

Q&A on PFAS for fashion and textile companies

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PFAS is currently high on Denmark's agenda, and a discussion about a potential national ban on the substance is underway. The Minister of Environment has already expressed his intention to include textiles in the list of product groups where PFAS should be banned.

However, Danish unilateralism can pose a challenge, so it is important to ensure that the strict requirements proposed are the same across all EU countries.

But what exactly is PFAS? Is it harmful to health? And what can you do if you want to make sure that you live up to the new requirements? Get answers in the Q&A below.

What is PFAS?

PFAS refers to the group of perfluoroalkyl and polyfluoroalkyl substances, which includes up to 12,000 different chemicals that contain organofluorine compounds. These chemicals are commonly used, but they can be difficult to degrade, which means they can accumulate in the human body and the environment over time. Several of these substances can also spread via water and air currents.

PFAS are known for their unique properties, such as their ability to repel water, dirt, and grease and to provide a fire-retardant effect.

The substances can harm the environment and health, while at the same time not degrading. Therefore, there is great concern for them. PFAS is also referred to by other names such as fluorinated substances, perfluorinated substances, PFCs, and fluorocarbons. Some examples of PFAS include PFOA, PFOS, and PTFE, which are used in Teflon and Gore-Tex.

In which textiles can PFAS occur?

Due to their special properties, PFAS can be used as impregnating agents for water-repellent breathable membranes, such as those used in rainwear, outdoor clothing, sportswear, workwear for hospital employees, pilots, the military, and firefighters.

PFAS has also been found in a number of processes such as dyeing and bleaching of textiles, use in foaming retardants, surface treatment of cotton, and the manufacture of leather goods.

Is PFAS in clothes and shoes harmful to health?

While it is not considered dangerous to wear shoes or clothes with PFAS in isolation, the combined impact of exposure to different sources of PFAS can be harmful to both health and the

environment. Some PFAS substances can affect health, and some are suspected of being endocrine disruptors and carcinogens.

The Danish authorities have set limit values for PFAS in drinking water, soil, groundwater, surface water, and food for 12 specific PFAS compounds.

How is PFAS harmful to the environment?

The main challenge with PFAS is that they either do not degrade or degrade into other persistent substances, which means they can accumulate in the environment. Some PFAS substances can harm the environment and health and can accumulate in humans, animals, and plants. The Danish Environmental Protection Agency states that the best-studied PFAS substances are known to cause health effects such as liver and immune system damage, lower birth weight, and effects on fertility and/or the unborn child. PFAS substances are also suspected of being endocrine disruptors and carcinogens.

When clothes and shoes containing PFAS are incinerated or otherwise become waste, they can contribute to the spread of PFAS in the environment, contaminating groundwater, surface water, and soil.

What is a potential ban about?

In February 2023, the European Chemicals Agency (ECHA) published a proposal to restrict the manufacture, use, and placing on the market of over 10,000 PFAS substances in the EU. The proposal includes single substances, mixtures, and articles, such as textiles, and has been prepared by Denmark, Germany, Norway, the Netherlands, and Sweden.

WEAR believes that a common EU ban is important to ensure that the same strict requirements are imposed on all EU countries, thereby avoiding different rules in different. As global trade in textiles and other goods continues to grow, disparities in national regulations can create uneven market conditions and supply chain challenges. Furthermore, regulating online marketplaces can be particularly difficult, making it crucial to find effective solutions to ensure compliance with bans on harmful substances.

What is the aim of ECHA's proposal?

The aim of the proposal is to limit the spread of PFAS substances and thus reduce the risks of adverse impacts on human health and the environment.

What does this mean for textiles?

A ban on PFAS in all textiles, including those used for shoes (and other consumer items), is proposed, with a transitional regime of 18 months from adoption. There are certain time-limited exemptions related to textiles used for specified safety equipment.

What does this mean for safety equipment?

The Danish Working Environment Authority sets specific safety requirements for workwear, such as the EN13034 certification that protects users from liquid chemicals, which currently require impregnation with PFAS. However, the proposed restrictions do include exemptions for personal protection and equipment used in activities involving fire, water, and oil.

More information on these exemptions can be found [here \(page 5\)](#).

What happens next?

The next step in the restriction process is a six-month public consultation period, beginning on 22 March 2023. During the consultation phase, anyone can comment on the proposal and contribute scientific information on (necessary) use, including input on alternatives, costs, etc. Specific documentation related to a number of other possible exemptions for use is requested, if a need can be demonstrated. On 5 April 2023, the European Chemicals Agency (ECHA) will hold an information meeting on the restriction proposal.

In parallel, the proposal is being examined by the Scientific Committees of the European Chemicals Agency, which will also include the responses received in their final evaluations. It is expected that the European Commission will present the final proposal for regulation in 2025. The restriction process is described in more detail on the website of the European Chemicals Agency.

How can you phase out PFAS from your production?

If there is a possibility that your textiles contain PFAS, it is advisable to discuss with your supplier about conducting tests to determine the presence of the substance and creating a plan to phase it out.

It's important to note that even if PFAS is not used in the finishing of your textile products, the substance can still linger on machines and other equipment, leading to cross-contamination. Therefore, it is crucial to ensure that all products are free of PFAS, regardless of whether post-treatments with PFAS are used or not.

What should you be aware of in relation to recycled fibers?

When it comes to recycled fibers, it's worth noting that they may contain PFAS, as the origin of the fiber mixtures is typically difficult to trace. Thus, it's recommended to conduct tests for PFAS content before using or considering the use of recycled fibers in your production.