TEXTILE



NOP(L)ACE FOR TRACE

CHEMICAL TRACEABILITY LOST IN THE BERMUDA TRIANGLE OF CONSUMER IGNORANCE, INDUSTRY UNWILLINGNESS AND LACK OF POLITICAL AMBITION

No P(I)ace for Trace

Chemical traceability lost in the Bermuda Triangle of consumer ignorance, industry unwillingness and lack of political ambition

BY ECHT PROJECT CONSORTIUM

T IS 2040 AND THERE IS STILL NO GENUINE TRACEABILITY OF CHEMICALS IN THE TEXTILE VALUE CHAIN. While legislators lack the ambition to make chemicals traceability a priority, both chemical and textile industry stick to their established still profitable modes of work. In addition, consumers might be more informed, but continue to focus on cheap rather than toxic-free apparel, or buy second-hand clothes instead, which still plays only a minor role. How could this happen?

CRITICAL PUBLIC OPINION - NOT FOUND

Consumer behaviour, policy makers and industry have been the three main drivers here: The continuing absence of public awareness and critical public opinion about chemicals in textile apparel, including a lack of interest in what (potential toxic) substances are used in the production process and what happens with the apparel after it is worn, are one reason for this development. A lack of education of consumers added further to this. Although consumers had continuously more information of chemicals in textile apparel, they still based their purchasing decision primarily on price, instead of sustainable products, which led to not promoting the manufacturing of more sustainable products necessary

to outcompete the conventional products. The absence of major pressure from the public to change this has essentially allowed production to continue as in 2024.

From a political point of view, the deharmonisation tendencies of recent years occurred in line with a limited level of political cooperation globally. In addition, political attention to the topic of chemicals traceability has remained low over the last decade due to strong competition between Asia (especially China), the US, Russia and Europe – there has been no interest in common approaches. This forced the EU to reconsider and slow down their regulatory efforts to restrict chemicals in products, which was further amplified by the member states: Due to the high competitive pressure, they reduced enforcement to the necessary minimum to protect their industries and out of fear of losing them to other countries.

EUROPEAN LEGISLATION - BACKS OUT

Since there was neither a strong critical public opinion and corresponding market demand nor a determined European legislation, both the chemical and textile industries had no reason to reconsider their mindsets. Established business models and protective information management policies regarding chemicals in products and processes



remained in place. Still today, the traceability of chemicals is widely seen as a costly and burdensome investment without any viable business case and economic benefit. Accordingly, hardly any player in the industry had invested strategically in the development of traceability capacities (human resources or technological infrastructure).

The same applies to scientific knowledge about chemicals: In the absence of regulatory need, the chemical and textile industries did not provide any significant funding for research and no genuine effort was made to generate and disseminate knowledge. Furthermore, even less money was invested in public research on aspects of traceability. The few actors doing research on chemical substances (including their toxicity profiles) were limited to academia and did not have sufficient access to practical knowledge of the actual chemical substances used in global value chains. This led primarily to general and mostly basic research results that were mainly disseminated in the academic world and hardly acknowledged elsewhere.

Textile industry – standing still

Since the traceability of chemicals was (and still is not) a priority, there was no need for the

industry to cooperate along the value chain: the chemical industry also did not provide the apparel value chain with the necessary information on the chemical ingredients formulated in the chemical products used in the value chains. To be compliant with current regulations, companies had to rely on test methods. With general technological advances in recent years, more sophisticated detection methods and higher levels of automation have brought some progress to the industry.

Nevertheless, innovations in detection methods continues to fall short of regulatory requirements for scientific evidence in terms of hazardousness. Even the latest test methods are still not able to test the necessary percentages, or are limited to the final product and neglect the potential harm of substances used during the production process.

Similarly, there was a lack of collaboration between peers in the textile value chain, which could have strengthened their position vis-à-vis the chemical industry. Large companies only occasionally formed partnerships when they saw an opportunity and benefit for their own interests. This in turn hindered the development of industry standards.

As the overall pressure remained low and no incentives were provided, innovation in the textile and traceability technology lagged behind. As a result, the market for traceability-based business models remained rather small. Since 2024, it has been difficult for companies to establish themselves in this niche.

Although the first steps towards the traceability of chemicals were already in place in 2024, little has happened in the past 16 years. Consumers, industry and politicians have not managed to generate enough momentum for a significant change. The question is whether it is already too late to catch up?

Imprint

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Disclaimer

This document does not report on actual events and developments but is merely a fictional story of a potential scenario for the global textile apparel value chains in 2040. It is the result of the transdisciplinary research project "ECHT - Enable Digital Product Passports with Chemicals Traceability for a Circular Economy". The project is funded by Interreg North-West Europe (2024-2026).

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