



The Ultimate Cut Protection™

TECHNICAL DATA SHEET

Product Description:

Cut-Tex® PRO is an ultra-high cut resistant fabric, made out of an innovative combination of ultra-high molecular weight polyethylene (UHMWPE) and other technical fibres weaved by special high-density knitting machines.

Cut-Tex® PRO is manufactured at a UK based ISO 9001:2008 quality standard controlled manufacturing facility.

Key Applications

Cut-Tex® PRO has countless potential applications.

It is primarily being used to create slash resistant clothing, effectively helping protect frontline professionals working within hostile environments such as prisons, correctional facilities, homeland security and policing from laceration, subsequent rapid blood loss and death.

Additional key sectors for cut resistant clothing made out of Cut-Tex® PRO are flat glass handling, metal sheet pressing, recycling, automotive and similar industries.

Due to the exceptional tear resistance of Cut-Tex® PRO, this fabric is also being used to manufacture tear and bite resistant clothing for mental health care facilities and secure hospital facilities around the world, as well as schools specialised in severe learning disabilities, challenging behaviour, special needs and autism. Even if Cut-Tex® PRO cannot stop the sometimes severe bruising following a human bite, it will eliminate the risk of potentially severe infections following the skin penetration of a human bite.

Most recently Cut-Tex® PRO is being used to create cut resistant seating within public transport, cut resistant back packs or cases for travellers, and protective clothing for animals.

Many other tests around the world are currently conducted to establish additional potential applications.

Standards Width & Length of Fabric Roll

- Cut-Tex® PRO fabric is knitted on a circular machine, resulting in a tube of material, measuring 80cm flat width (160cm cut open)
- Our Cut-Tex® PRO fabric will be supplied as a tube of material.
- Each roll is 25 metre in length (40 square metre)

American Dimensions

- Cut-Tex® PRO is knitted on a circular knitting machine... hence it comes in a roll (tunnel shape) measuring 25 linear meters (82.021 feet) in length.
- The flat width is 80cm (31.4961 inches), when cut open this equals 1.60 meters (62.9921 inches).
- Total area of 1 x Roll of Cut-Tex® PRO is equating to 40sqm (430 sqf)

Fabric Weight

- 447gsm (grams per square metre)

Gauge

- 12

Protection Levels

- ISO 13997:1999 Cut Resistance = 26.4 Newtons
- ANSI/ISEA 2016 Blade Cut Resistance Level A5/A6 = 3007 grams/force
- EN 388:2016 Abrasion Resistance Level 3 = More than 2,000 cycles
- EN 388:2003 (coupe test) Cut Resistance Level 5 = 36.4 Newtons
- EN 388:2016 Tear Strength Level 4 = 518.2 Newton
- EN 388:2016 Puncture Resistance Level 4 = 271.6 Newtons
- EN ISO 13997 (TDM-100 Test) Cut Resistance Level E = 36.4 Newtons

Cut-Tex® PRO Performance Chart

> Cut Resistance - ISO 13997:1999



> Cut Resistance - ANSI/ISEA 2016 Blade Resistance Levels A1-A9



> Abrasion Resistance - EN 388:2016 Abrasion Resistance Levels 1-4



> Cut Resistance - EN 388:2003 (coupe test) Cut Resistance Levels 1-5



> Tear Resistance - EN 388:2016 Tear Resistance Levels 1-4



> Puncture Resistance - EN 388:2016 Puncture Resistance Levels 1-4



> Cut Resistance - EN ISO 13997 (TDM-100 Test)



> Fabric Weight - GSM



Appearance

Cut-TEX® PRO is available in one standard colour: 'Grey Marl'

The following additional colours (subject to minimum order volumes of 36 rolls per colour) are also available upon request:

- Olive Green Marl
- Navy Blue Marl
- Hi Viz Yellow Marl
- Hi Viz Orange Marl

Additional Information

- Cut-TEX® PRO has been washed in TEN Durawash twin-tub industrial machines. This is equivalent to 50 washes in a domestic washing machine. The cut resistance level, following this washing process has INCREASED by 4%. Test reports from INTERTEK are available upon request.
- Cut-TEX® PRO is bleach resistant
- Cut-TEX® PRO is a yarn dyed fabric
- Cut-TEX® PRO is NOT fire retardant, but it can be treated with any high quality flame retardant spray/wash.
- Cut-TEX® PRO is only available from UK based PPSS Group.
- The supply/purchase of Cut-TEX® PRO is subject to a license agreement.
- For intellectual property/copyright reasons, our high performance fabric cannot be marketed or sold under the name Cut-TEX® PRO in Germany.

Working with Cut-TEX® PRO

Cutting of Cut-TEX® PRO

- We recommend 'Hoffman HF125P' Rotary Cutting Machines or CNC cutting for high volumes.

Sewing Needle Type

- We recommend Groz & Beckert needles, with different tips and various thickness of the needle, depending on what fabric needs to be sewn.
- Apart of FFG tip that is used for F02 fabric and R tip which is used for Cordura, we recommend using Groz & Beckert RG tip needles to sew Cut-TEX® PRO.
- Thickness of the needle: for Cordura we recommend 90-110 thick, for F02 70-90 thick and for Cut-TEX® PRO 90 thick.

Thread Type

- We recommend Amann's thread (model: Saba)

Would you please describe the equipment you use for these operations?

- We recommend overlock Juki machines with cutting knife system. However it seems that it is more a matter of experience and skill rather than any special techniques. We do not use any non-traditional sewing or hemming techniques. We could send a sample for you to evaluate.

How much would the fabric and threads cost us?

- We would only supply the fabric. You would have to source your own threads.

Do you know the International customs code for the fabric and production?

- Fabric: 60063190
- Garments (made of Cut-Tex PRO: 61103091

Disclaimer

The information on this technical data sheet is based on the current status, as well as our personal experience with Cut-Tex® PRO. However, the information should not diminish the responsibility of the user to ensure with due care, that our Cut-Tex® PRO cut resistant fabric is suited for the intended purpose, surface and application.

Contact Details



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