

PROBAN®

PROBAN® is a chemically treated Cotton fabric designed to protect the wearer from a range of workplace hazards such as arc flash, flash fire, molten ferrous metal splash, exposure to welding and wildland firefighting.

The PROBAN® process ensures the fabrics are guaranteed for flame resistance for the life of the garment, provided recommended wet laundering or dry cleaning procedures are followed.

Identification	
Fabric name	PROBAN®
Weight (g/m ²)	340g/m ²
Composition	100% Cotton
Weave/knit	3x1 Twill S
Description	FR PROBAN® Heavy weight drill
Compliance	AS/NZS 4824; ISO 14116 Index 3, ISO 11611 Para 6.7; ISO 11612 Para 6.3 after 50 wash dry cycles according; ISO 15797 Procedure 8

Applications
<p>PROBAN® is used by Elliotts for the following safety apparel and accessories:</p> <ul style="list-style-type: none"> - Wildlands Firefighting Apparel - Rescue Coveralls - Welding Safety Apparel - Wakatac Welding Safety Apparel

The PROBAN® Chemical Process
<p>PROBAN® is both a chemical and a quality controlled technological process, treatment takes place at the finishing stage of cotton and cotton blended textile manufacture.</p> <p>The PROBAN® process involves chemical impregnation. Drying and curing with ammonia gas using Rhodia's patented licensed technology followed by oxidation and finally neutralisation.</p> <p>The process of polymer formation is irreversible. The polymer is completely insoluble and is embedded in the body of the fibre. The polymer can only be removed by powerful oxidising agents, particularly in the presence of metal ions. See wash factors to be avoided.</p>

The PROBAN® Process
<ol style="list-style-type: none"> 1. Proban molecules are sufficiently small and linear to penetrate the internal areas of the cotton fibre. Some chemical will be present in the spaces between the fibres. 2. Drying removes excess moisture and prepares the fabric for curing. 3. Dried fabric is cured with ammonia gas. This causes the small molecules to cross link and form a polymer. The polymer is then physically trapped and fixed in the core of each fibre. 4. A final oxidation and neutralisation treatment completes polymer fixation and removes any residual by-products. <p>Lifelong protection: PROBAN® finished fabrics retain their flame retardant properties for the lifetime of the garment. Fabrics acquire their flame retardant properties from the polymer which is embedded into the fabric. It can only be removed by powerful oxidising agents. See wash factors to be avoided</p> <p>Flame performance: When exposed to flame, PROBAN® fabrics form an insulating char, this stays in place and helps protect the wearer. PROBAN® fabrics do not smoulder, have no afterglow, do not melt and the flame doesn't spread outside the charred area.</p>