



Permanent flame protection
for synthetic fabrics



Further information about the safe use of the product can be found on our Safety Data Sheet!

The recommendations and information about our products given here in words and writing are based on extensive research work and represent our current experience in the textile finishing business. They are non-binding – including with regard to the intellectual property rights of third parties and foreign laws – and do not exempt users from testing the product and process themselves for suitability for their purposes. In particular we do not accept any liability for any purposes not expressly mentioned by us in writing. We reserve the right to make technical changes in the course of new product development. In the event of damage please refer to our General Terms and Conditions of Sales and Delivery, Item 7.



Permanent flame protection for synthetic fabrics

With the **pyroshell™** technology, Textilcolor is setting completely new standards in flame protection. Reliable protection from heat and flames is now possible on synthetic fabrics and provides outstanding safety.



New standards in safety and comfort

pyroshell™ revolutionises flame protection and minimises potential burns. When a fabric with **pyroshell™** technology is exposed to a flame, a massive volume increase is triggered. As a result, both the heat and the oxidising gasses are kept away from the fabric. In addition, the time between the onset of pain caused by the skin heating up and the occurrence of second-degree burns is doubled. Compared to conventional flame protection articles, the wearer has more time to react to the fire.

Textilcolor has succeeded in combining permanent flame protection with polyamide and polyester fabrics. Therefore, safety personnel, railway workers, police officers or electricians, for example, are not only ideally protected in the case of possible contact with fire and sparks, but can also enjoy the familiar comfort of synthetic functional fabrics.



WATER REPELLENT



WINDPROOF



FLAME RETARDANT



BREATHABLE

- Minimizes potential burns with lightweight protective clothing
- Hardwearing and sustainable
- Flame protection is free of phosphorus and halogens
- Modular use (can be combined with other Textilcolor technologies)
- Polyester-based, available in all high-visibility colors
- Polyamide-based with maximum abrasion resistance
- Can be printed with camouflage

Sustainability

pyroshell™ is produced in accordance with the bluesign® system. The bluesign® system is the solution for a sustainable textile production. It eliminates harmful substances right from the beginning of the manufacturing process and sets and controls standards for an environmentally friendly and safe production.



Performance tests

Made-to-measure flame protection

pyroshell™ is not only a technology but also a comprehensive, modular overall concept. Depending on the area of use and requirement profile, the **pyroshell™** flame protection fabric complies with a broad range of norms such as EN ISO 11612 (clothing to protect against heat and flames), EN ISO 11611 (protective clothing for use in welding and allied processes), DIN EN 1149 (electrostatic protection), EN 343 (protection against rain) or EN 61482-1-2 (workwear for protection against electric arcs).

Articles coloured according to EN 20471 high-visibility colours are also combinable with **pyroshell™** (Bright-Yellow, -Orange, and -Red). Of course, all other customer-specific colors can also be combined with **pyroshell™**.

pyroshell™-test: limited flame spread in accordance with EN ISO 15025:A



This test measures the limited flame spread on vertically oriented textile fabrics when exposed to a defined flame for 10 seconds. The **pyroshell™** flame protection fabric passes the 10-second test and the flame does not continue to spread even after an additional 5 minutes of exposure.

