Chemical Management at Tesco F&F clothing – our Detox progress.

October 2022 update

TESCO

Contents

Messages from our leadership.

Sustainability is built into our Group purpose, to serve our customers, communities and planet a little better every day.

This purpose is underpinned by a clear set of values that support the ambitions and commitments across our Home and Clothing business. In turn this ensures we source our products responsibly and ethically, helping to protect people and communities in our supply chain while minimising our environmental impact.

Our commitment to the Detox campaign is an important element of our sustainability programme at F&F and we are proud of the actions we continue to take since we first reported in 2018. We recognise the active role we can play in driving change for the better.

Jan Marchant,
CEO, Home & Clothing

We know that transparency in our operations and supply chain is important to our stakeholders and customers, and key to how we manage the end-to-end sustainability impact of the products we source.

We continuously work to expand our scope and reach of our upstream supply chain and are committed to applying the learnings from our clothing business to other textile categories, to drive ongoing improvement.

The actions of our suppliers are key to us delivering our sustainability commitments and we work closely with them to ensure they have the right infrastructure, tools and capability to support our goals. Under the Detox commitments, our ambition is to ensure we have a robust chemical management system in our supply chain that goes beyond the elimination of hazardous chemicals. We want to minimise the overall use of chemical substances, reduce water consumption and ultimately implement more sustainable methods that support a circular production model across the textiles we source for our Tesco F&F Brand.

Vicky Wellings,
Technical Director, Home & Clothing

Introduction.

We've built sustainability into our purpose, strategy and business plans. We know that our business depends on the world around us and as the UK's leading retailer, we know we can make a big difference. Our commitment to operating in a responsible and sustainable way is reflected in our values and they are the responsibility of everyone at Tesco.

At F&F, we are committed to sourcing our products responsibly, helping to protect the workforce and communities in our supply chain and minimise our environmental impact. We maintain awareness of relevant sustainability challenges within the textile and clothing industry and continue to collaborate with others to support industry transformation.

We aim to integrate tools in our business that help our supply chain to implement sustainable practice and use more sustainable materials that can enhance circularity.

In 2021/22, we have continued to strengthen our systematic approach to chemical management through three key areas:

1. Continue to focus on input chemistry and adapt industry tools which helps our mills to manage their chemical inventory and ensure they comply with regulatory requirements while helping us move towards more sustainable chemistry and safer alternatives.

2. Ensure our supply chain remains efficient through strenthening long term supplier relationships with capacity building and empowerment to improve performance and transparency.

3. Working with industry and sector initiatives to drive best practices and accelerate transformation.

This year's update outlines our progress on effective chemical management in our supply chain, as well as progress against the Detox Commitment to promote sustainable chemical use.

In March 2021, we launched our Made Mindfully symbol to help customers identify products that are produced, grown, or made in an environmentally responsible way. Currently, over half of our clothing is Made Mindfully, using responsibly sourced materials including organic cotton and recycled polyester. We also apply the Made Mindfully symbol to our toys, greeting cards and home textiles. Further information can be found on our Made Mindfully pages.

Elimination of hazardous chemicals and chemical management framework remains core to our sustainability strategy. We ensure the Detox Commitment requirements are integrated across our F&F Clothing and Home categories supply chain and continue to work with experts on wider industry solutions.

Our sustainability journey.

2008

Established Product Restricted Substance List (RSL), which helps to eliminate hazardous chemicals being used in our supply chain.

2012

Joined WRAP's voluntary commitment, the Sustainable Clothing Action Plan (SCAP) agreeing to reduce our carbon, water and waste footprint per tonne of clothing sold in the UK by 2020.

2013

Launched Partnership for Cleaner Textiles (PaCT) with International Finance Corporation, to support our Bangladesh supply chain to reduce their energy, water and chemical use.

2015

Signed up to Zero Discharge of Hazardous Chemicals Programme (ZDHC) and committed to the joint roadmap to use MRSL and remove hazardous chemicals from supply chain.

2016

Published Bangladesh F&F factories list, Signed up to CanopyStyle initiative to protect ancient and endangered forests. Committed to source from man-made cellulosic fibre producers rated green in canopy report by 2020. Joined WWF Ganges Leather Buyers Platform.

2017

Signed up to the Greenpeace Detox Commitment, published integrated restricted substances list (RSiT). Published all F&F garment and footwear factories list. Signed up to Sustainable Cotton Communiqué to achieve 100% sustainable cotton by 2025. Pledged to support the Changing Markets Foundation's Roadmap towards responsible viscose & modal fibre manufacturing.

2018

Perfluorocarbon / Polyfluorinated Compounds (PFCs) fully eliminated from 2018 Spring/Summer range. Disclosed our strategic Tier 2 wet processing Units. Published our China supplier list in IPE Green Supply Chain platform. Publish our supplier list in Open Apparel Registry.

2019

Launched Partnership for Cleaner Textiles (PaCTII) with additional chemical module. Signed up to WWF Zero Impact to Fashion Project. We Added Tier 4 man-made cellulosic fibre producers to supplier disclosure list.

2020

Launched our first 100% organic cotton range in collaboration with WWF. Rolled out our customer take back scheme to 500 stores across the UK. Became founding members of the WRAP Textiles 2030 commitment, We became members of the Sustainable Apparel Coalition and are now implementing HIGG Facility Environmental Module in our supply chain.

2021

Signed up the Textile Exchange and have committed to the 2025 Recycled Polyester Challenge. Became members of the US cotton Trust Protocol (USCTP), enabling us to strengthen our transparency and meet our cotton commitment. We launched Made Mindfully range in our Spring/Summer season 2021.

2022

We signed up to the Microfibre Consortium and committed to the 2030 roadmap in working towards zero impact from fibre fragmentation from textiles to the natural environment. Signed up the Sorting Circularity India Project with Fashion for Good which aims to identify opportunities for textile waste supply chain of pre-consumer and post-consumer and pilot technologies that supports waste organisation and provide access to the market.

Focusing on input chemistry.

To become effective in monitoring hazardous chemical formulations, using common tools developed and accredited by the industry remains essential. We are expanding the coverage to recognise the adoption of industry recognised chemical screening and inventory management tools that help our supply chain to monitor formulations which comply with requirements and help us to move to more sustainable options.

Key highlights

We believe using fewer chemicals and reducing our footprint is as important as restricting the use of hazardous chemicals. We're undertaking a pilot programme with one of our mills which aims to reduce the chemical footprint as well as the environmental impact. In studies, we tried two options to modify the dyeing process based on using a lower number of existing chemicals or replacing with alternative Safer chemicals. Both options resulted in saving up to 50% of total chemicals by weight, including less water and energy input with shorter process time. With this success we plan to continue rolling out the pilot to more product lines.

We understand Manufacturing Restricted Substances List (MRSL), can help us to minimise the use of hazardous chemicals beyond products and also protect workers health and the environment. We actively work with other brands to review the feasibility of expanding the scope to cover more product categories. We have expanded our Detox Commitment to apply to our Home Textile categories ensuring their supply chain follows the same requirements as clothing suppliers. This year we have added Home textiles Tier 2 wet processing mills which represents over 80% of production capacity in our disclosure list.

We have made it mandatory for our key wet processing mills to subscribe to chemical inventory management platforms - CleanChain, BVE3 Environmental Emission Evaluator and GoBlue Bhive – which are based on data from the ZDHC Chemical Gateway. We also continue advocating for chemical suppliers to register on the Gateway to improve its coverage. With access to this level of transparency from suppliers, we have seen the chemical use significantly improve. These platforms enable wet processing mills to manage their chemical procurement more proactively against the ZDHC Manufacturing Restricted Substances List (MRSL) and Tesco's Restricted Substances List (RSiT). In turn this has helped us monitor our supplier progress on using more sustainable alternatives. We have access to 96% of our wet processing units chemical inventory by production capacity and 80% are using the chemical inventory platforms.

Working with suppliers.

We work in partnership with our suppliers to build long-term relationships and provide ongoing training and guidance to upskill and improve performance. This enhances trust and increases transparency, making full mapping of our supply chain more feasible.

Key highlights

We have improved our transparency and published our clothing supply chain list beyond the first tier for clothing and footwear manufacturing and second-tier wet processing units as well as man-made cellulosic fibres (MMCF) producers. This list has also been published and shared in IPE Green Supply Chain Map and Open Apparel Registry to support transparency and collaboration in the industry. Our effort was recognised by IPE in their Corporate Information Transparency Index (CITI) where we ranked 21st amongst 613 companies rated in 2021.

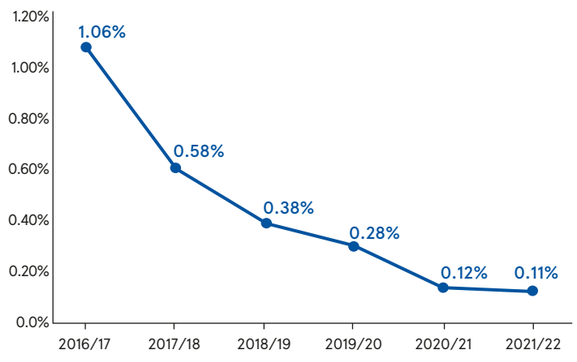
With advancement in technology, virtual and remote training are becoming part of normal business practices. As a result we are able to continue upskilling suppliers to ensure training resources are current and accessible. We continue to host webinars through our Supplier Network Platform on chemical compliance, ZDHC standards and tools to support implementation. We also deliver monthly webinars for our supply chain, inviting industry experts as guest speakers. Since 2014 we have reached more than 2,300 participants to build their capacity with practical knowledge on chemical management. This includes 11 training sessions, held in 2021/22 hosted by Tesco F&F with 484 participants.

We continue to work with our supply chain partners, supporting them to build capacity and empower their team to take responsibility for managing their upstream supply chain. Their technical representatives must attend a comprehensive training programme and pass an exam with satisfactory level of performance before they are certified. With supply chain consolidation, there are over 111 people who now act as an extended implementation team to administer our chemical management and material quality requirements.

Continuous improvement in product compliance

In terms of overall chemical testing against compliance in our products, failures have continued to reduce from 1.06% in 2016/17 to 0.11% in 2021/22. All products that fail a chemical test are removed from production and shipment. Corrective and preventive action plans are required along with an investigation into their root causes.

Hazardous chemical test failure rate 2016-2021

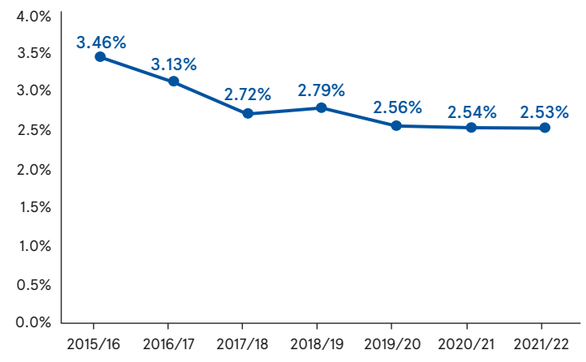


Cleaner wastewater discharged

We continue to verify the successful implementation of our hazardous chemicals controls by regularly checking the wastewater quality from the Tier 2 wet processing mills operated in our supply chain. The number of wastewater tests conducted continue to increase as we expand coverage further into our supply chain which now represents 86% of our production capacity. Wastewater testing results continue to show progress with positive results reduced from 3.1% in 2016/17 to 2.5% in 2021/22.

Examples of our efforts to help our supply chain to make more targeted improvement on different chemical groups are shared in detail in the key links section.

Wastewater test parameters 2016-2021



Data for 2021/22 is inclusive of the discharge from our Home Textile wet processing units".

Working with industry and sector initiatives.

We recognise that we can only eliminate harmful chemicals and build a more sustainable future by working in collaboration with other brands, retailers, and stakeholders. We engage in relevant industry groups and initiatives that are helping to establish common industry standards and tools to support implementation and act as knowledge sharing forums.

Key highlights

Our wet processing mills have published their wastewater reports in Detox.Live and IPE, covering 86% of our production capacity. To keep the momentum of continuous improvement, in the last five years we have presented 31 ZDHC suppliers with an award for their efforts and impact in leading the way amongst our supply chain.

Since 2021 we have worked with our supply chain partners to participate in the new circularity initiative, Sorting for Circularity India Project, which is hosted by Fashion for Good. This project aims to build more circular infrastructure and enables us to understand both the pre-consumer and post-consumer textile waste streams in India, and to pilot sorting and mapping solutions.

In 2021/22, we became a member of the Microfibre Consortium and committed to the 2030 roadmap in working towards zero impact from fibre fragmentation from textiles to the natural environment. From 2022, we will start measuring microfibre release from our products, this information will help us understand and develop solutions that can help to reduce the impact of fibre fragmentation.

Progress against our Detox Commitment.

The Greenpeace Detox Campaign aims to eliminate hazardous chemicals in the manufacture of clothing and textile products and promote the adoption of business models to achieve more sustainable consumption of textiles. Our Detox Commitment focuses on seven areas of action where we can make the greatest positive impact, and which align with with the aims of the campaign.

1. Supply chain disclosure

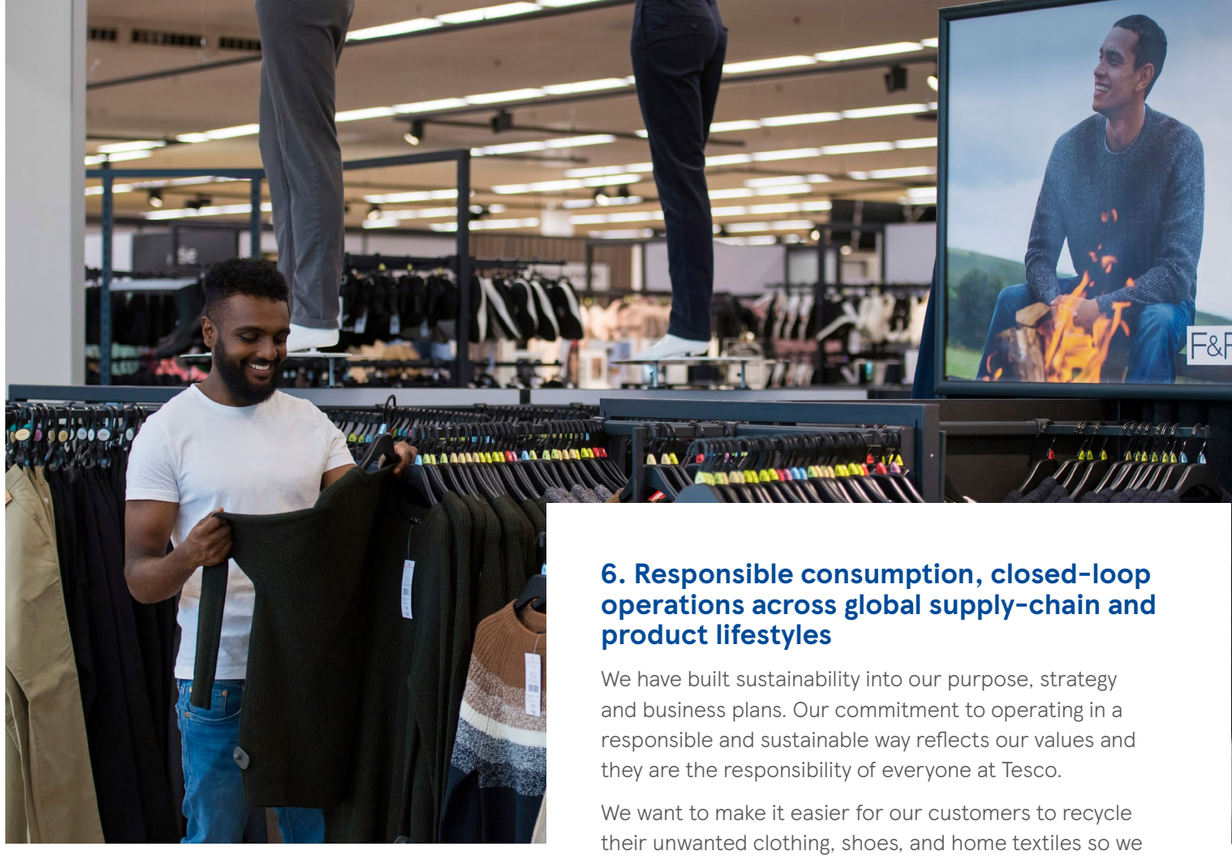
We continue to publish and update our Restricted Substances List in Textile, Leather & Footwear (RSiT) on our website. In 2021, we have disclosed 100% of our tier 1 clothing and footwear suppliers, over 80% tier 2 wet processing mills and 95% tier 4 man-made cellulosic fibre (MMCF) producers by production coverage. The list of factories supplying F&F can be found here. Wet processing units representing over 85% of our production capacity have also tested their wastewater and published their results either on IPE Detox Platform or ZDHC Wastewater Disclosure Portal - Detox.live. We will continue to improve our transparency and aim to reach 100% coverage by 2025 of all our tier 2 suppliers and tier 4 MMCF producers and expand to include tier 3 spinners. We have shared our list of suppliers located in China through the Institute of Public Environmental Affairs (IPE) Green Supply Chain Brand Blue Map and encourage them to disclose environmental data to the Pollutant Release and Transfer Registers (PRTR) on this platform. We have also made our supplier list available on the Open Apparel Registry which supports the industry effort in making data more robust and effectively applied across common initiatives.

2. Priority hazardous chemical groups elimination policy

Our chemical compliance policy has moved beyond elimination of hazardous chemicals in outputs from the manufacturing process to focus on input chemistry of 11 priority chemicals. Since 2019/20, we have added five additional chemical groups in our product test programme which is aligned with ZDHC MRSL and Wastewater Testing Guidelines. We also stipulate in our chemical compliance policy that all our supply chain partners must comply with our RSiT requirements, and our key strategic wet processors must utilise the ZDHC accredited chemical management platforms to monitor their input chemicals. Where feasible, partners must use more sustainable alternatives and less chemicals in their production process to minimise the chemical footprint. With the success of the Partnership for Cleaner Textile (PaCTII) programme iwhich has achieved chemical reductions, we have continued to develop an additional business case this year.

3. Alkyl phenols & their ethoxylates (APEOs) elimination policy

We have achieved 100% elimination of intentionally added APEOs. As APEOs are widely used in the industry, some contamination issues remain and are being investigated. Our product testing shows that the occurrence of APEOs has reduced further from 0.4% in 2020/21 to 0.2% in 2021/22. We continue to work with our supply chain partners to conduct root cause analysis and take corrective and preventive actions to eliminate their input sources.



4. Perfluorocarbon / Polyfluorinated Compounds (PFCs)– elimination policy

Tesco has followed the Detox recommendations by listing all relevant individual PFCs in our list of restricted substances. PFCs are banned for use in our production according to our chemical compliance policy. Since 2018, all our products which require water repellent properties have used PFC-free finishes. Our product testing shows 100% performance compliance. From our due diligence checks, there were no cases reported this year.

5. Targets for other hazardous chemicals

Our Restricted Substances List in Textile, Leather & Footwear (RSiT) is reviewed and updated every six months and can be found on our website. We ensure restricted substances not only meet minimum legal requirements of regions in which we sell our products, the RSiT goes beyond these levels by adhering to voluntary industry standards. Our latest list was published in August 2022 with 21 new chemicals added. Our Manufacture Restricted Substance List aligns to the latest version of ZDHC MRSL v2.0.

6. Responsible consumption, closed-loop operations across global supply-chain and product lifestyles

We have built sustainability into our purpose, strategy and business plans. Our commitment to operating in a responsible and sustainable way reflects our values and they are the responsibility of everyone at Tesco.

We want to make it easier for our customers to recycle their unwanted clothing, shoes, and home textiles so we introduced our customer take back scheme to 500 stores across the UK in 2020. Customers can donate clothing, shoes, and textiles from any brand and of any quality, to our collection units at the front of stores.

Apart from helping customers, we also continue to look for opportunities to reduce waste and leverage closed loop productions. Together with some of our supply chain partners, we have participated in the Sorting for Circularity India project lead by Fashion For Good. Its objectives are to understand the current textile waste flow in India, identify technologies to assist mapping of waste, pilot solutions and build a roadmap for implementation that fit for the industry. It is expected the result will be ready for release later this year.

7. Self-reporting on the DETOX Commitment

This report is our principal account of our work to deliver our DETOX commitments and we will continue to report against our progress annually.

Future Priorities.

Together with our supply chain partners, we continue to make good progress towards eliminating hazardous chemicals and moving towards more sustainable chemistry. We are committed to continuing to drive change for the better.

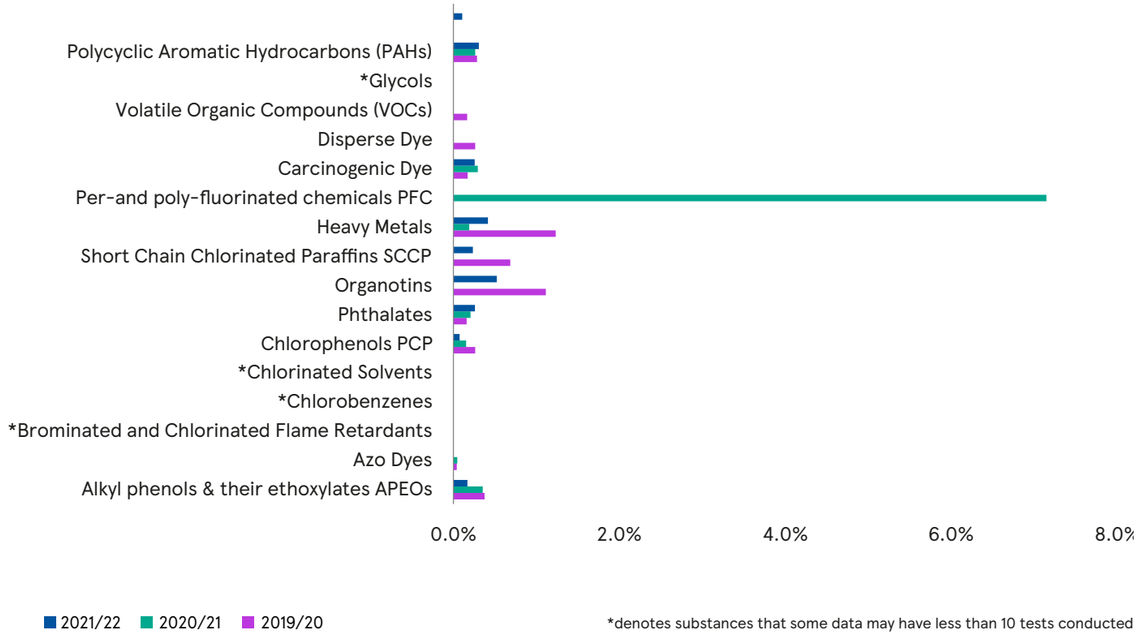
- We continue to increase the coverage of our supply chain through wastewater testing with the aim of reaching 100% coverage by 2025. We are tightening our measures to onboard new suppliers. We have supported our suppliers to enroll to SAC FEM programmes. This will give suppliers a deeper understanding and support a more holistic approach to implementing a best practice chemical management framework and help expand their efforts to other environmental parameters. We aim for all of our tier 1 and 2 supply chain to adopt FEM by 2025.
- Our chemical management approach is not limited to reducing environmental impact, we anticipate by taking this approach production will be more efficient in helping to ensure our products remain competitive.
- We continue to support our man-made cellulosic fibre supply chain (MMCF) with closed-loop production models through our “Roadmap to responsible viscose and modal manufacture” commitment. We will continue to support the Textile Exchange MMCF roundtable in developing the self-assessment questionnaire and transparency dashboard in support of a transition to closed-loop manufacturing and utilisation of waste as feedstock.
- In addition to chemicals, we are also piloting a circular model with our supply chain partners, which involves taking back industrial wastes and recycling. For post-consumer waste, we continue to work with Soex and Satcol for our Take Back Program. We hope this will give us further insights solutions.
- Our home and nursery textile supply chain continued to follow the same path to eliminating priority chemicals as our clothing supply chain with good progress. This year, we have disclosed over 80% of our home textile production capacity wet processing unit and aim to continue to increase in the next few years.

Appendix.

Product Failure Rate on Priority Chemical Testing

We continue to monitor levels of priority hazardous chemicals in final products, through our regular due diligence testing. Since 2016/17, the growth in awareness of different chemicals and hazardous substances has led to an increase in the number of chemical tests we have administered on products in the last five years by 75% and a reduction in chemical groups found. Those we identified in testing are APEOs, PCPs, PFCs, PAHs, phthalates, carcinogenic dyes, and heavy metals. Each of the case will go through a root cause analysis with corrective and preventive action taken place in our supply chain. Hazardous chemicals found beyond acceptable requirements will not be accepted for shipment.

Comparison of product failure rate on priority chemical testing



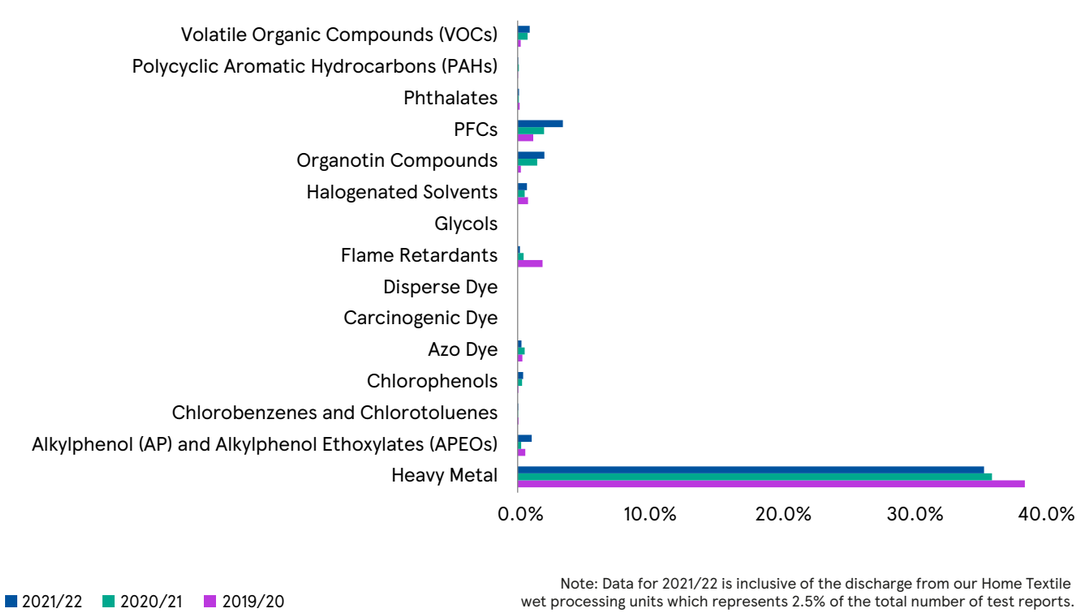
*denotes substances that some data may have less than 10 tests conducted

Wastewater Testing Analysis by Chemical Groups

From wastewater test records, no positive results for disperse dyes, carcinogenic dyes, and glycols were recorded. Chlorobenzenes and chlorotoluenes, chlorophenols, Azo dyes, flame retardants, halogenated solvents, phthalates, Polycyclic Aromatic Hydrocarbons (PAHs) and Volatile Organic Compounds (VOCs) have reduced to very low levels between 0.1-0.9%. Align with the industry performance, Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs), halogenated solvents, organotin and Polyfluorinated Carbons (PFCs) are having a higher percentage of positive detection than rest of the groups even it is continuously reduced over the past years.

From our analysis, the higher PFCs are mainly from contamination from the incoming water and we count all positive results in our statistics without removing those below detection limit. If we only focus on those without contamination and exceeding detection limit, the percentage should be 1.1% instead of 3.4%. Heavy metals remain the most challenging group of chemicals to address as there are fewer alternatives. However, we have included all conventional parameters and testing of indirect discharge mills, their wastewater will further treated with centralised effluent treatment plants which do not represent the actual discharge quality. If we just consider direct discharge, it becomes 0.18%. Therefore, we will align testing without include indirect for conventional parameters from next year as we start to adapt the new version of ZDHC wastewater guideline 2.0.

Water testing analysis (percentage of wet processing units with positive results by chemical group)



Note: Data for 2021/22 is inclusive of the discharge from our Home Textile wet processing units which represents 2.5% of the total number of test reports.

Useful links.

Detox Commitment

Restricted Substances list in Textile, Leather and Footwear (RSiT)

Clothing supplier list

2020 Technical case studies on chemical substitution:

Substitution Case Study for Antimony

Substitution Case Study for PFCs

2019 Technical case studies on chemical substitution:

Substitution Case Study for NPEOs (a)

Substitution Case Study for NPEOs (b)

2018 Technical case studies on chemical substitution:

Substitution Case Study for Carcinogenic aromatic amines

Substitution Case Study for Chlorophenols

Substitution Case Study for Organotin

2017 Technical case studies on chemical substitution:

Substitution Case Study for APEOs (a)

Substitution Case Study for APEOs (b)

Substitution Case Study for Chlorinated Compounds

Substitution Case Study for Phthalates

Substitution Case Study for Naphthylamine