

FYI ON ATTACHED . . .

All of our barrier gowns and coats use fluorine based textile coatings. We have seen a recent uptick in inquiries from customers regarding if our products contain PFAS which our products do.

We are moving to PFAS Free products but it is still fluorine based. We are researching alternatives but they are quite a bit more expensive than fluorine based coatings.

More to come

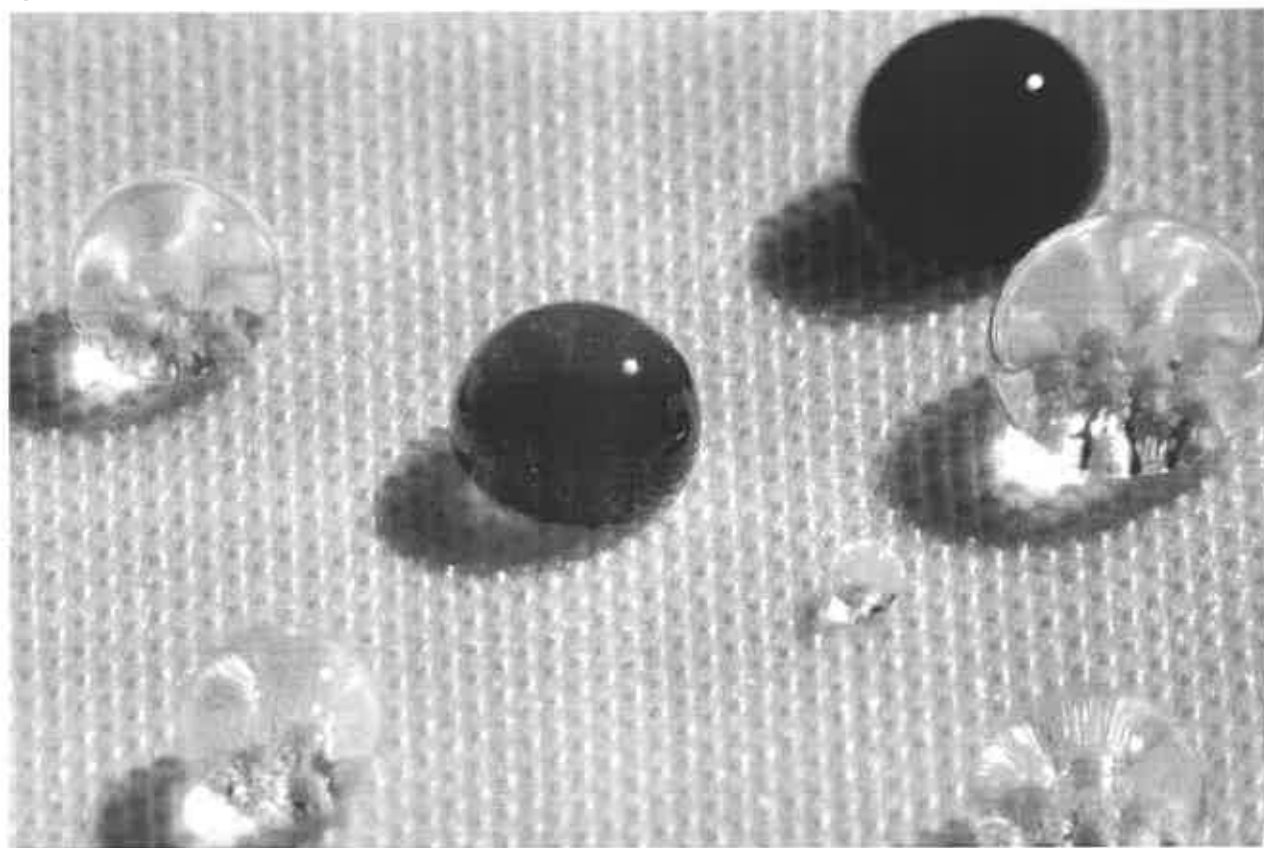
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New Study Confirms Risks of Fluorine-Based Textile Coatings

By Arthur Friedman



CREDIT: MIT

Flourine-based textile coatings may soon be altogether outmoded in the apparel industry.

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A newly compiled life cycle study commissioned by the European Union in conjunction with the Organization for Economic Cooperation and Development (OECD) has recommended that fluorine-based durable water and oil textile repellents be eliminated as a raw material source where possible.

For many companies in the textile industry, this was confirmation of previous studies that led them to look to fluorine free solutions for their water-repellent coatings.

Among the recommendations from Gemma Janer and Marc Torrentellé from LEITAT Technological Center, which was involved in the three-year study, were that “focusing on the use of fluorine-free alternatives in textile finishing must be promoted.” In addition, they said, “Industries should contribute to further define these critical uses, ensuring that fluorinated DWOR products are only used when necessary.”

The study found fluorinated formulations have a negative environmental impact “10-40 times larger” than fluorine-free alternatives. Julio Fierro of the Centro Tecnológico de Investigación Multisectorial (CETIM) noted on a webinar on the topic last month that the main negative environmental impact of fluorine-based DWOR is high toxicity and ozone depletion.

According to the Fluoride Action Network, there are more than 4,000 fluorinated substances on the global market, many used in textiles and clothing. Concerns have been raised about the “persistence, bioaccumulation and toxicity” in the substances, which has led to the phasing out of their production for the majority of uses and the use of non-fluorinated or alternative chemicals to perform the same function.

However, there are some critical uses for which there are no suitable alternatives available yet, Janer and Torrentellé noted in the webinar.

The Massachusetts Institute of Technology (MIT), however, has developed a process that has potential to offer a nontoxic alternative to environmentally harmful chemicals used to make waterproof fabrics.

An MIT team combined a shorter-chain polymer that confers some hydrophobic properties and is enhanced with extra chemical processing, and a different coating process called initiated chemical vapor deposition (iCVD). The iCVD coating process, which does not involve any liquids and can be done at low temperature, produces a thin, uniform coating that follows the contours of the fibers.

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