TREVIRA CS

FABRIC FOR IDEAS

COMFORT & SAFETY
DESIGN & FUNCTION
FLAME RETARDANT
THE FABRIC THAT HAS IT ALL

The initial material for any fabric consists of fibres and yarns. They are the determining factor for function and design of the textile fabric made from them. The more varied the fibres and yarns, the greater can be the value of the fabric design. Man-made fibres, furthermore, make it possible to build in functions that supply added value to the material.

Trevira has done pioneering work in this field with its range of flame retardant fibres and yarns. As long ago as 1980 the first Trevira CS textiles made from these fibres and yarns came on the market. What is special about them is that they all meet important fire safety standards and achieve this without any chemical finish. The permanently flame retardant polyester fibres constitute the basis for a new generation of functional textiles – their flame retardant properties cannot be washed out or be lost with age or usage. In 1982 Trevira was awarded the innovation prize of German industry for this product.

The Trevira CS brand is now a synonym for flame retardant fabrics. And there are good grounds for this.
GUARANTEED SAFE

Textiles have an important role to play in interior design and furnishing. They form an integral part of the aesthetic concept, they ensure comfort and exercise a sound-deadening effect. They also have considerable influence on the origins and spread of fire. Where conventional textiles come into contact with a fire source, flames can spread with lightning speed over the material, soon engulfing the area. In contrast, Trevira CS fabrics counter the spread of flames and so help minimise the risk of fire.

These textiles give users the assurance that it is possible to furnish spaces safely. The secret of this inbuilt safety lies in the chemical structure of the polyester fibre. The flame retardant properties are in the form of a phosphor-organic compound that is firmly anchored in the fibre. External influences are not able to affect or alter this element.

Fabrics can be given a finish that is applied at a late stage and this can lose its initial protective qualities through usage, age or frequent washing. Unlike these materials, Trevira CS textiles offer long-term safety.

In order to supply maximum safety, Trevira builds in an additional level of security for Trevira CS fabrics. The company tests all materials bearing the Trevira CS brand for flame retardancy. Only after passing the burn test do the fabrics receive approval and circulate under the Trevira CS trademark. All suppliers of Trevira CS materials must conclude a contract, authorising the use of the registered Trevira CS®. In this way users can always rest assured they are handling materials that fulfil important fire safety standards throughout the world.

Trevira CS textiles guarantee tested quality. They consist of flame retardant fibres and yarns by Trevira and their partners in the spinning and yarn finishing stages. It goes without saying that Trevira maintains stringent monitoring of the guidelines safeguarding the brand.

Comparative burn test: This test shows how flame retardant Trevira CS textiles (left) melt away once the ignition source has been extinguished, while conventional fabrics go completely up in flames.
UNIVERSALLY APPLICABLE

Today easy care, hard wear and good economic and ecological properties are functions inherent in every Trevira CS fabric. They come well packaged in fabrics for drapes and decorative materials that have great strengths in design, in textiles for interior sun protection, comfortable upholstery fabrics, practical bedding textiles and technical textiles.

In the challenging contract market, as for example in hotels, clinics, offices, the cinema or the theatre, or on cruise ships, Trevira CS textiles set the standards. No wonder – since it was for this market that the flame retardant Trevira fibre was “invented” 40 years ago.

Nowadays Trevira CS textiles are increasingly entering private residences. Neither should this surprise – because the present generation of attractive, easy care Trevira CS fabrics can be very convincing here as well.

INCREDBLY EASY CARE

Trevira CS textiles are noteworthy for high colour brilliance and fastness to light. They are extraordinarily hardwearing and retain their attractive qualities for a long time, even with intensive use. Upholstery fabrics withstand high levels of abrasion and do not stain other textiles. Trevira CS materials are easy to clean and are quick drying. They are low-crease and retain their shape after washing. Marks can easily be removed with traditional cleaning agents and methods. They are, incidentally, quite economical to maintain.

Unlike what happens with other fabrics, washing them takes substantially less water, less detergent and – thanks to short drying times – less energy to dry them.

The flame retardant properties are firmly anchored in the fibre and cannot be lost in washing. As a result, functionality is retained throughout the life cycle of the textiles, with no need for costly processes to renew properties.

UNEXPECTEDLY SUSTAINABLE

When it comes to sustainability, textiles made from polyester do not have to take second place when compared with materials in natural fibres. On the contrary, both in manufacture and in usage, they consume fewer resources than natural fibres, for instance with regard to the use of water and agricultural space. The textile can also supply many advantages during the usage stage. The ecological washing process (short wash cycles and drying times, consumption of less water and detergent) is a real plus point for the environment. Polyester is also non-toxic, does not degas and is easily recycled or safely incinerated to create energy.

Trevira textiles are environmentally friendly. Which cannot be said of fabrics in which specific functions are achieved by applying a chemical coating. When washed, Trevira CS fabrics do not release any finish that can harm the environment. With Trevira CS, functions active in the textiles, such as flame retardancy for example, are firmly anchored in the fibres and yarns. It is here they stay – not in the environment – throughout the total life cycle of the materials. And this is a lengthy one, since Trevira CS fabrics have a long working life.

Flame retardant Trevira fibre and filament yarns are certified to Oeko-Tex Standard 100 and here attain the highest rating, i.e. they are suitable for baby articles.

Trevira is actively committed to the “Responsible Care” initiative of the Chemical Industry Association of Germany (VCI). The VCI takes as its aim the continual improvement of performance in relation to conserving the environment, to plant safety and protecting the health of users and employees – independently of legal requirements.

During production certain processes are carried out so that operations are safe and kind to the environment. For the most part fibre spinning takes place directly from the melt product, achieving massive savings in energy consumption and CO2 emissions. No solvents are involved in the manufacture of flame retardant fibres and filaments and no halogens or nitrogenous compounds used. Chemicals required in production are kept to a minimum in storage and during direct usage. Where at all possible, toxic ingredients are replaced by products that are less dangerous and more environmentally friendly.

On the basis of environmental standard DIN ISO 14001 and quality standard DIN ISO 9001, Trevira is continuously optimising its environmental targets. All employees, suppliers and customers are involved in the process as well.

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TREVIRA CS – THE BRANDS

Trevira CS collections are becoming more and more ambitious in their designs – and this at a time when the market is increasing its demands and fresh end uses are being developed. In appearance it is frequently impossible to distinguish them from textiles made from natural fibres. At the same time there are fresh surfaces appearing, seemingly technical, which can only be achieved with the use of man-made fibres. This is made possible by continual expansion of the fibre and yarn programme, which increasingly contains new fancy and textured yarns from spinners and yarn finishers. It is thanks to their creativity that fabric designers can draw on the most varied and innovative range of flame retardant yarns when they create Trevira CS materials.

Flame retardant Trevira fibres and yarns are thus not only the basis for the functionality of textiles, they also ensure that manufacturers and fabric houses are able to set international trends.

To meet the ever more complex demands of the market and offer our customers and partners greater flexibility, the Trevira CS concept has been expanded to include two new brands, Trevira CS flex and Trevira CS eco. Besides the high brand quality and performance that Trevira CS customers have come to expect, these two new brands offer properties and functionalities especially tailored to meet specific requirements.

TREVIRA CS

As always, the Trevira CS brand stands for textiles made of 100 % flame retardant fibres and yarns by Trevira and their partners in the spinning and yarn finishing stages. Only Trevira fibre and filament yarns with a low-melt component are permissible to be used as an addition together with the flame retardant products from Trevira and partners. As Trevira CS textiles are made up of only one or at the most, two yarn components, they are particularly suitable for applications where materials must meet specific requirements besides that of flame retardancy.

The fabric brand for flame retardant textiles:

- consisting of 100 % flame retardant Trevira fibres and yarns
- with additional low-melt components from Trevira where applicable
TREVIRA CS FLEX

To add further functionalities and/or design elements to flame retardant Trevira CS textiles, Trevira CS fabric manufacturers and end users want to see more options in terms of how materials can be combined. It goes without saying that safety is our highest priority and can never be compromised. This means that the Trevira CS brand will only ever be awarded to textiles that pass the Trevira burn test. This is why, the textile fabric must comprise at least 75 % flame retardant fibres and yarns by Trevira and/or our partners in yarn processing. The remaining 25 % can be made up of other flame retardant specialties by Trevira or approved partners, including up to 5 % non-Trevira materials such as fancy yarns. However, non-Trevira flame retardant fibres and yarns may only be used if they cannot be obtained from Trevira.

TREVIRA CS flex – SAFE AND VARIED.

The fabric brand for flame retardant textiles:
- consisting of at least 75 % flame retardant Trevira fibres and yarns
- where applicable to be combined with up to 25 % flame retardant specialties by Trevira and/or approved partners
- may include up to 5 % non-Trevira materials (applied solely or as part of the 25 %)
- combinations with non-Trevira flame retardant yarns are only possible if the yarns cannot be obtained from Trevira

TREVIRA CS ECO

The Trevira CS eco brand unites the two properties of flame retardancy and sustainability. Under this new brand, Trevira offers products which have been manufactured through different recycling processes. The flame retardant filament yarns are based on recycled PET bottles and consist of 50 % recycled content (Post-Consumer). To produce recycled fibres, Trevira also uses an agglomeration plant, where residual waste from manufacturing sites is transformed into serviceable raw materials which rival the original products in both quality and performance. Fibre yarns produced from this material have a recycled content of 100 % (Pre-Consumer).

TREVIRA CS eco – SAFE AND SUSTAINABLE.

The fabric brand for textiles:
- consisting of at least 50 % recycled materials
- where applicable a combination of flame retardant recycled fibre yarns and flame retardant virgin yarns is possible
- eligible for GRS certification/labelling

The fabric brand for flame retardant textiles:
- consisting of at least 75 % flame retardant Trevira fibres and yarns
- where applicable to be combined with up to 25 % flame retardant specialties by Trevira and/or approved partners
- may include up to 5 % non-Trevira materials (applied solely or as part of the 25 %)
- combinations with non-Trevira flame retardant yarns are only possible if the yarns cannot be obtained from Trevira
THE FABRIC THAT GIVES YOU THE EDGE

TRADEMARK SERVICE AND SUPPORT

Trevira CS – a brand that focuses on partnership.
Trevira CS is more than a product. Trevira CS is a brand that stands nowadays for flame retardant fabrics that have high quality and great strength in design. So that all those active in the market are aware of this, we provide a network for our customers along the whole supply chain – from yarn manufacturer to interior designer. A variety of services are available to customers according to their needs. In this way we all enjoy the benefits in the market together, under the Trevira CS banner.

TRADEMARK SERVICE

Trevira® is a registered trademark. Textiles bearing the Trevira CS brands are a guarantee of tested quality. After passing burn tests, textiles obtain trademark approval that ensures that they comply with requirements set out in our regulations.

SALES SUPPORT

We issue brochures, sales arguments and promotional material for customers’ own use, which are available in several languages. Customers and partners can also obtain labelling gratis. Appearances at trade fairs and other events, both at home and abroad, offer customers an attractive platform for the presentation of their latest Trevira CS fabrics. For customers and partners we also provide product training on Trevira CS.

ADVISORY

We offer support when it is a question of special applications for textiles and of burn and textile testing. We provide numerous certificates, surveys and test reports, which can assist in overcoming barriers to market entry. We can also supply segment-specific information and data on contract markets for customers and partners.

TREVIRA CS CLUB

To secure and grow the success of the Trevira CS brand in the long term, we want to work closely with our customers and partners along the textile supply chain. To this end, we set up the Trevira CS Club, open to all suppliers of Trevira CS products. Our customers and partners can access specific services, which vary according to membership status (Gold, Silver or Member-only). The status within the club is derived from the fulfilment of certain criteria and is evaluated every year. Eligibility for each membership status is not just dependent on your business sales figures, but also depends on other factors that play a part in our shared success, such as creativity, geographic presence and, especially, brand loyalty.

WWW.TREVIRA.COM

On our website you can submit your applications for the Trevira trademarks and find all relevant documents and certificates for our products. Our sales literature is available in the download center. Additionally there is of course a lot of information about our products and especially about Trevira CS. The performance catalogues of our laboratories are also available on our website.

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TREVIRA CS – ALL THE ARGUMENTS AT A GLANCE

- Wide choice of product, many possible applications: curtains, drapes, bed textiles, roller blinds, vertical blinds, room dividers, furniture fabrics, wall coverings
- Innovative products through continuous further development of Trevira fibre and filament types
- Easy care, low-crease and dimensionally stable
- Short wash cycles at low temperatures save water, detergent and energy
- High colour brilliance and fastness to light
- High resistance to rub
- Perfectly comfortable when seated due to upholstery fabrics with high breathability
- Flame retardant Trevira fibre and filament yarns are certified to STANDARD 100 BY OEKO-TEX® (highest rating – suitable for baby wear too)
- Compatible with the skin

- Permanent flame retardancy through controlled modification of the polyester molecule, which cannot be lost due to wear, washing or age
- Permanently flame retardant without additional finishing agents
- No after-glow and only very slight development of fumes in the event of fire
- Safe due to trademark testing and approval
- Compliance with important international fire safety standards, e.g. DIN 4102 -B1; EN 13501-1/B-s1, d0; EN 13773 class 1; NF P 92503-507/M1; BS 5867, Part 2 Type C; UNI VF 8456/8457 - classe uno; EN 1021 Part 1 + 2
- Support through general test certification
- Uniformly high quality levels through constant trademark monitoring by Trevira
- In addition to contract business also ideal for use in the private sector
THE FABRIC THAT OFFERS VARIETY

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HOTELS & RESTAURANTS
In most cases they have to comply with safety regulations laid down in law. With Trevira CS fabrics every textile element in a hotel can be designed safely: drapes and decorative fabrics, blackout materials, interior sun protection, upholstery materials, bed covers, decorative elements such as cushions or trimmings, mattresses, bed and table linen. Trevira CS fabrics fulfil worldwide all the important fire safety standards demanded in hotels and restaurants – in the lobby, hotel room, the bar or in the club, and in restaurants and conference centres.

The decoration and furnishing of hotels brings about many different challenges. Depending on the requirements of the contract customer, hotel designers move in the area of tension between implementing new design trends and traditional patterns of décor. The furnishing and decorating is almost always carried out in the context of strictly limited budgets. While contract fabrics have to meet all these demands, yarn and fabric developers have made considerable progress in recent years. The selection of materials available on the market is so comprehensive that virtually all designs can be realised. And this holds true without abandoning textile properties, such as easy care, resilience and longevity.
With many hotels, sustainability is a subject that comes into play in selecting materials and products. Many experts see sustainable design as the most important trend in the hotel industry. Eco-friendly products are in demand, but with them, however, one would not want to introduce any compromises in design. To accompany their flame retardant properties, textiles must be able to demonstrate a manufacturing process that is environmentally friendly and makes sparing use of resources, and ultimately one that is economic and energy saving for the user. Fabrics must not contain any toxic substances either and they have to be recyclable in a manner that is compatible with the environment. It is good to know that Trevira CS fabrics satisfy all these criteria.
Trevira CS materials come with many plus points. Trevira CS fabrics in their antimicrobial variant are of particular interest for use in the hospital and care sectors, since they combat the spread of microbes. In addition to flame retardant properties, Trevira CS Bioactive textiles possess an active agent based on silver, which is firmly integrated in the fibre raw material. The additive exercises a permanently antimicrobial effect that is not affected either by washing or usage.

The effect works on the fibre surface, yet the antimicrobial agent does not migrate into the environment. Trevira CS Bioactive is compatible with the skin. Trevira CS Bioactive textiles are consequently ideal for use in areas where there is strong emphasis on cleanliness and freshness. It goes without saying that both flame retardant and antimicrobial Trevira fibre and filament types hold the Oeko-Tex Standard 100 certificate and are thus free from toxic substances.

Anywhere textiles require frequent washing there are questions raised about factors like easy care and economy. Trevira CS safety fabrics are easily cleaned, remain durable and keep their shape despite frequent washing. In the wash process they absorb only slight amounts of water – less water means at the same time fewer detergents and a drying cycle that is evidently shorter, and therefore energy-saving. Resistance towards current methods of disinfection is another point worthy of notice, one that predestines Trevira CS fabrics for use in the hospital and care sectors.

Textiles need to have many functions under hospital conditions. But even so, one should not underestimate their aesthetic function. The sick and those in need of care often suffer from restrictions on their mobility and sensory capacities. They have an increased need for safety and orientation. Nowadays we are aware that an environment geared to patient needs can give positive support to the healing process.
There are also areas where living and care are blended together, of increasing importance for the future, and much is dependent here on creating an environment that is carefully conceived, considering the psychology of aesthetics and colour. Design, coloration, and haptic qualities of the textiles can be vital factors in furnishing and orientation. By drawing on Trevira CS collections specially geared for use in the hospital and care sectors, it becomes possible to decorate and furnish these institutions in a way that takes account of such functions and at the same time discover new value in the concept of the “feel good factor.”

TREVIRA CS – FOR THE PLACE THAT MAKES YOU FEEL GOOD.

OFFICE & PUBLIC SPACES
THE FABRIC TO COUNTER GREY ROUTINES

Trevira CS – for a safe and comfortable stay at work and in public spaces. Whether you’re sitting in the cinema, in a concert hall, in a hotel lobby or on an office chair – there’s a good chance that you’re sitting on a Trevira CS upholstery fabric. In this case, you are not only sitting comfortably, but also safely. Upholstery fabrics bearing the Trevira CS trademark are flame retardant and meet important fire protection standards that apply internationally to public buildings and places of assembly. Of course, Trevira CS drapes, curtains, screens and blinds in public buildings also live up to the highest standards in terms of both safety and design.

WORKSPACE

Great demands are placed on interior designers to create modern work environments and business premises. Choice of colours and materials, taking into account room acoustics and lighting, all play a particular role here. Those present in such surroundings, should feel well and be able to concentrate on their tasks.

Often these premises also have a representative function that reflects the identity of the institution in question. By using Trevira CS fabrics, the interior designer can satisfy the demands involved in creating such premises in office buildings and can do so with flexibility. Upholstery fabrics are extremely durable and withstand stresses of all kinds in terms of wear and abrasion resistance. Shape retention is extremely good, as these upholstery fabrics show no creases even when used in contract conditions. Colour brilliance and high levels of light fastness counteract the grey, daily routines of office life. Breathability and good moisture transport are further assets that ensure a high level of seating comfort.

In addition to the pure function of interior sun protection, these textiles provide an aesthetic response to the demands of modern architecture that frequently plans to include large areas of glass.

Room acoustics are also one of the factors that have a decisive influence on the work environment. Special Trevira CS collections, embodying a function that is demonstrably sound deadening, have been specifically developed to effectively counter disturbing noise levels. Depending on requirements, curtains, room dividers, wall and ceiling coverings can be used.

TREVIRA CS – MULTIFUNCTIONAL AND WITH THE DESIGN STRENGTHS FOR A MOTIVATING WORK ENVIRONMENT.
VENUES
Theatres, cinemas, concert halls, sports arenas, and museums – wherever many people gather to participate in an event, there are stringent fire safety regulations to observe. This is a good thing, since such places must above all be safe. Visitors take this for granted – but at the same time, they also expect a pleasant and exclusive ambience.

Hardwearing, breathable Trevira CS upholstery materials form the basis for excellent seating comfort. Only a slight amount of maintenance is required to retain quality and spots can easily be removed. Trevira CS fabrics are resistant to wet rub, which means that they do not stain other materials. They retain their shape and are non-crease, enabling them to withstand many years of high wear. They are always accompanied by the integrated function of flame retardancy, which is never lost during the whole lifespan of the fabrics.

Wall coverings are a factor that is particularly important for the interior design of theatres and cinemas. Here, they ensure optimal room acoustics and a soft, relaxing atmosphere. However, Trevira CS fabrics are also used both on stage and backstage, for example as stage curtains or for technical purposes. In theatres with a rich history, it is quite common that historic models need to be used for refurbishments. In this case, the wide range of flame retardant yarns is second to none in terms of offering the possibility to reproduce traditional designs and qualities.

TRADE FAIR CONSTRUCTION
Depending on their purpose, textiles in trade fair construction must often be sprinkler-suitable as well as flame retardant – and specialist manufacturers and dealers can also make these technical textiles available in Trevira CS quality. Elasticity is another property often required of textiles in trade fair construction, as they are frequently stretched in order to adjust to both angular and organic shapes. In the process, they must keep their shape, must not crease, and they have to be printable. There are textile solutions here, too, with Trevira CS fabrics that have been designed for this specific purpose.

TREVIRA CS – SETTING THE SCENE FOR EVENTS.
THE FABRIC
THAT LINKS DESTINATIONS

Trevira CS – under way in comfort and safety by all modes of travel.
By land, sea and air – safety comes first. Especially since this is often stringently prescribed, Trevira CS safety fabrics ensure that the textile furnishings of modes of transport do not catch fire, either in the event of accident or through negligence. Over recent years there has also been a noticeable development to furnish and decorate the interiors of transport modes in high quality style.

Certain apparently incompatible principles have to be reconciled in selecting materials: sedate luxury and high levels of fire safety, convincing quality of design and high levels of resilience, attractive looks and straightforward maintenance, fastness to light, colour brilliance and lasting durability. Here Trevira CS is a convincing choice, with its ideal material properties and collections that display great strengths in design.

One factor is also persuasive in the transport sector and that is potential savings in terms of weight, something that is demanded from all materials employed, as it should produce cost reductions for the transport operators. Trevira CS can clearly score here, when compared with other textiles.
RAIL TRAFFIC
Like all modes of transport, international rail traffic has special requirements when it comes to fire safety. In recent years, there has also been an increasing emphasis on attractive designs for coach interiors – partly to create a more appealing environment for passengers, but also to reflect the ongoing trend towards individualisation through the use of specific design elements. The influence of the contract sector is increasingly making itself felt in the design of interior spaces, with textiles playing a major role in creating the overall look and feel of passenger and catering areas on trains. Flame retardant Trevira CS fabrics meet these demands in terms of both safety and design.

AVIATION
We are becoming ever more mobile, increasingly taking to the air for business and leisure. Air passengers require a high-performing environment that is safe and comfortable, so airlines choose textiles that reflect these goals. Trevira CS meets the international air travel safety standards. Offering ideal material properties, it is available for nearly all fields of textile application.
MARITIME SHIPPING

The special requirements relating to the safety of passengers on cruise ships mean that particularly stringent fire protection regulations govern this sector. These regulations apply internationally and are enforced through legislation based on resolutions passed by the IMO (International Maritime Organisation). The requirements for burn tests are set out in the FTP Codes.

Trevira supports its customers in obtaining certification for their Trevira CS textiles by giving them access to all the information required for the application process. This speeds things up so that flame retardant Trevira CS fabrics can be put to use on board ship more quickly.

Alongside fire protection regulations, it goes without saying that flame retardant Trevira CS textiles meet the demands of designers and architects when it comes to creating an exclusive environment for passengers on luxury liners.
All Trevira CS textiles are noted for high colour brilliance and fastness to light. The materials glisten for a long time, just as they did on day one. In addition, the fabrics are extremely resilient and maintain their appearance over long periods, even with intensive usage. Upholstery materials withstand high levels of abrasion and do not stain other textiles.

Those in particular who would like their home to be safe are in the right place with Trevira CS. This is because Trevira CS fabrics are permanently flame retardant, offering long-term safety, and they are not affected in any way, either by age or usage.
There are over a thousand Trevira CS collections available worldwide, offering all furnishing materials that can be used in the private sector, i.e. drapes, decorative and upholstery fabrics. There are also numerous attractive collections in the interior sun protection sector, cutting a good figure in front of windows at home.

TREVIRA CS – LIVE NICE AND SAFELY AND ENJOY MANY PRACTICAL ADVANTAGES.