



SHAME ON YOU, SHEIN

**HAZARDOUS CHEMICALS
STILL FOUND IN FAST FASHION
PRODUCTS**



Executive Summary

A new Greenpeace investigation reveals that Shein's chemical management is failing — hazardous substances are still turning up in fast fashion goods

Shein embodies the acceleration of fast fashion. The company tracks trends in real time, copies designs using AI and pushes production through a dense network of Chinese suppliers working under extreme pressure. The result: thousands of new designs every day — on peak days more than 10,000 — many available for only a few weeks. With 363 million monthly visits, Shein.com is now the world's most visited fashion website — attracting more traffic than Nike, Myntra and H&M combined. At any given time, the platform carries over half a million styles — twenty times H&M's range. Aggressive marketing, “dark patterns” in its app and a huge presence on TikTok and Instagram create a buying frenzy among their mainly young consumers. Prices are artificially low; the real costs are paid through environmental destruction and human exploitation. Polyester accounts for 82 % of fibres used — in other words: fossil fuel — and the company's emissions have quadrupled in the last three years. Shein exploits customs loopholes and breaches consumer protection and environmental regulations — despite repeated multimillion-euro fines. The



Greenpeace purchased a total of 56 garments and shoes from Shein across eight countries and had them analyzed for hazardous chemicals.

company's practices show where an unrestrained economic system leads — and it is pulling the entire industry along in its wake. Fast fashion means overproduction, exploitation and a reckless transgression of planetary boundaries.

In 2022, Greenpeace found hazardous chemicals above EU regulatory limits (REACH) in 7 of 47 Shein products tested. Since then, Shein's platform has surged in popularity: the company continued to grow rapidly, with revenue up from **\$23 billion (2022) to \$38 billion (2024)** — making it the biggest online fashion store worldwide. In the meantime, Shein acknowledged the chemical contamination and pledged substantial improvements to its chemical management.

To verify whether those promises hold, Greenpeace re-tested Shein products in 2025.

Findings of the latest investigation

Greenpeace purchased 56 garments and shoes from Shein across eight countries and had them analysed for hazardous chemicals at an independent, accredited laboratory in Germany. The results are alarming:

- > 18 of 56 products (32 %) exceeded EU REACH limits; including children's clothing (3 items)**
- > 7 products (jackets) exceeded PFAS limits by up to 3,300 times.**
- > 14 products exceeded phthalates limits, 6 by 100 times or more.**

Even a single jacket or pair of shoes can pose risks: many items contained chemicals that are persistent and bioaccumulative, polluting rivers, lakes, seas and threatening the life within them. Particularly concerning are persistent, hormone-disrupting substances such as **per- and polyfluoroalkyl substances (PFAS)** — used to make jackets water and stain-repellent — and **phthalates**, used as plasticisers in footwear. Workers in producing countries are likely to be exposed without protection, while chemicals are discharged into waterways and soils. Consumers are also at risk as they can be exposed to these

chemicals in several ways — directly through the skin (e.g. when sweating), by inhaling textile fibres in the air, and in the case of babies and small children through mouthing contaminated clothes – hazardous chemicals in textiles can also enter the environment during washing or disposal, eventually reaching rivers and the food chain.

The substances detected above legal limits include:

PHthalates (in 14 products): linked to impaired growth, fertility and child development; also toxic to aquatic life, with long-term biodiversity impacts.

PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS) (in 7 products): extremely persistent in the environment, PFAS can accumulate over time reaching acutely toxic concentrations. Some of these substances can also build up in the human body and are suspected of being carcinogenic. They can impair fertility and child development, weaken the immune system, and disrupt liver and kidney function. PFAS exposure may also increase the risk of thyroid and metabolic disorders. Highly mobile in the environment, these “forever chemicals” contaminate groundwater, rivers, oceans and even remote regions.

HEAVY METALS (LEAD & CADMIUM) (in 2 products): lead (Pb) is particularly harmful to children (affecting brain development, IQ, learning and behaviour) and damages the nervous system, kidneys and reproductive organs and can affect hormonal balance. Cadmium (Cd) is a probable carcinogen that can harm kidneys, lungs, liver, the cardiovascular and nervous systems, as well as negatively affect fertility and birthweight. Both are toxic to aquatic organisms and bioaccumulate in the food chain, affect organs, disrupt physiological and hormonal functions and impair growth and reproduction.

ALKYLPHENOL ETHOXYLATES (APEO) (in 1 product): break down in the environment to hazardous compounds such as nonylphenol and octylphenol, which are highly persistent, bioaccumulative and toxic. They disrupt the

hormonal systems of aquatic organisms, cause feminisation in male fish, alter sex ratios and impair reproduction.

FORMALDEHYDE (in 1 product): can cause DNA damage that may lead to cancer and genetic disorders. Also irritating to the skin, eyes and respiratory tract.

Shein’s measures are not working

In early 2025, Shein again claimed major improvements in its chemical management — including (i) publishing a Manufacturing Restricted Substances List (MRSL), (ii) expanding internal testing and (iii) excluding non-compliant suppliers. Our results suggest these measures are not effective. Shein products still contain hazardous chemicals above EU limits. Greenpeace identifies a pattern: some items flagged in earlier tests reappear in near-identical form — with the same hazardous substances. Shein removes individual items once exposed, only to replace some of them with near clones — possibly even from the same supplier. Given the extreme product range and vast supplier base, Shein appears unable to control the chemicals used in products sold on its platform.

At the same time, Shein seems to exploit loopholes in EU chemicals legislation. Because sellers on the platform ship directly to consumers within the EU, Shein can circumvent the REACH obligations — putting profit before people and the planet.

As a result, Shein and similar platforms can continue to place non-compliant products on the European market without facing meaningful legal consequences. Our latest investigation exposes, once more, how voluntary self-regulation and inadequate enforcement fails to protect people and the environment.

Greenpeace demands: a law to rein in fast fashion — now!

Fast fashion is a systemic problem. There is already more than enough clothing in the world to dress everyone. Yet the industry continues to flood markets with volumes far beyond global needs. To make sure these clothes are still sold, the sector deliberately fuels consumer frenzy through social media, influencer marketing and advertising. Fast fashion thrives on exploitation and appalling working conditions — producing garments designed for the bin. Every second, a truckload of clothing ends up in landfill or incineration somewhere in the world.

To stop this destructive cycle, governments worldwide must introduce a comprehensive Anti-Fast-Fashion Law.

More concretely:

- **A fast-fashion levy**, to make producers finally pay for the damage caused by their excessive production.
- **A ban on fast-fashion advertising**, including on social media, to cool down today's artificially overheated consumption climate.
- **Support truly circular business models**, such as second-hand, swapping and repair schemes.

France has already taken an important first step with its anti-fast-fashion law. Other countries must now follow suit — to create a truly circular textile economy with less waste, longer-lasting, higher-quality clothing, and a vibrant culture of repair and reuse.

Close the legal loophole — and hold online platforms to account

EU regulation must urgently be updated so that online platforms like Shein and Temu can no longer bypass existing law.

Greenpeace specifically calls for:

- **applying EU chemicals legislation to all products sold within the EU**, including those offered by online platforms,
- making platforms legally **liable under EU law** for any breaches,
- allowing authorities to **suspend platforms** in cases of repeated violations.

Only binding, enforceable regulation can prevent hazardous chemicals from entering the EU unchecked — and protect the health of consumers and ecosystems worldwide.



Protest against fast fashion in Accra, Ghana

Imprint

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