



# NAQUA

## PFAS - FREE REPELLENT FINISH

### What are PFAS?

**PFAS (*Per-and polyfluoroalkyl substances*) are a group of chemical substances derived from hydrocarbons where hydrogen atoms have been replaced by fluorine atoms.**

The estimated amount of existing individual PFAS is above 20.000 substances which can be found in fresh water, soil and air. The chemical bond between carbon and fluorine is a strong one, thus PFAS are considered the forever chemicals. Some of these PFAS are toxic to both humans and wildlife and they have been linked to a variety of health issues.

Therefore, we want to lead the way towards PFAS-Free PPE in the Protective wear Industry, for which we offer our Naqua finish.

This high-performance finish will provide you with chemical protection to aqueous chemicals such as sulfuric acid, sodium hydroxide and other water-based chemicals and stains.



With NAQUA technology  
it is now possible to get  
certification (type-6).

## What are the minimum requirements of EN 13034 (type 6)?

Protective clothing type 6 are meant to cover at least the body, arms and legs. For this purpose, coveralls or jacket-pant sets can be used.

Among the requirements we can find different mechanical parameters (such as abrasion resistance, tear strength), however, the main challenge with Naqua technology is to reach minimum requirements for chemical protection: repellence and penetration index.

| PARAMETER   | MINIMUM REQUIREMENT EN 13034 TYPE 6            |
|---|--|
| Abrasion resistance   | Class 1  |
| Tear strength   | Class 1  |
| Tensile strength  | Class 1  |
| Puncture resistance   | Class 1  |
| Repellency / penetration index tested on:<br>1 · Sulfuric acid (30%)<br>2 · Sodium hydroxide (10%)<br>3 · 1-Butanol (not covered by naqua technology)<br>4 · O-xylene (not covered by naqua technology) | Index 3 / 2 in at least one out of 4 chemicals |

Other parameters, not included in this standard, have been proven not to be affected by Naqua finish (FR properties, antistatic, molten metal splashes, welding properties...).

Naqua technology has been tested in many fabrics of our range, covering many different blends, weights and structures. Using this PFAS-free finish (also known as C-0 finish), EN 13034 can be achieved in any of our products, even after 20 cycles of cleaning\*.

## Re-impregnation recommendations

Please make sure to use a PFAS-free (C-0) product during washing.

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\*Dry cleaning is not compatible with Naqua finish