

## Towards toxic free fashion report 2022

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### Introduction

H&M Group has a long history of working with chemical management. Since 2011, we have been committed to Greenpeace's [Detox commitment](#). In line with this commitment, we communicate our chemical management achievements and learnings yearly. However, we have widened the reporting scope to also include our 2030 goal of toxic free fashion. Progressive and proactive chemical management is a key enabler to reach our ambition to become circular.

H&M Group's chemical management is cross functional and collaborative. Therefore, a variety of interrelated topics are covered in this report such as chemical restrictions, the ZDHC programme and our stakeholder engagement. This report also describes our ambition to move beyond compliance, as well as details of recent external acknowledgements.

### H&M Group chemical restrictions

We have adopted common and strict industry standards for our [H&M Group Chemical Restrictions](#), which is based on the [AFIRM RSL](#) and [ZDHC MRSL 2:0](#).

In addition to these industry restrictions, H&M Group has strategically phased out, and/or will phase out, some specific chemical substances or materials such as:

- DMF solvent (by 2021 we achieved 100% phase out), commonly used in synthetic leather production.
- Substances on the REACH Candidate List are always restricted
- Complete ban for biocide treated articles
- Complete ban for flame retardants
- Complete PFC /PFAS ban
- Potassium Permanganate (PP) used to distress denim is banned from January 2023. PP is now also included as a "candidate" in [ZDHC MRSL 3:0](#).

### H&M Group approach to chemicals in recycled materials

We completed a large-scale study with IKEA and others on [chemicals in recycled textiles](#). Through broad industry collaboration we have been able to create a large-scale database to understand potentials and challenges presented by recycled textiles from a chemical contamination perspective. Over the past 12 months, we completed a couple of initiatives to find out more about chemical contamination in recycled textiles.

- **Textile to textile polyester:** This study has helped to understand the chemical contamination pattern within textile-to-textile recycling.
- **Recycled fibre analysis from new technology partners:** We have learned that fibres from chemical recycling can have inconsistent chemical detection levels across the production. Detection rate for APEO was around 25 % (with values below RSL-limits).
- **Smarter testing strategies:** We are in the process of learning the pattern of chemical contamination detection across multiple recycled fibres. In mechanical recycling bisphenols continues to be one of the biggest challenges.

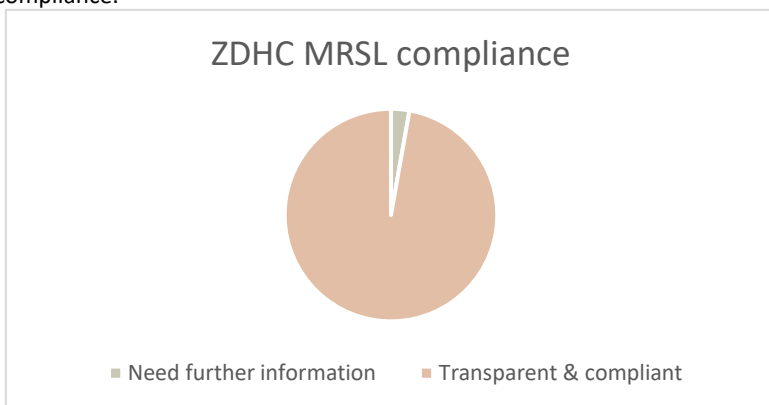
We constantly refresh our data about recycled material chemical contamination to raise awareness and develop smarter testing strategies that can support legislation around the circular economy.

## ZDHC programmes

Having enrolled all our suppliers in scope in the ZDHC programme [Roadmap to Zero](#), we continue to monitor wastewater as well as input chemicals. We have goals related to our suppliers using the ZDHC Gateway, a database for chemical products fulfilling the ZDHC MRSL. To see our work in practice please watch our [video](#).

## Input chemical management

- 99% of our suppliers in scope are enrolled in the ZDHC programme (619 units out of 627 units)
- We achieved 97,2 % ZDHC MRSL compliance and continue to work towards our goal of 100%. Full ZDHC MRSL compliance is proving challenging due to the variety and complexity of our supply chain. Our wide and dynamic product assortment means that suppliers use many recipe variations in production. Achieving 100% is a complex and concerted effort between us, our suppliers, their chemical suppliers and the certification bodies that evaluate chemical compliance.



- In 2022, 86,2 % of chemicals used were assured via ZDHC Gateway. Having exceeded our goal of 60% in 2021, we set an ambitious new goal of 90% for 2022. We believe that the best way to reach 100% ZDHC MRSL compliance is by using the chemicals that are listed on ZDHC's Gateway database. These chemicals are tested and reviewed against ZDHC's standards. This achievement is based on the ZDHC Performance InCheck of our collective supply chain.
- Additionally, we explored connections between chemicals management and other impact areas such as water, energy, raw materials and biodiversity. We began investigating opportunities to reduce chemical use by mapping best practices, such as process chemicals recovery. Today there is a lack of reliable baseline data for quantity of chemicals in our value chain. Our next step is to set a baseline and a benchmark to set the goal for reducing chemical quantity in our supply chain.

## MRSL compliance in wastewater

- In 2022 we reached 99,96 % ZDHC MRSL compliance for wastewater across our supply chain.
- We have root cause analysis routines in place to handle each failure to help us and our suppliers reach 100%. By sharing our results, we encourage transparency. All wastewater results are also published on ZDHC's platform, [DetoxLive](#).
- For more specific information on our wastewater testing and the results, please also see our latest [discharge analysis](#).

# Capacity Building and Chemical Management System

We developed 141 of our supply chain units with ZDHC Academy platform for Chemical Management System Technical Industry Guide by partnering with Nimkartek. This supported our suppliers to develop their chemical management system for more sustainable production. Additionally, we are training 20 suppliers in Introduction of ZDHC through the ZDHC Academy platform to secure understanding of ZDHC and its programmes for input control, chemical management and output control.

In addition, we are implementing ZDHC's Supplier to Zero platform with ZDHC's Brand Implementation Support Token in 100 of our suppliers. Supplier to Zero is both an assessment and development platform on chemical management. Participants in the Supplier to Zero programme have access to personalised action plans based on their current condition.

On the local level, we also carried out various capacity building activities with our supply chain partners, strengthening our program implementation on the ground.

## Indonesia

The Indonesia team conducted a workshop on MRSL Compliance and wastewater testing in collaboration with BV in April 2022. The idea was to remind our suppliers about our goals and 2022 ZDHC MRSL Compliance and ZDHC Gateway Utilization. We also wanted to increase supplier awareness of new requirements for ZDHC Wastewater testing parameters and samples (based on WWG 2.0) in preparation for 2023.

In addition, the team maintained their regular sustainability program workshop in February and March 2022 to reflect on 2021 activities, as well as to inform suppliers about our program goals and activities in 2022. In September and October 2022, the sustainability summit discussed on-going programs and future direction, including MRSL 3.0 and chemical recycling and leasing.

To advance our chemical agenda, our Chemical Program Specialist in Indonesia and two of our suppliers, participated in a workshop held by Bandung Institute of Technology in partnership with UNIDO. The workshop introduced green chemicals and chemical leasing business concepts. Based on this workshop, we will further evaluate the possibility of implementing chemical leasing in our supply chain. It is likely that chemical leasing can be used in large scale cut-and-sew manufacturing units.

## India

The India team hosted training about chemical goals and expectations for 30 existing tier one and two footwear, bags and belt suppliers. They reviewed ZDHC program implementation and discussed performance gaps. In April 2022, India team held Screened Chemistry awareness training to explain the importance of hazard-based assessment, how to know Screened Chemistry certified products and how to work with chemical suppliers for upstream implementation.

On more general environmental topics, India team held HIGG FEM training in March 2022 by Tekstech where suppliers shared best practice. In addition, the team hosted Environment Day 2022 to give a recap on the environmental agenda - water, energy, chemical and waste. All Indian suppliers attended the event, which included interactive sessions to gauge the level of understanding on the environmental goals and knowledge sharing sessions on the impacts of climate change and why H&M Group is driving this agenda.

## Bangladesh

In March 2022, the Bangladesh team arranged training on Screened Chemistry to extend the screened chemistry pilot in H&M Kids suppliers. This helped suppliers to scale up Screened Chemistry utilisation and strengthened their understanding of the importance of chemical hazard assessment in terms of finished product safety, workers' health and safety and the environment.

In addition, we visited low performing facilities and gave awareness training to improve their chemical management performance.

## China

In May 2022, China and Far East Asia team arranged the Supplier Capacity Development Week to share best practice and achievements in sustainability and technology. Sessions covered technology, climate, water, waste, chemicals, gender, wage, IR, health & safety. Over 250 suppliers joined us. They enjoyed having a learning platform, listening to the industrial solutions and success stories.

Working with ZDHC East Asia, we communicated with 13 major local chemical formulators used by our suppliers to seek solutions for over 600 unverified MRSL conformance chemicals in our suppliers' chemical inventory list (CIL). As a result, these local formulators are fully aware of H&M Group's expectation on ZDHC MRSL conformance. They also shared plans for Gateway registration and alternatives for unverified MRSL conformance chemicals, which helped suppliers to improve MRSL conformance level.

In November 2022, we invited Dr. Yan Guo from BluWin to deliver training on textile chemistry and innovative chemicals. The training purpose is to have SCOPI (Sustainable Chemicals Optimization Process Improvement) experience and knowledge sharing for internal teammates so that they can better support suppliers to improve chemical performance.

## Myanmar

The Myanmar team collaborated with SMART Myanmar to organise a Chemical Inventory Management (CIM) workshop. The event raised awareness of the importance of GHS Label & SDS requirements. It also gave participants the chance to share knowledge about chemicals hazards type, health & safety prevention and precaution, and how to maintain effective chemical inventory.

## Vietnam

In collaboration with GIZ (insert link), the Vietnam team held further Chemical Management Improvement for the Fashion Industry training as part of a project called "Promoting Sustainability in the Textile and Garment Industry in Asia". It aims to improve chemical management performance in textile, garment and footwear factories.

The training provides supplier employees with basic chemical management knowledge and supports them to establish or improve their chemical management action plan. Ten factories attended the 2022 session, taking the total number of factories trained in CMI to 20. A total of 14 factories increased their self-assessed Higg FEM chemical score by at least 20% compared to a baseline of 2021 or the most recently available.

The Vietnam team provided HIGG FEM/FSLM training, including chemical management. In this training, suppliers shared best practice and implementable actions to improve factory performance.

In addition, the team organised an online session about FEM and FSLM contents to factories that are in scope of Higg. The training explained Higg and shared best practice examples.

## Moving beyond compliance

We apply a stepwise approach, moving beyond MRSL compliant chemicals. Restricted substance lists (RSL) and manufactured restricted substance lists (MRSL) are vital to assure that specific chemicals of high concern are not used in products or processes. However, Chemical Restrictions and testing do not provide any information about the safety of the chemicals present in a formulation, nor do they allow brands to make informed comparisons of chemicals to select preferred chemicals for substitution or identify chemicals for phase out.

To address this lack of transparency, we have adopted "Screened Chemistry v3" as our preferred methodology to ensure safe chemicals while protecting intellectual property. This program is the result of a collaboration that aligned LS&Co.'s *Screened Chemistry Program* and Nike's *Chemistry Assessment Program*. Aligning these two programs facilitates the widespread implementation of safer chemical selection and informed substitution.

## Implementing screened chemistry

- We have adopted Screened Chemistry methodology to assure safer alternatives in substitutions for textile and leather.
- Together with ZDHC, two suppliers, and a global chemicals manufacturer, we are co-developing and piloting assessment methodology for ZDHC's framework *Chemicals to Zero* aspirational chemicals. This will enable the industry to select chemicals that are better for people and the environment from hazard and resource efficiency perspectives.
- We continued to scale Screened Chemistry, especially within our children's assortment.
- We are collaborating with ZDHC and a chemical supplier to develop a [holistic methodology to assess chemicals](#).

## Engagement

### Public Affairs

Together with [ChemSec](#) and peers, we sent a [joint letter](#) to the EU Commission about how to incentivise chemical suppliers to share full information on chemical content. This letter was followed up with a meeting with the EU Commissioner for the Environment, Virginijus Sinkevičius ([Still wanted: Chemical transparency – ChemSec](#))

We also engaged in the EU REACH revision and when the revision was delayed, we and 21 other brands sent a letter to the commission explaining that we want an urgent and an ambitious revision of REACH to enable safe substitution and circular economy. [A company request for an ambitious revision of REACH – ChemSec](#)

We participated in a panel on the subject "Towards elimination of hazardous substances in products" at the chemicals conference held by the French Ministry of Ecological Transition.

We advocated for strict chemical safety criteria to be included in the EU Safe and Sustainable by Design (SSbD) framework for Chemicals and Materials. We believe it is essential to secure that chemical innovations in the SSbD context are made inherently safe from the start.

### Collaboration

- We continued to collaborate with ZDHC through the brand advisory group and in task teams relating to safer chemistry, MRSL review, wastewater guideline and solvent task team. H&M Group's Program Manager for Chemicals, Mia Gunawan, was elected to the ZDHC board to represent the ZDHC member brands.
- We are members of the AFIRM steering committee as well as the RSL, data management, training and public policy committees.
- We actively participate in [ChemSec](#) business group to share and exchange knowledge on cross industry chemical management. The outcomes of these meetings include the REACH and chemical transparency letters mentioned above.
- We joined the Green Chemistry Commerce's first European meeting and participated in a panel on the subject "Barriers and Challenges with scaling better chemistry".
- We began an industry collaboration to establish a common MRSL for hardline products, such as furniture and decorative items, and to restrict use of hazardous chemicals in these supply chains.
- We are part of the SAC FEM task team to develop FEM 4.0 chapter on chemical management. We aim to improve application and accuracy of the scores to reflect the current industry situation. We also want to promote stronger industry alignment through ZDHC's Supplier to Zero platform.

## External acknowledgement

We were one of eight brands awarded "aspirational level" during the annual assessment of ZDHC's [Brands to Zero leader programme](#). This means that we are among the leaders of the industry for implementation of ZDHC programmes in our supply chain.

# Our Circular Approach

Here is some of the progress we made during 2022. For more specific information on our work related to resource use and circular impact please see the [circularity pages on our website](#).

## Circular Products

- We took big strides towards our 2030 material goal, including strong progress on increasing the share of recycled materials. Results will be published shortly in our annual sustainability report.
- H&M brand, Weekday and Monki confirmed participation of [Jeans Redesign](#) version 2.

## Circular Supply Chain

- H&M Group and IKEA study, as detailed above
- Joined [Sorting for Circularity project](#) with Fashion for Good
- [Circular Fashion Partnership](#) with GFA and Reverse Resources

## Circular Customer Journeys

Access: Offering customers different ways to enjoy and experience fashion, while keeping products in circulation for as long as possible.

We expanded ways for customers to purchase pre-loved products:

- H&M Group is a majority shareholder in Sellpy.
- Customers in 24 markets can now shop second-hand garments through Sellpy, and customers in four markets can sell at Sellpy.
- In seven markets H&M has a H&M X Sellpy collaboration on the website.
- H&M customers in Sweden can now [shop second-hand garments](#) from multiple brands alongside new H&M garments. The customer will find a curated assortment from Sellpys website that is integrated on hm.com
- Customers in three markets can now [buy and sell pre-owned clothes](#) through our collaboration with business technology provider Reflaunt. H&M launched [H&M Rewear](#) in Canada, while COS offers COS Resell in Germany and the United Kingdom.
- Weekday offers Weekday Curated “in store” 2<sup>nd</sup> Hand in three cities in Sweden giving customers the chance to buy and sell pre-owned clothes.

We expanded options to rent our products:

- Selected H&M stores in Amsterdam, London Berlin and Stockholm offer clothing rental services for specific collections.
- H&M HOME started offering rental for occasions and celebrations. Rent a Christmas offered customers the chance to loan festive decorations in five markets.

Use & care: Encouraging customers to love their clothes for longer and extend the life of their fashion favourites through care and repair.

- H&M’s Take Care initiative offers customers in 46 markets ways to care, repair and customise their clothing. The Take Care product range, which helps customers extend the life of their clothing, is available in 17 markets. Plus, the brand offers repair services through repair studios in six stores.

Collect: We offer our customers instore collection for post-consumer garments across all our brands. Working with our partners, we sort these garments for rewear, reuse and recycling.