

2020 ANNUAL UPDATE ON “GORE FABRICS DIVISION GOAL AND ROADMAP FOR ELIMINATING PFCS OF ENVIRONMENTAL CONCERN”

Introduction

In February 2017, Gore announced the “Goal and Roadmap for Eliminating PFCS of Environmental Concern (PFC_{EC})” from the lifecycle of its consumer fabrics products following an intense and fruitful discussion with Greenpeace. This has led to an ambitious research and development (R&D) program for Gore that stretches over several years to 2023. This program will allow us to develop new consumer outdoor products targeting the optimal combination of performance and improved environmental footprint.

As we want to make sure that our customers, end consumers and the broader public stay with us on this journey we will publish regular updates on progress we are making in achieving our goals.

Key:  Completed on time  On track  Delayed

Progress Report January 2020

Milestones	Status	Progress
see details in Gore’s „Goal and Roadmap“ document		made 2019
<p>1. Eliminate PFC_{EC} from laminates that correlate with 85% of finished consumer product units (jackets, shoes, gloves and accessories) by end of 2020, 100% by 2023</p>	<p>Gore is currently dedicating more than 15 innovation projects within its fabrics and core technology divisions to develop new fluorinated and non-fluorinated technology over the coming years, making this a priority in our R&D portfolio.</p> <p>Although we are working very hard together with our suppliers on delivering against our plan, we have to accept that true innovation is nothing that can be guaranteed. Due to technical challenges we have met, we are currently working towards first shipments to customers. Complete elimination of PFC_{EC} is projected by the end of 2023.</p>	
<p>2. Gore introduces new, non-fluorinated DWR for A/W 2018 collection in Q2 2018 (see 2.2.1.)</p>	<p>The new non-fluorinated Durable Water Repellency (DWR) was selected after a thorough screening and field test phase which demonstrated that this PFC_{EC} free DWR meets our performance standards for our general outdoor product range. It has also undergone hazard assessment.</p> <p>> 50% of our general outdoor product portfolio transitioned in 2018 to this new PFC_{EC} free DWR. In 2019 we further increased this percentage.</p>	
<p>3. Product labeling that allows consumers to connect Gore progress to the fabrics products available in the retail market (see 4.0.)</p>	<p>We have developed a new product labelling framework, starting with PFC_{EC} free DWRs, and successfully implemented the framework with brand and retail partners.</p>	

Milestones

see details in Gore's „Goal and Roadmap“ document

Status

Progress

made 2019

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| 4. New ePTFE barriers made without using PFC _{EC} as polymerization aids (see 2.2.2.) | Gore and our suppliers were successful in developing new PTFE grades for fabrics that no longer require PFC _{EC} in their manufacturing. In late 2017, we began prototyping efforts with these new PTFE grades.

We are currently making progress on developing initial products with the new PTFE grades made without PFC _{EC} . Commercial scale polymer availability is expected in 2021. | |
| 5. Alternative membrane materials that are not based on fluorinated materials (see 2.2.3.) | We have been actively pursuing alternative materials at pace, in addition to ePTFE solutions. Following the evaluation of a range of options, we now have a focused effort on the most promising development paths. Major technical uncertainties have been addressed, but there is still technical work to do and this suggests a slightly longer timeline than we had originally anticipated. | |
| 6. PFC _{EC} free DWR for the most technically challenging uses (see 2.2.4.) | The development of PFC _{EC} free DWR for highly demanding end-uses is a significant challenge ahead, but with close external collaboration we have narrowed our work to the most promising routes and are on track to achieve our goal. | |
| 7. PTFE incineration study to evaluate potential releases of a broad range of PFC _{EC} over representative municipal incineration conditions (see 5.1.) | Gore evaluated scientific resources worldwide and commissioned the renowned Institute of Technical Chemistry at the Karlsruhe Institute for Technology, Germany, to conduct the PTFE incineration study in its pilot size municipal incineration plant. A variety of stakeholders provided input on the draft study and an independent third party laboratory was selected to perform sample analyses.

KIT and Gore published the study in Chemosphere, Volume 226, July 2019, Pages 898-906, a peer-reviewed, scientific journal. None of the PFC _{EC} investigated during the combustion of PTFE under standard municipal incineration conditions could be detected at significant levels above ubiquitous background concentrations. https://doi.org/10.1016/j.chemosphere.2019.03.191 | |
| 8. Implementation of a standardized Hazard Assessment Approach , reporting to begin by end of 2018 (see 3.1.) | Beyond our long standing work with bluesign® systems and OEKO-TEX® Standard 100, Gore's product safety and chemical compliance experts have evaluated a range of emerging methodologies and, based on this work, deployed additional protocols for our fabrics portfolio to rapidly screen the properties of new materials resulting from its innovation program. This new approach was reviewed by third party experts and implemented by Gore's fabrics division in December 2018. | |

