

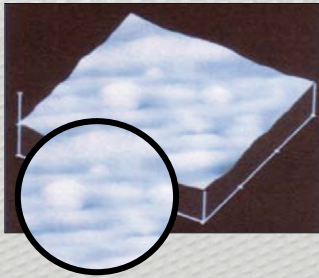
IBENA® protective fabric with

100% PFAS-free eco-friendly fabric protection

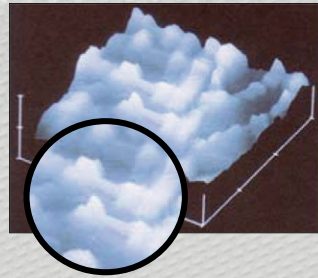


The use of chemical- and water-repellent agents that are PFAS-free is important for several reasons: PFAS are harmful to the environment and human health. They accumulate in the environment and are difficult to break down.

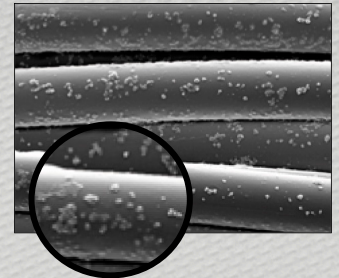
The innovative bionidry® impregnation is a fluor-free patented process that provides permanent PFAS-free fabric protection.



fabric surface
without plasmatreatment



fabric surface
with plasmatreatment



fabric surface
with plasmatreatment
and bionidry®

How bionidry® works:

This eco-friendly finish consists of three important components.

First, the fabric is treated with a unique **plasma technology**. This enlarges the fabric surface and allows it to absorb more water-repellent molecules. The process is dry and therefore completely emission-free.

After the plasma treatment the fabric will be impregnated with a patented combination of **biological chitosan** and **fluor-free water-repellent agent**.

Chitosan is obtained from the chitin shells of shellfish and is a waste product from the food industry that finds a useful application here. Together, chitosan and hydrophobic impregnating agent create a strong breathable surface with permanent protection in accordance with DIN EN 13034.

This technology is based on the **Cradle to Cradle certified Product Standard** and is certified "GOLD" in the "Material Health" category (version 4.1).

The certificate confirms that all ingredients used in the product are harmless and recyclable.



bionidry® impregnation. **Overview of advantages:**

- PFAS-free protection against alkalis and acids in accordance with DIN EN 13034
- water-repellent and breathable
- industrial washing at 70 degrees possible
- up to 100 washes without re-impregnation, depending on quality
- re-impregnation possible, no reactivation temperature necessary
- Cradle to Cradle certified technology protects people and the environment

