for highest flame protection and limited flame spread







### Our Spun Aramid range

#### **GÜTERMANN K**

Gütermann K is our long staple spun sewing thread made of 100% NOMEX® aramid. Thanks to this thread construction it has a higher tensile strength. It is therefore ideal for applications where this property is absolutely necessary e.g. protective workwear, canvas covers and equipment where high heat and flame resistance is required.

#### **ANESAFE®**

Anesafe<sup>®</sup> is our short staple spun sewing thread made of 100% NOMEX<sup>®</sup> aramid. This thread is the most demanded aramid thread in the application of personal high heat and flame resistance clothing and equipment.

#### GÜTERMANN K AR

Gütermann K AR is our short staple spun sewing thread made of 100% meta-aramid. This sewing thread is our economical solution and is particularly suitable for sewing applications e.g. protective workwear and equipment where high heat and flame resistance is required.









Gütermann

# **GÜTERMANN K**

Material: 100% m-aramid (Nomex<sup>®</sup>) Thread construction: Spun, long fibre

#### Areas of use

Protective workwear | workwear | filter industry | home textile | aviation industry and power engineering

**Shade range** Spun aramid shade card



#### **Product benefits**

High tensile strength | Highly heat resistant | Withstands temperatures of up to approx. 360 °C for short periods | Not melting | Self-extinguishing | Good chemical resistance against low-strength acids and alkalines | Good sewability | Matte appearance

| Article           | dtex   | tex | Make-up          | Code               | Needle size            | Strength   | Elongation |
|-------------------|--------|-----|------------------|--------------------|------------------------|------------|------------|
| K 753 No./Tkt. 40 | 750(3) | 75  | 3.000 m          | 701342.X           | NM 100 - 110 / 16 - 18 | > 2.500 cN | Ø 22 %     |
| K 403 No./Tkt. 70 | 400(3) | 40  | 700 m<br>5.000 m | 701319<br>701299.X | NM 90 - 100 / 14 - 16  | > 1.500 cN | Ø 20 %     |

#### Fastnesses

| Wash fastness<br>Water fastness<br>Rub fastness<br>Hypochlorite fastness<br>Dry cleaning fastness<br>Perspiration fastness<br>Light fastness | ISO 105 C10 C<br>ISO 105 E01<br>ISO 105 X12<br>DIN EN 20105 - N01<br>ISO 105 D01<br>ISO 105 E04<br>ISO 105 B02 | grade 3 or better<br>grade 2 - 3 or better | Decomposition temperature starts at 371 °C<br>Boiling shrinkage (30 min.) < 1 %<br>Thermal shrinkage (160 °C / 30 min.) < 1 % |
|--|--|---|---|
|--|--|---|---|

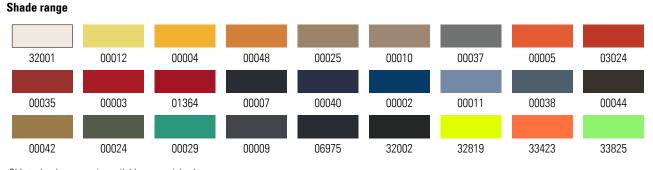
Please note: The indicated technical information is based on average values and should only serve as a point of reference.

#### **Certified Protection**

Gütermann K is certified according to DIN EN ISO 15025 and is thus ideally suited for clothing applications that must comply with the DIN EN 469, EN ISO 11612, EN ISO 11611, EN ISO 14116 standards. Furthermore it is certified according OEKO-TEX® STANDARD 100.

OEKO-TEX® CONFIDENCE IN TEXTILES STANDARD 100

**Further parameters** 



Old stock colours remain available as special colours.





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**ANESAFE**<sup>®</sup>

Material: 100% m-aramid (Nomex<sup>®</sup>) Thread construction: Spun, short fibre

#### Areas of use

Protective workwear | workwear | filter industry | home textile | aviation industry and power engineering

**Shade range** Spun aramid shade card



#### **Product benefits**

Highly heat resistant | Withstands temperatures of up to approx. 360 °C for short periods | Not melting | Self-extinguishing | Good chemical resistance against low-strength acids and alkalines | Good sewability | Matte appearance

| Article      | dtex   | tex | Make-up          | Code             | Needle size            | Strength   | Elongation |
|--------------|--------|-----|------------------|------------------|------------------------|------------|------------|
| No./Tkt. 36  | 800(3) | 80  | 3.000 m          | 705704           | NM 110 – 130 / 18 – 21 | > 2.000 cN | Ø 32 %     |
| No./Tkt. 50  | 600(3) | 60  | 4.000 m          | 705705           | NM 100 - 110 / 16 - 18 | > 1.600 cN | Ø 34 %     |
| No./Tkt. 75  | 400(3) | 40  | 700 m<br>5.000 m | 705714<br>705702 | NM 90 – 100 / 14 – 16  | > 1.300 cN | Ø 30 %     |
| No./Tkt. 120 | 270(2) | 27  | 5.000 m          | 705703           | NM 80-90 / 12-14       | > 500 cN   | Ø 25 %     |

#### Fastnesses

| Wash fastness ISO 105 C10 C grade 3 or better | Decomposition temperature starts at 371 °C                                      |
|---|---|
| Water fastness ISO 105 EO1 grade 3 or better  | Boiling shrinkage (30 min.) < 1 %<br>Thermal shrinkage (160 °C / 30 min.) < 1 % |

Please note: The indicated technical information is based on average values and should only serve as a point of reference.

#### **Certified Protection**

Shade range

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**Further parameters** 

#### 00005 03024 32001 00012 00004 00048 00025 00010 00037 00035 00003 01364 00007 00040 00002 00011 00038 00044 00042 00024 00029 00009 06975 32002 32819 33423 33825

Old stock colours remain available as special colours.





Gütermann

# **GÜTERMANN K AR**

Material: 100% m-aramid Thread construction: Spun, short staple

#### Areas of use

Protective workwear | workwear | filter industry | home textile | aviation industry and power engineering

### Spun aramid shade card: 15 colours

**Care instructions** 📨 🛦 🖸 💻 P

#### **Product benefits**

Highly heat resistant | Withstands temperatures of up to approx. 360 °C for short periods | Not melting | Self-extinguishing | Good chemical resistance against low-strength acids and alkalines | Good sewability | Matte appearance

| Article              | dtex   | tex | Make-up | Code     | Needle size            | Strength   | Elongation |
|----------------------|--------|-----|---------|----------|------------------------|------------|------------|
| K 753 AR No./Tkt. 40 | 750(3) | 75  | 3.000 m | 777918.X | NM 100 - 110 / 16 - 18 | > 2.000 cN | Ø 22 %     |
| K 403 AR No./Tkt. 70 | 400(3) | 40  | 5.000 m | 771685.X | NM 90-100 / 14-16      | > 1.150 cN | Ø 21 %     |

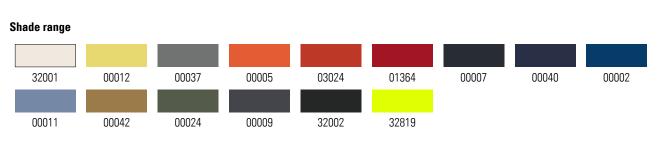
| Fastnesses   |  | Further parameters  |   |
|--|--|---|---|
| Wash fastness<br>Water fastness<br>Rub fastness<br>Hypochlorite fastness<br>Dry cleaning fastness<br>Perspiration fastness<br>Light fastness | ISO 105 C10 C<br>ISO 105 E01<br>ISO 105 X12<br>DIN EN 20105 - N01<br>ISO 105 D01<br>ISO 105 E04<br>ISO 105 B02 | grade 3 or better<br>grade 2 - 3 or better | Decomposition temperature starts at 371 °C<br>Boiling shrinkage (30 min.) < 1 %<br>Thermal shrinkage (160 °C / 30 min.) < 1 % |

Please note: The indicated technical information is based on average values and should only serve as a point of reference.

#### **Certified Protection**

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**OEKO-TEX**® STANDARD 100



Old stock colours remain available as special colours.

