

Taking the Shine off SHEIN:

A business model based on hazardous chemicals and environmental destruction



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Taking the Shine off SHEIN:

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Introduction & summary of key findings

The fast fashion business model is notorious for the huge volumes of clothes that are produced, the speed they are brought to market, and for stories of outsize environmental and social impacts. The most visible of these is the vast quantity of polluting textile waste increasingly making its way to East Africa and other Global South countries, as recently revealed by Greenpeace Germany.¹ While credible attempts to change the business model are thin on the ground, there's no shortage of 'sustainability' or 'circularity' initiatives, which are mostly not a serious attempt to address the problem² – and are increasingly being proven as greenwashing. It's hard to imagine how fast fashion could get any worse, yet this is already happening. The latest phenomenon – ultra fast fashion³ – championed by the Chinese online fashion brand SHEIN, has taken the fast fashion business model beyond the extreme. This new evolution of fast fashion forces suppliers to deliver at breakneck speed, with orders made in China within 3-7 days⁴ and delivered direct to customers around the world by air freight. It's a business model built around the exploitation of the environment and people, which relies on the lack of enforcement of regulations designed to protect the environment – and the health and safety of workers and consumers – routinely crossing the red line of regulation.

Pink and purple foam on the Tullahan River in the Philippines. The river changes colour almost daily. Several industries, including a dye factory, are located upstream from this site.



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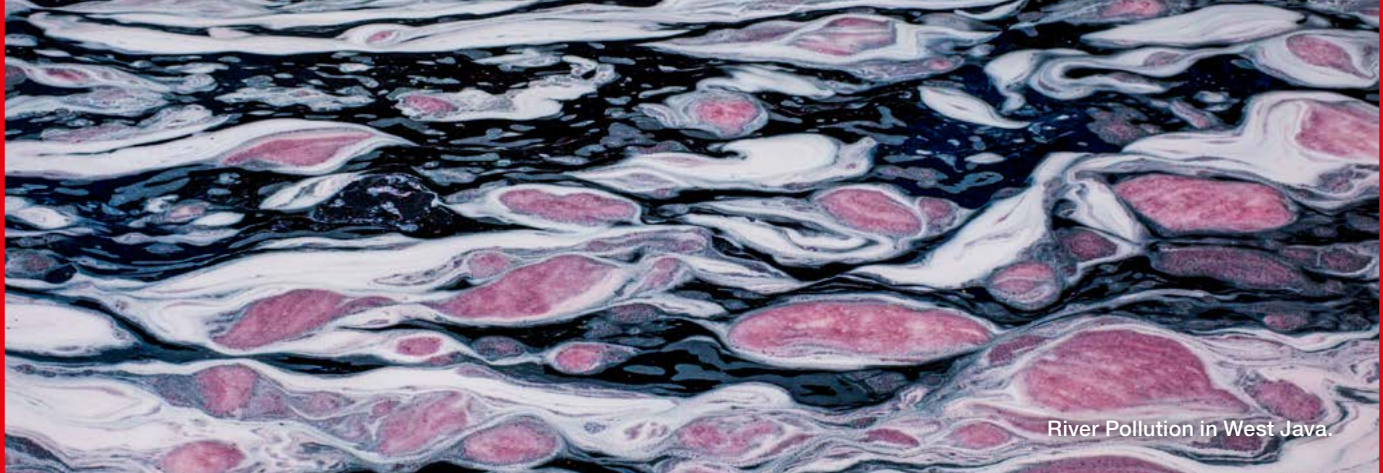
Cormorant oilfield in the North Sea.



Smoke from dyeing factories.



Dye Factory in Shaoxing.



River Pollution in West Java.

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Indonesian models wear eco fashion apparels designed by well-known Indonesian designers Felicia Budi, Indita Karina, Lenny Agustin during a “Detox Catwalk” organised by Greenpeace in the polluted paddy field in Rancaekek, West Java 2015 province to highlight the toxic pollution brought by the clothing industry as well as the idea that ‘beautiful fashion shouldn’t cost the earth’.

The fashion industry is responsible for up to 10% of global greenhouse gas emissions⁵ (GHG) and is even failing to meet its own GHG commitments.⁶ It is also a major cause of water pollution worldwide,⁷ with over 80% of its supply chain impacts on the environment taking place in Global South countries where the overwhelming majority of clothes are manufactured.⁸ Following the pressure of Greenpeace’s successful Detox My Fashion campaign, the global brands that were targeted are cleaning up their supply chains to tackle the huge problem of water pollution with hazardous chemicals that we revealed in 2011.⁹ But this voluntary action can only go so far; without a level playing field, there will always be companies who will do nothing unless they are required to by regulation, whether that’s cutting corners on hazardous chemicals and water pollution or speeding up the turnover of “disposable” plastic clothing.¹⁰ And if the regulations that do exist are not enforced, they will take advantage of this too.

As a result, all of the brands targeted by the campaign, including fast fashion giants like Zara and H&M, have been working successfully for years to Detox their supply chains, with the positive effects that come with supply chain transparency. Nevertheless, these brands and others like them opened Pandora’s box many years ago by starting the fast fashion trend. While their business models still depend on non-circular fast fashion and can therefore never be sustainable, it’s shocking that the number of new designs they promote even looks small in comparison with the huge

number of new designs that SHEIN puts on its website every week. SHEIN’s clever marketing bombards young people, under the radar of critical eyes, through novel social media platforms like TikTok, with glamorous looking products selling at rock-bottom prices, promoted by micro- and macro-influencers who get free products and other benefits in return for spreading the word. Yet the suppliers that make these products for SHEIN are shrouded in mystery; little is known about the thousands of cut and sew suppliers in Guangdong, China, which churn out orders 7 days a week, and even less about the factories that wash and dye their fabrics - the biggest contributors to SHEIN’s pollution footprint.

Can the products themselves tell a story? Do the sheer volumes and tight turnaround times of SHEIN’s products mean that it is cutting corners on the use of hazardous chemicals in its supply chain? To find out, Greenpeace bought 42 items from SHEIN websites in Austria, Germany, Italy, Spain and Switzerland and 5 articles from a pop-up store in Munich, Germany, and sent them to independent laboratory BUI for chemical analysis. The findings prove SHEIN’s careless attitude towards the environmental and human health risks associated with the use of hazardous chemicals, all in the interest of profit. Even worse, we found that SHEIN is breaking hard-won EU environmental regulations on chemicals and risking the health of consumers and the workers at the suppliers that make the products.

Key findings

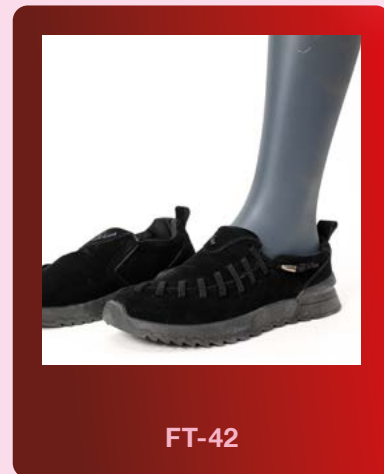
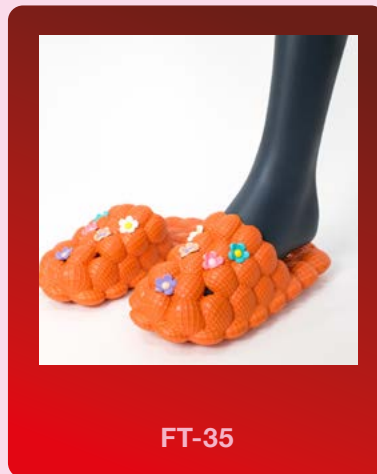
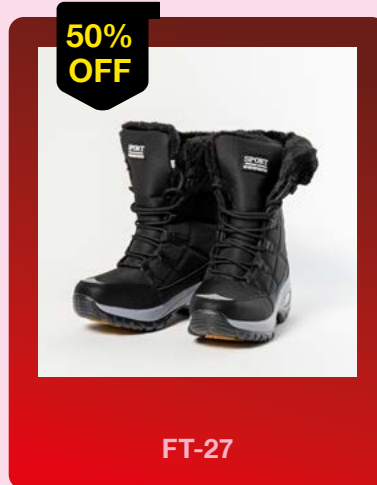
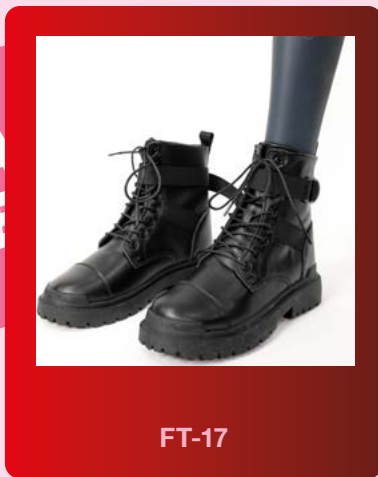


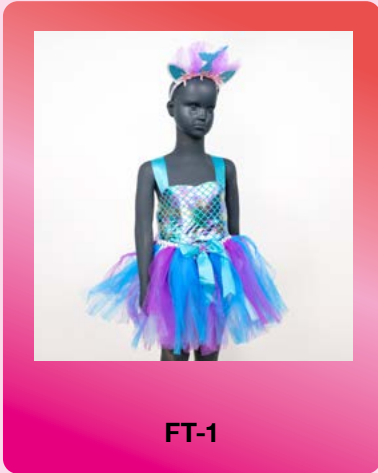
For products sold in Europe, strict concentration limits are set under the REACH Regulation for a range of hazardous substances (whether present as additives or contaminants) in clothing textiles, accessories and shoes (see table 1).¹¹ For specific details of the results of the product testing, see the Appendix.

Out of the 47 products bought, 7 contained hazardous chemicals in excess of EU regulatory limits.¹² That's 15% of the products.

All 7 of these products were made wholly or partly from synthetic, fossil-fuel based materials. 6 of these 7 products were boots or shoes.

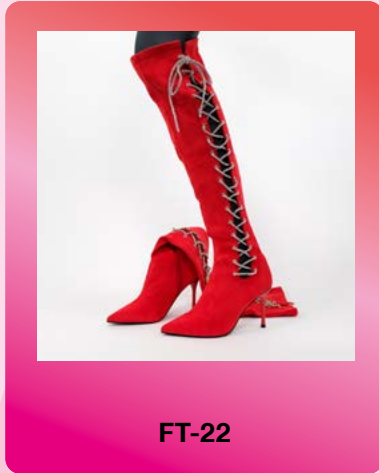
Very high levels of phthalates were found in 5 boots or shoes (FT-17, FT-27, FT-15, FT-35, FT-42) at above 100,000 mg/kg (100%), compared to the requirement in the EU's REACH regulation of <1,000 mg/kg. The highest level of phthalates was found in some black snow boots (FT-27) bought in Switzerland, at 685,000 mg/kg of DEHP (680%).





FT-1

Formaldehyde was found in a baby girl's colourful fancy dress tutu, at 130 mg/kg in purple tulle, which exceeds the REACH requirements, and 40 mg/kg in a green strap and purple tulle, above the EU Toys Directive limit of 30 mg/kg.¹³



FT-22

The release of nickel above the EU REACH requirements of $<0.5 \mu\text{g}/\text{m}^2/\text{week}$ was found in a pair of red stiletto boots bought in Spain, at $1.5 \mu\text{g}/\text{m}^2/\text{week}$.

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ONE OTHER PRODUCT CAME CLOSE TO EXCEEDING REGULATIONS.¹⁴



FT-21

A suede moto jacket also bought in Spain was found to release $0.7 \mu\text{g}/\text{m}^2/\text{week}$ of nickel and apparently breaches the REACH requirements for the release of nickel ($<0.5 \mu\text{g}/\text{m}^2/\text{week}$). However, there is a margin of uncertainty in the testing.

A total of 15 of the products contain hazardous chemicals at levels of concern (32%), including 6 products containing DMF(N,N-Dimethylformamide), and lead found in a polymer at 4500 mg/kg in the orange clogs.¹⁵

At least one hazardous chemical was quantified in 45 of the 47 products, although most were at relatively lower levels.

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Expedition to Macun Lakes, Switzerland. Greenpeace teams went to famous remote areas on three continents to collect water and snow samples and test them for PFCs, the hazardous chemicals used to make outdoor gear waterproof. They are already found deep in the ocean, on mountain tops, and in nearly all living creatures. Once released into the environment during industrial production, PFCs persist for millions of years and future generations will continue to be exposed via contaminated water, air and food.

The concern is not only that SHEIN products with illegal levels of hazardous chemicals are being widely sold in Europe, contravening EU regulations, with potential impacts on consumers. It also suggests that SHEIN has little oversight of hazardous chemical management within its supply chain. It is therefore exposing workers to these hazards when products are made. Its suppliers who make the fabrics and materials are likely to be impacting the environment and local communities by releasing these hazardous chemicals into the air and wastewater.

Greenpeace's Detox My Fashion campaign¹⁶ revealed the widespread use of hazardous chemicals like nonylphenols, phthalates and the "forever chemicals" PFAS¹⁷ that were routinely being discharged into waterways by textiles suppliers in East Asia, Southeast Asia and Central America. Many of these chemicals are persistent and do not break down, so they build up in the environment and leave a poisonous legacy for future generations. Chemicals don't only remain in the regions

where clothes are made; for example, persistent chemicals have been found globally, from polar ice caps to remote mountainous regions¹⁸, to the bottom of the sea.¹⁹

Many fast fashion products are manufactured in high volumes and made to be disposable – a party top is used on average 1.7 times before being discarded²⁰ – and recycling of textiles into new clothing is only a reality for less than 1% of clothes.²¹ Unsold or returned goods are also routinely destroyed – in Europe it is estimated that the products destroyed in 2020 alone would go around the world 1.5 times.²² So at the other end of the fashion cycle when clothes containing hazardous chemicals are thrown away, they will inevitably contaminate the truckload of textile waste which is either burnt or sent to landfill every second.²³ Finally, if any fashion brand is serious about circularity, the first thing to do is address the hazardous chemicals problem, to prevent these chemicals recirculating in second hand clothing and contaminating recycled textile fibres for years to come.

Product testing

A recent investigation in Canada found that out of 38 samples of children's, adult's and maternity clothes and accessories bought from three online retailers, including SHEIN, one in five items had elevated levels of hazardous chemicals — including lead, PFAS and phthalates — with a SHEIN jacket for toddlers containing 20 times the safe level set by Health Canada.²⁴ Likewise, in Europe, a documentary on French TV²⁵ analysed clothes bought from SHEIN which showed non compliance with REACH, with levels of lead in a polyester top 4 times higher than the REACH limits. These findings were clearly a cause for concern, adding to Greenpeace's alarm about the high volumes of SHEIN products being sold: we therefore decided to investigate the situation further.

Greenpeace bought 42 articles from SHEIN websites in Austria, Germany, Italy, Spain and Switzerland and five articles from a pop-up store in Munich, Germany, and sent them to independent laboratory BUI for chemical analysis.



THE PRODUCTS

A total of 47 textiles were purchased and sent to an independent laboratory for analysis. In September 2022, 42 products were bought from SHEIN's online website, 22 from Germany, with 5 from Austria, Italy, Spain and Switzerland respectively.

A further 5 textile products were bought at SHEIN's pop-up store during Oktoberfest in Munich in October.²⁶

THE METHODOLOGY

The products were divided into sub-samples according to their material and were analysed for alkylphenol ethoxylates, formaldehyde, heavy metals in metal parts, heavy metals/metalloids in plastics and coated materials, extractable nickel, VOC screening, total and extractable heavy metals, aromatic amines from azo dyes, PFAS (perfluorinated carboxylic and sulfonic acids), DMF (n-n-dimethylformamide), phthalates and other plasticisers, and PAHs.

For full details of the chemicals analysed and the results according to each product see Appendix, Table A1, and for the full results including details of the methods applied for each type of analysis, see the BUI Analysis Report.

THE RESULTS - SUMMARY OF MAIN FINDINGS:

- **Alkylphenol ethoxylates (APEs):** 43 samples (from 43 products) were analysed for the alkylphenol ethoxylates NPE and OPE; 9 samples contained NPEs and 2 contained OPEs (25%). The range was between 3 and 36 mg/kg, within the REACH requirement of <100 mg/kg.
 - Regulation and enforcement since 2015 has encouraged the substitution of the hazardous chemicals NPEs with safer alternatives throughout the industry, following Greenpeace findings of NPEs in products²⁷ which resulted in the closing of a loophole in EU regulation that allowed the presence of nonyl-

phenol ethoxylates in imported products. Therefore the fact that the levels of APEs found in the SHEIN products do not exceed the regulatory limits, shows the shift away from APEs resulting from Greenpeace's campaign.²⁸

- **Formaldehyde:** 45 samples were analysed, taken from 43 products (some products were divided up into more than one sample to target specific chemicals). Formaldehyde was found in 4 of the samples (3 products) between 5 - 130 mg/kg. The sample with 130 mg/kg exceeds the REACH requirement of <75 mg/kg. Another sample of the same children's dress contained 40 mg/kg, which exceeds the requirement of the Toys Directive.
- **Heavy metals in metal parts:** 18 samples were analysed, from 14 products. Nickel was detected in 14 samples, ranging from 6,000 mg/kg to 460,000 mg/kg. A Dazy swimsuit²⁹ also contained lead (20,000 mg/kg) and tin (700 mg/kg) which is possibly connected to organotins - in a plastic part).
- **Heavy metals/metalloids in plastics and coated materials:** 33 samples from 22 products were analysed. Bromine, tin, cadmium and lead were detected in 6 samples: bromine was detected in 4 samples (50 - 400 mg/kg which could indicate inorganic bromine or Brominated Flame Retardants (BFRs) although levels are usually much higher with intentional use), tin in 2 samples (700 & 800 mg/kg) which is possibly connected to organotins, and both lead (4500 mg/kg) and cadmium (200 mg/kg) were found in 1 sample. The level of cadmium exceeds the REACH requirement of <100 mg/kg for cadmium in polymers.
- **Nickel release of suspected cases:** 6 samples of the metal parts of 6 products were analysed (6 samples in total) for release of nickel, which was found in 2 samples, at 0.7 and 1.5 µg/cm²/week, both in exceedance of the REACH requirements. However, there is a 'combined measurement uncertainty' for the sample with 0.7 µg/cm²/week.

- **Heavy metals - extractable:** 45 samples (43 products) of material or printed material were analysed for extractable heavy metals, which were detected in 42 samples. Antimony was detected in 41 samples (between 0.1 - 20 mg/kg) and nickel in 9 samples (9 products) (between 0.1 - 1.3 mg/kg). There is no REACH requirement for either extractable antimony or nickel in material or printed material, (unlike the requirements for nickel release from metals above).

- Previous Greenpeace studies tested for antimony in polyester clothing; a 2014 report³⁰ tested 36 polyester items, all contained antimony, in the range of 14-293 mg/kg. Antimony is commonly used as a catalyst in polyester production, although alternative catalysts are available.

- **PFAS - perfluorinated carboxylic and sulfonic acids:** 8 samples of swimwear were analysed for PFAS, and were not detected in any of the samples. PFAS are added at the finishing stage when clothes are manufactured, for waterproofing. SHEIN doesn't publish a Restricted Substances List, so it is unclear whether the absence of PFAS is the result of efforts to replace PFAS with environmentally friendly alternatives, or of simply skipping the waterproofing process to save costs or time.

- **Aromatic amines:** 44 samples (from 43 products) were analysed for aromatic amines, which were found in 3 products, between 6.5 and 110 mg/kg. The sample with 110 mg/kg of p-PDA is not included in the restrictions according to REACH on carcinogenic amines, although it has allergenic potential.

- **VOC screening:** 65 samples (46 out of the 47 products) were screened for VOCs. The presence of a range of chemical compounds were detected in all but 4 of the products. Based on the results of this VOC screening, further targeted analysis of some samples for DMF, phthalates and other plasticisers and PAHs was undertaken.

- **DMF (N,N-Dimethylformamide):** DMF was quantified in 6 products between 35 and 1200 mg/kg, within the REACH requirement of <3000 mg/kg.

- **Phthalates and other plasticisers:** 10 products were analysed (13 samples altogether), and phthalates were found in 8 products. In 6 products, phthalate concentrations exceeded REACH requirements of <1000 mg/kg each/in combination.

- **PAHs – poly aromatic hydrocarbons:** one sample was analysed for PAHs, and 18 PAHs were found, ranging from 0.2 to 17 mg/kg, with a sum of 68 mg/kg.

It's also useful to compare the findings to the OEKO-TEX Standard 100 (Annex 6)³¹ limits for hazardous chemicals in products, which are more ambitious than the REACH limits. Of the 47 products tested, 11 could exceed the various limits in the Standard 100 chemicals list, including exceedances of other chemicals in 5 of the products already exceeding REACH. The exceedances of the Standard 100 limits were for:

- aromatic amines (product sample number FT-7),
- phthalates (FT-31, FT-37, FT-41),
- PAHs (FT-22),
- lead (FT-35) and metallic lead (FT-39) and
- DMF(N,N-Dimethylformamide), with all 6 of the products that contained DMF (FT-7, FT-10, FT-15, FT-17, FT 22, FT-27) exceeding the Standard 100 limit of <0.05 - <0.10.

Further details are in the Appendix, Table A1.

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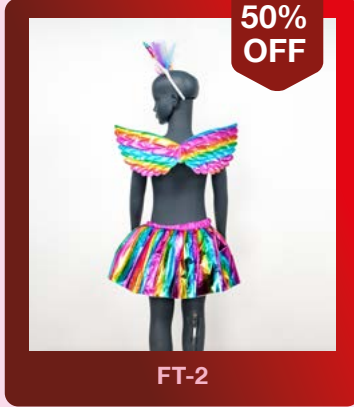
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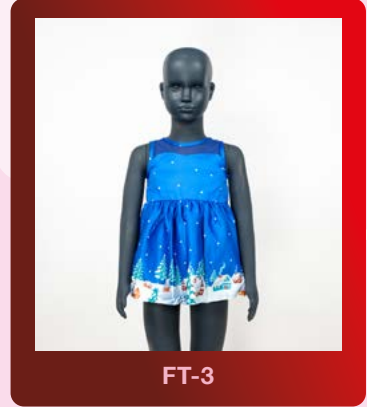


FT-1

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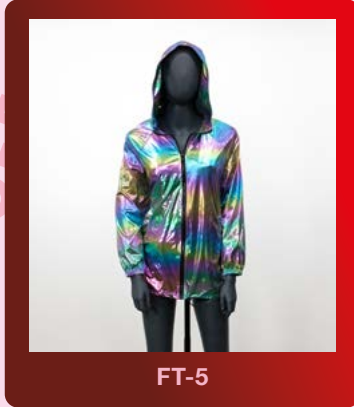
FT-2



FT-3



FT-4



FT-5



FT-6



FT-7



FT-8



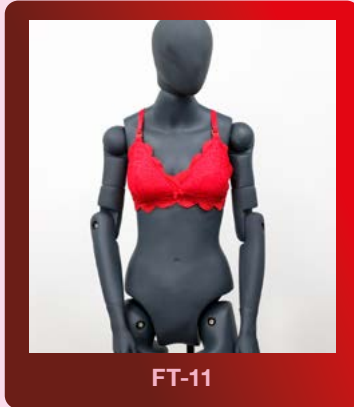
FT-9

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FT-10



FT-11



FT-12

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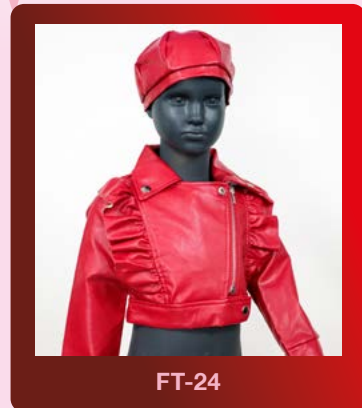
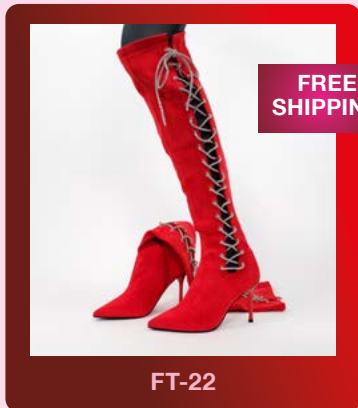
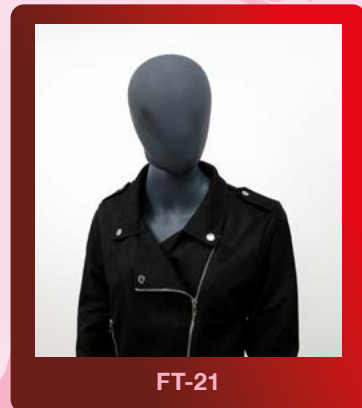
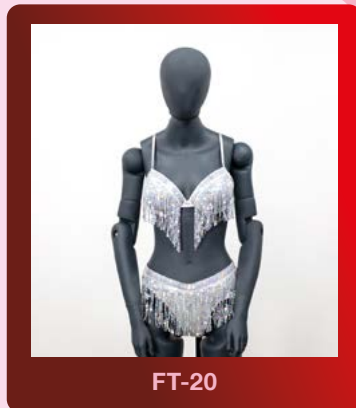
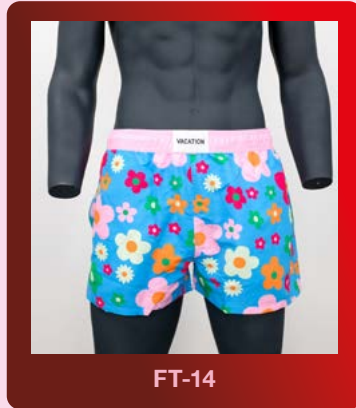
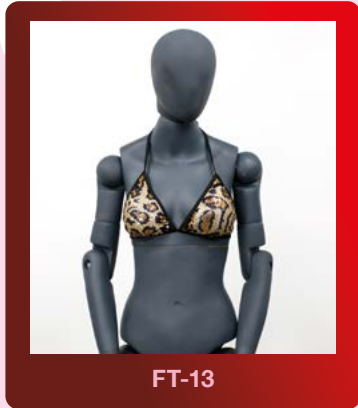
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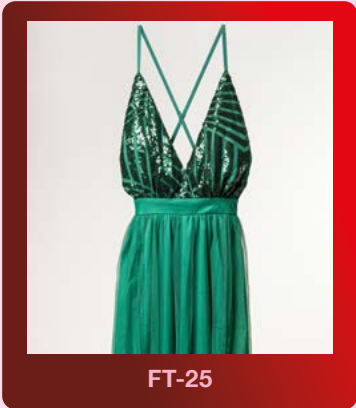
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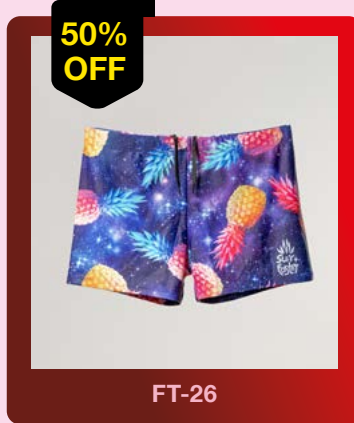
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FT-25



FT-26



FT-27



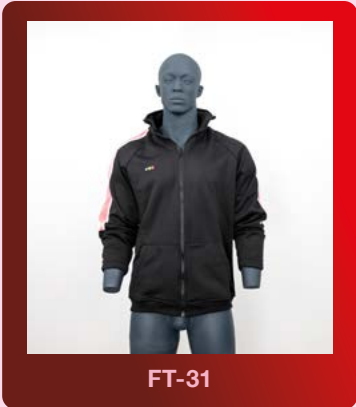
FT-28



FT-29



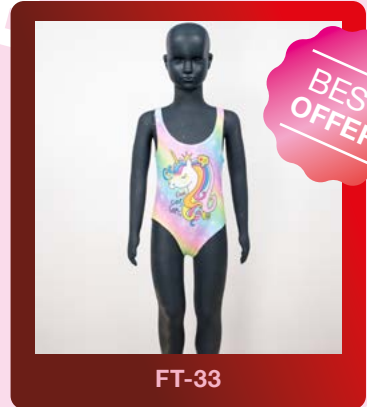
FT-30



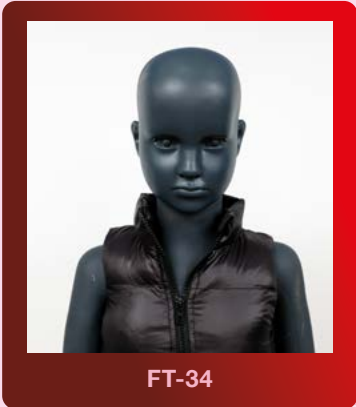
FT-31



FT-32



FT-33



FT-34



FT-35



FT-36

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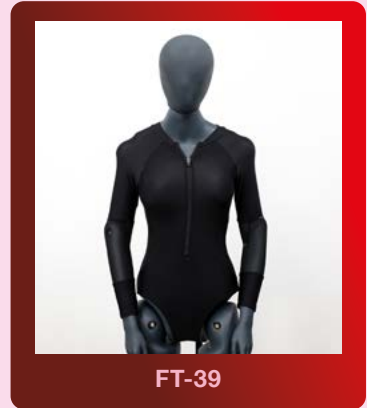


FT-37

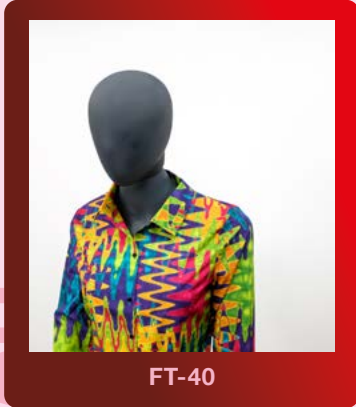
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FT-38



FT-39



FT-40



FT-41



FT-42

SUPER SALE

Orange bucket hat

<https://m.shein.com/de/EIMERHUT-p-10808020-cat-1772.html>

FT-43

Overall dress with ribbon, buckle, without blouse

<https://m.shein.com/de/OVERALL%20KLEID%20MIT%20BAND,%20SCHNALLE,%20OHNE%20BLUSE-p-11197639-cat-1727.htm?ici=&ref=m&rep=dir&ret=mde>

FT-44

Sweater with polo collar, drop shoulder, letters graphic

<https://m.shein.com/de/PULLOVER%20MIT%20POLO%20KRAGEN,%20DROP%20SHOULDER%20BUCHSTABEN%20GRAFIK-p-7722202-cat-1773.html>

FT-45

SHEIN X Penelope Ping PU leather blazer with lapel collar, eyelets and asymmetrical trim

<https://m.shein.com/de/PU%20LEDER%20LAZER%20MIT%20REVERSKRAGEN,%20%20C3%96SEN%20UND%20ASYM-METRISHEM%20BESATZ-p-2696714-cat-1739.html?ici=&ref=m&rep=dir&ret=mde>

FT-46

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Jeans with rips

<https://m.shein.com/de/JEANS%20MIT%20RISS-p-2420834-cat-1989.htm?ici=&ref=m&rep=dir&ret=mde>

FT-47

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Table 1: EU Regulations for chemicals analysed for product testing of textiles

Chemicals analysed for product testing of textiles, October 2022	Requirements REACH ³² mg/kg	Requirements Toys Directive ³³ mg/kg	OEKO-TEX Standard 100 Annex 6, ³⁴ for comparison mg/kg
Ethoxylated alkylphenols	<100 ³⁵		<50
Formaldehyde	<75 ³⁶	<30	nd (baby) In contact with skin <75
Lead in jewellery products	<500 ³⁷		
Lead in metallic material			<90
Lead in plastic, coatings			<75
Cadmium in polymers	<100 ³⁸		<40 total content
Organotin compounds, Sn in articles	<1000 ³⁹		<0.5
Nickel release	<0.5 µg/cm ² /week ⁴⁰		Same as REACH
Extractable heavy metals: Cd, Cr VI, As, Pb for clothing, accessories and footwear	Each <1 ⁴¹		Cd <0.1 Cr VI <0.5 As <0.2 Pb <0.2 Sb <30 Ni <1
Aromatic amines	Each & sum <30 ⁴²		<20
VOC screening: DMF, N,N-Dimethylacetamid	<3000 ⁴³		<0.05 - <0.10
DMF (dimethyl formamide)	<3000 ⁴⁴		<0.05 - <0.10
Phthalates: DPP, DMEP, DIPP, DnHP, single or in combination with DIBP, DBP, BBP, DEHP	<1000 ⁴⁵		
Phthalates: DIBP, DBP, BBP, DEHP, single or in combination	<1000 ⁴⁶		
Phthalates: DINP, DIDP, DNOP (toys and articles for babies, that can be put in the mouth)	<1000 ⁴⁷		
Phthalates - all			<0.010 Sum <0.025
PAHs	<1 ⁴⁸		<0.5 - <10



PEST SALE

50% OFF

BLACK FRIDAY SALE

FREE SHIPPING | GET THE SHEIN APP

SPECIAL OFFER | BEST OFFER

SHOPPING % SHOPPING % SHOPPING %

BLACK FRIDAY SALE

BOX 1: ABOUT THE CHEMICAL VILLAINS ANALYSED IN THE PRODUCTS

CHEMICAL VILLAINS - the hazardous chemicals	Examples of uses /functions ⁴⁹	Examples of hazards to environment and human health (see note*) and relevant regulation. Impacts occur from their use in the supply chain, their presence in the final product during use and their disposal.
Alkylphenols/alkylphenol ethoxylates (APs/APEs), including nonylphenols/nonylphenol ethoxylates (NPs/NPEs)	Detergents and auxiliaries	APs: toxic to aquatic life, persistence, bioaccumulation, endocrine disruptors. Heavily regulated in the EU. APEs break down to APs
Formaldehyde	Water-, oil-, stain- and wrinkle-resistant coatings	Legislation in major markets around the world restricts the presence of formaldehyde in finished products. At high exposures formaldehyde is classified as a probable human carcinogen. It is an irritant which can affect the eyes, nose, and throat. ⁵⁰ Individuals who are sensitised to formaldehyde can develop an allergic response (eg allergic contact dermatitis) when they are exposed to formaldehyde.
Heavy metals: cadmium, lead, mercury and chromium (VI). Also antimony and nickel	Dyes and colourants; additives in some plastic coatings Antimony can be used as a catalyst in the production of polyester Nickel can be found in pigments, dyes, metal alloys, metal coatings and in metal-complex dyes. ⁵¹	Some can bioaccumulate in the body over time and are highly toxic, with irreversible effects including damage to the nervous system (lead and mercury) or the kidneys (cadmium). Cadmium is also known to cause cancer. Antimony shows many similarities in its chemistry and toxicity to arsenic. Trivalent antimony, such as is present in antimony trioxide, is a more toxic form of antimony compound. Antimony compounds have been associated with dermatitis, irritation of the respiratory tract, and interference with the immune system. Nickel: The most common effect of exposure to nickel is an allergic reaction and sensitization effect caused by direct and prolonged skin contact with nickel.
Tin - could arise from organotin compounds	Antibacterial and anti-mould agents;	Some organotins are persistent, bioaccumulative, and can affect immune and reproductive systems. Consumer products containing more than 0.1% of some organotin compounds are banned in the EU.
Bromine - could arise from inorganic bromine or Brominated flame retardants (BFRs)	Fire retardant textiles	Many BFRs are persistent and bioaccumulative. Some PBDEs, a type of BFR, are endocrine disruptors and are banned under EU law.
Per- and polyfluorinated chemicals (PFCs) (also referred to as PFASs - polyfluorinated alkylated substances)	Water-, oil-, stain-resistant coatings	Many PFCs are persistent and bioaccumulative - and are known as “forever chemicals”. Some can affect the liver or act as endocrine disruptors, altering levels of growth and reproductive hormones.

Aromatic amines: Azo dyes with cleavable carcinogenic amines	Dyes and colourants	Azo dyes release chemicals known as aromatic amines, some of which are carcinogenic. Certain azo dyes (those that can release carcinogenic amines) are banned by the EU in textiles that come into contact with human skin.
DMF - N,N-dimethylformamide	Used in the production of polyurethane (PU) coated materials such as synthetic leathers, also in process coatings, adhesives, plastics, acrylic fibres, PU resins, or as a cleaning solvent. ⁵²	DMF is classified as toxic to reproduction and is a Substance of Very High Concern under REACH. Also toxic to the liver from either acute or chronic exposure.
Phthalates	Softeners in plastic coatings	Some phthalates are classed as reprotoxic, others are known for other types of toxicity. Under EU REACH legislation many phthalates are listed as Substances of Very High Concern.
PAHs - polyaromatic hydrocarbons	Added to rubber and plastics as a softener or extender and may be found in rubber, plastics, lacquers, and coatings. Can be an impurity in textile dye. They are impurities in low-grade raw materials. ⁵³	Legislation in major markets around the world restricts the presence of PAHs in final products. Some PAHs can be very toxic to aquatic organisms and, above certain exposure levels, may cause long-term adverse effects in the aquatic environment. Long-term exposure to some PAHs may result in the development of particular cancers.

*hazards to environment and human health include: persistence (they do not readily break down in the environment); bioaccumulation (they can accumulate in organisms, and even increase in concentration as they work their way up a food chain); and toxicity

Some types of toxicity make it difficult to define 'safe' levels for substances, even at low doses, for example, substances may be:

carcinogenic (causing cancer), mutagenic (able to alter genes) and/or reprotoxic (harmful to reproduction); or endocrine disruptors (interfering with hormone systems)



The flow of waste water containing alkylphenol ethoxylates from a discharge pipe in China. This pipe leads into the Huangshali Channel, and is located northeast of the Guotai Dyeing Factory or the “Well Dyeing Factory Limited” (English name). The factory is in Gaoping Industrial Park, Sanjiao town, Zhongshan City, situated on the Pearl River Delta.

EU and European regulations

HAZARDOUS CHEMICALS AND REACH

The EU’s regulation on hazardous chemicals, known as REACH, puts the responsibility for providing information on the hazards of chemicals used for production and in products with chemical producers and manufacturers of products containing chemicals.⁵⁴ Though registration such as this may not apply directly to brands selling articles, it depends on the volumes and concentrations of hazardous chemicals and their likely fate.⁵⁵ All companies (both manufacturers and brands) therefore need to be fully aware of the chemicals used by their suppliers, and take responsibility for

eliminating their use, their presence in products, their impacts and any discharges; including those into water.

The REACH Regulation is based on the principle⁵⁶ that it is the responsibility for manufacturers, importers and downstream users to ensure that they manufacture, place on the market or use only such substances that do not adversely affect human health or the environment. Its provisions are underpinned by the precautionary principle.

REACH-ING BEYOND THE EU: THE CASE OF NPES

The 2006 REACH regulation was a major development for the control of hazardous chemicals, and came about after years of

campaigning by Greenpeace and other public interest groups, who presented evidence about the problems from hazardous chemicals ranging from wastewater discharges to waterways, to consumer products such as toys and fragrances and the presence of chemicals in household dust. Nevertheless, there was a significant loophole, uncovered in 2012 by two Greenpeace International reports which found high levels of NPEs in branded clothing and revealed how they were washed out into European waterways when washed by consumers.⁵⁷ While the EU already banned the use of nonylphenol ethoxylates (NPE) in textiles manufacturing within its own borders, it allowed garments containing NPE to be imported. This revealed the universal use of NPEs by manufacturers in East Asia and other Global South countries which were discharging this hazardous chemical into their waterways.

In a major success for Greenpeace's campaign, EU member states closed this loophole in REACH by voting to ban the import of clothing containing NPE in July 2015.⁵⁸ As the EU is an important market for clothing, this measure has had a global impact, resulting in the progressive elimination of the use of NPEs and the group APEs throughout the textiles supply chain. This example shows the importance of the paradigm shift from consumer safety towards taking responsibility for impacts in the supply chain, in this case, zero discharges of hazardous chemicals through eliminating their use by suppliers.⁵⁹



Detox Mannequins in Zhejiang Province 'witnessing' the Qiantang River pollution. The Greenpeace investigatory report; "Toxic Threads: Putting Pollution on Parade" (2012) revealed that effluent from the Linjiang WWTP contained various toxic chemicals including carcinogens.

The European Commission is currently engaged in an ongoing process to update the REACH regulation⁶⁰ as part of its Chemicals Strategy for Sustainability. However, public interest groups have accused the European Commission of "inexcusable short-termism" for delaying the crucially needed reform of the REACH – originally expected by March 2023 at the latest – until late next year.⁶¹ This strategy provides an action plan⁶² to:

- Ban the most harmful chemicals in consumer products – allowing those chemicals only where their use is essential.
- Pay attention to the cocktail effect of chemicals when assessing chemical risks.
- Phase out per- and polyfluoroalkyl substances (PFAS) in the EU, unless their use is essential.
- Boost investment and innovative capacity for the production and use of chemicals that are safe and sustainable by design throughout their lifecycle.
- Promote the EU's supply and sustainability of critical chemicals.
- Establish a simpler "one substance, one assessment" process for assessing the risks and hazards of chemicals.
- Play a leading role globally by championing and promoting high chemical safety standards and not exporting chemicals banned in the EU.

BOX 2: E-COMMERCE REGULATIONS

When it comes to companies selling online, enforcing regulations, including REACH, becomes more difficult. A recent report by the European Chemicals Agency⁶³ assessed the compliance of a range of products (including textiles) with EU regulations, and found out of 776 articles, 25% were non-compliant with REACH restrictions. The Swedish Chemicals Agency also found a higher risk of non-compliance with European chemicals legislation: “Shopping online, especially from companies outside the EU and EEA, can pose a risk to both health and the environment if consumers are not sufficiently conscious and informed and sellers are not knowledgeable and honest. This risk is higher when buying from companies without physical stores in the EU and from marketplaces based outside the EU, as consumers may purchase products that do not comply with the requirements of the European chemicals legislation”.⁶⁴ In a first for France, the website Wish has recently been “un-referenced”⁶⁵ because of the non-compliance and hazards of the products it was selling.

The EU Safety Gate system (formerly Rapid Information System-RAPEX)⁶⁶ which was set up to identify products posing a serious risk to the health and safety of consumers, has also drawn attention to the problem of dangerous products being sold online.⁶⁷ The OECD publishes global statistics that show that 68% of products that were identified as banned or recalled were supplied online, and has also carried out a global campaign to raise awareness about this issue.⁶⁸

In recent years more effort has been made through the Safety Gate system to include products sold online through tracing systems, international cooperation as well as a voluntary Product Safety Pledge which the EU has asked online retailers to sign. This contributes to the faster removal of dangerous non-food consumer products offered for sale online and sets out actions by online marketplaces to strengthen product safety, such as providing a clear way for customers to notify dangerous product listings.⁶⁹ The most recent report in May 2022 lists eleven online marketplaces as signatories of the Pledge, including Amazon; however, SHEIN is not listed among them.

SHEIN - an “under the radar” catastrophe

After the scandals of recent years, with hundreds of people dying in disasters, from the collapse of Rana Plaza factory in Bangladesh to the fire at Ali Enterprises⁷⁰ in Pakistan, along with the scandalous treatment of suppliers by some big brands during the COVID pandemic, fast fashion is rarely out of the headlines. As a result of this, and the campaigns of public interest groups, there is a growing movement towards longer lasting, alternative and second-hand fashion such as renting, largely driven by women.⁷¹ Yet in the last few years, under the radar, SHEIN, a

company that most people over 30 years old have never heard of, has been strategically targeting vulnerable consumers as young as 9 years old⁷² with its new system of ultra fast fashion. Away from checks and balances of civil society, SHEIN has taken its fashion directly to its young customers through social media such as TikTok, taking advantage of children who could not be expected to be aware of the huge social and environmental impacts that are concealed behind the glamorous facade of its cheap and super-disposable fashion. With its smart but profit at all costs strategy SHEIN is undermining years of progress on tackling the toxic impacts of the global fashion industry. And even more concerning, this could just be the beginning.

**CHEAPER, FASTER, MORE CHOICE ...
MORE WASTE**

If you are looking for new men’s shoes for 7 euros or wedding dresses for 8 euros to wear once only, you will find them at SHEIN. Every day, the company puts an apparently unbelievable 6000 new articles online, with some of the styles and designs even stolen from designers, artists and other brands, with legal challenges a regular occurrence.⁷³ These products are made at breakneck speed, using 5000 small and large factories in Guangdong, China, which are said to produce directly for the company.⁷⁴

It normally takes a fashion brand about three months to plan a garment and bring it to market: SHEIN has arguably shortened the process to as little as 3-7 days,⁷⁵ ahead of its nearest competitor Zara, which takes two⁷⁶ to three weeks.⁷⁷

With the exception of occasional pop-up stores,⁷⁸ announced at the last minute to generate excitement – like the one during Oktoberfest in Munich where Greenpeace bought some products for this report, and the recent announcement of its first showroom in Tokyo⁷⁹ – SHEIN sells almost exclusively online. So instead of maintaining expensive stores, SHEIN delivers directly to its customers, gathering real-time customer feedback from the app and sharing it with its suppliers to control the production of goods.⁸⁰ New designs are made in very small quantities, as little as one or two hundred pieces or less; if the product is popular SHEIN orders more batches, usually with the same supplier.⁸¹ SHEIN is also one of Google Trends’ biggest customers and uses live searches to identify rising trends in different countries and predict the colours, fabrics and styles that will be popular.⁸² All of this increases the probability of “hitting the nail on the head”, with 50% of its products in high demand, and only 10% relatively less popular.⁸³



SHEIN
3–7 days

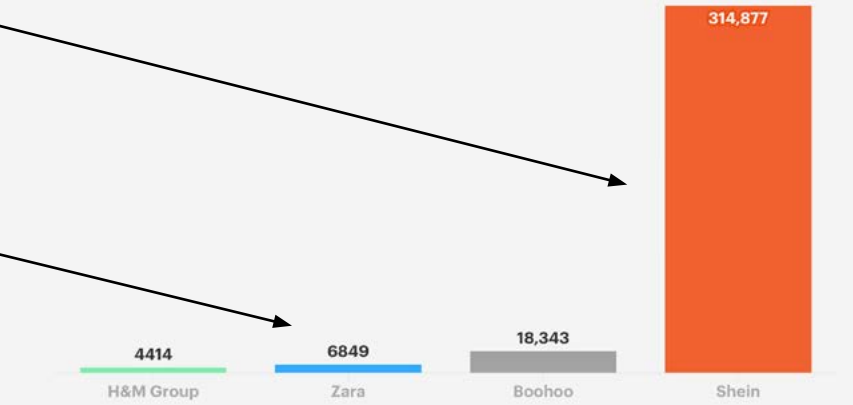


Zara
3 weeks

An Incomparable Churn

Shein pumps out far more styles than its rivals, with thousands of new items added to its website every day.

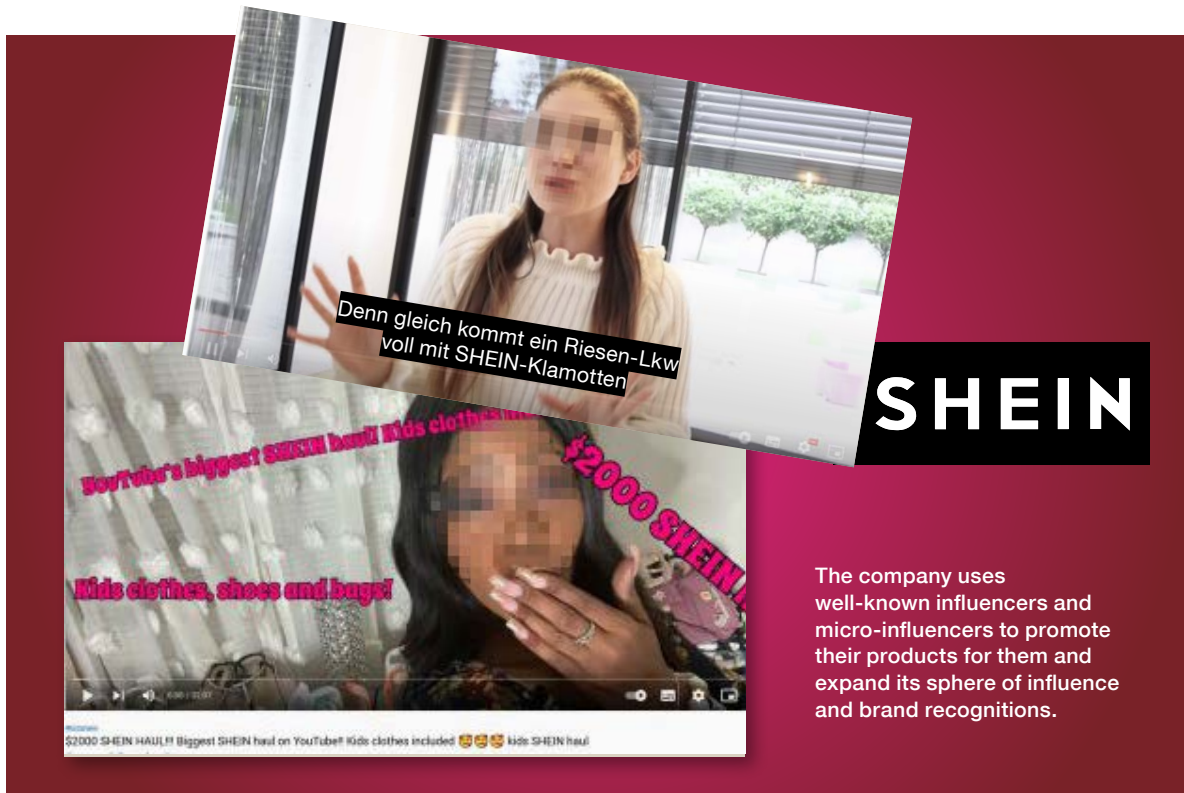
Number of New Styles Added in the US (YTD)



Source: Edited



Source: Business of Fashion, September 2022: <https://www.businessoffashion.com/articles/retail/why-shein-might-be-worth-100-billion-in-four-charts/>



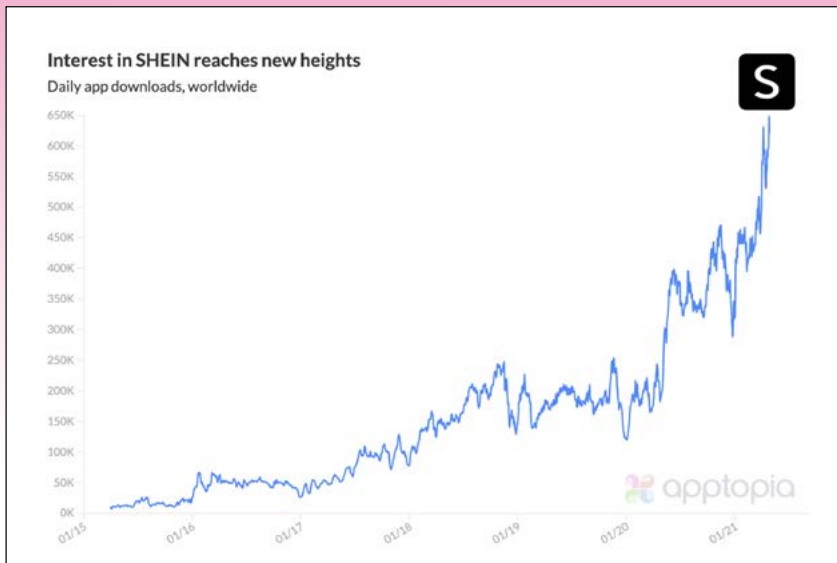
INFLUENCERS AND GEN Z

SHEIN relies heavily on influencers for its marketing, who are rewarded with free products in return for their efforts at promoting SHEIN's products amongst their young followers. For example, in Germany, this is as one example done with the help of Bianca "Bibi" Claßen, through the 5.9 million subscribers to her YouTube channel Bibis-BeautyPalace⁸⁴ and her 7.8 million Instagram followers,⁸⁵ where she presents SHEIN-sponsored content and gambling.⁸⁶ In Austria mi9chelle has 80.1K followers on TikTok.⁸⁷ By using country-specific accounts on Instagram, SHEIN is able to finesse its local influencer strategies and create more relevant connections with consumers in each of those markets.⁸⁸

SHEIN promotes its services on platforms like Instagram, and is especially popular with young Gen Z shoppers on TikTok and

YouTube, where it has become a trend for users to post \$1,000 SHEIN "hauls," or large purchases.⁸⁹ And it works: the hashtag #SHEINhaul has a massive 4.3 billion⁹⁰ views on TikTok alone, and on Youtube there are thousands more videos⁹¹ with hundreds of thousands of views each⁹². Internationally, the marketing works through events like the SHEIN Together Fest – officially a charity event for the WHO, supported by the United Nations Foundation – where world stars like Katy Perry or Lil Nas X perform.⁹³

This strategy has been incredibly successful for SHEIN; its website is the most visited for fashion and clothing worldwide,⁹⁴ with sometimes twice as many visits as its competitors from H&M, Zalando or Adidas, while in 2021 its app was the most downloaded shopping app in the world, far ahead of Amazon,⁹⁵ and has already been downloaded over 100 million times from Google Play alone.^{96,97}



<https://blog.apptopia.com/shein-accelerates-app-growth>

SHEIN's app is experiencing record-breaking activity, achieving new lifetime highs for single-day downloads and daily active users.

A MASTER OF MANIPULATION

SHEIN has been called the most manipulative fashion company ever by marketing experts,⁹⁸ and is a master at using so-called “dark patterns”, such as concealing hidden costs, making a customer feel bad if they don't buy, hidden advertisements, time-limited offers with a countdown, and much more. Anything to persuade its customers to buy more than they need. In an analysis of the exposure of Swiss consumers to “dark patterns” SHEIN took the top spot by far, with 18 out of 20 “dark patterns”.⁹⁹

The app works in a similarly manipulative way. It contains features such as mini-games, wheels of fortune and raffles, discount vouchers, free offers and loyalty points. These are intended to encourage people to use the app for longer, to keep checking it, and above all, to make purchases.¹⁰⁰

With consumers 2 to 4 times more likely to perform a specific action in an environment containing dark patterns,¹⁰¹ such tactics are the key to SHEIN's success. One survey shows that 33% of German shoppers intentionally buy more than they ultimately want to keep.¹⁰² Purchases for thousands of dollars are extremely popular internationally.¹⁰³

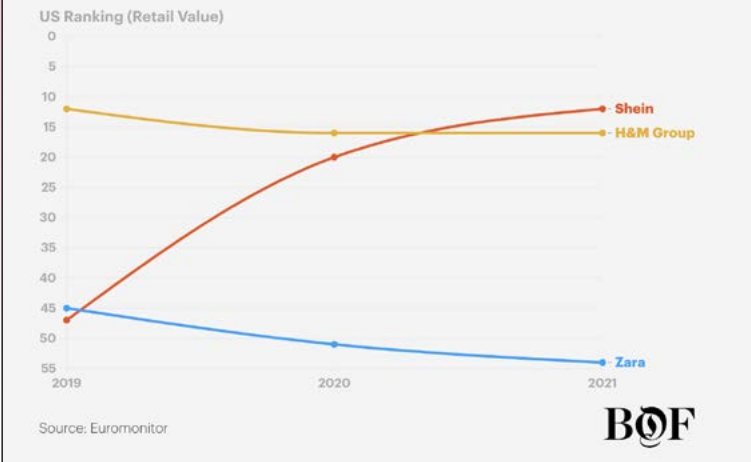
Such excesses show that despite its low prices, SHEIN is not really interested in providing useful products to people on low incomes. In fact, 39% of the people buying SHEIN products in Germany have a high income and are by no means needy people acting out of necessity.¹⁰⁴ And with dark patterns as “the lubricant in the engine of the online fast fashion industry”,¹⁰⁵ it's not surprising that this business model is whipping up ridiculous levels of overconsumption, with serious consequences for people and the planet.

THE RAPID RISE OF SHEIN

SHEIN has appeared as if from nowhere, from a small company with only 50 employees in 2013¹⁰⁶ growing to 10.000 by 2016, with 800 staff responsible for design and prototypes.¹⁰⁷ Along with other online retailers, SHEIN's sales were boosted at the start of the pandemic, jumping from 7% of the market in January 2020 to nearly 30% by June.¹⁰⁸ While the growth of its fast fashion competitors has stalled since the pandemic, SHEIN's revenue has soared, with a turnover of nearly \$16 billion in 2021.¹⁰⁹ The company also benefited from the online shopping boom during the pandemic: sales tripled to around \$10 billion. This makes SHEIN the largest online fashion retailer in the world. It is in talks with investors for a funding round that would value it at \$100 billion - more than H&M and Zara combined.¹¹⁰

Climbing the Ranks

Shein's ascent has been especially pronounced in the US, where it's now one of the top apparel retailers by sales.

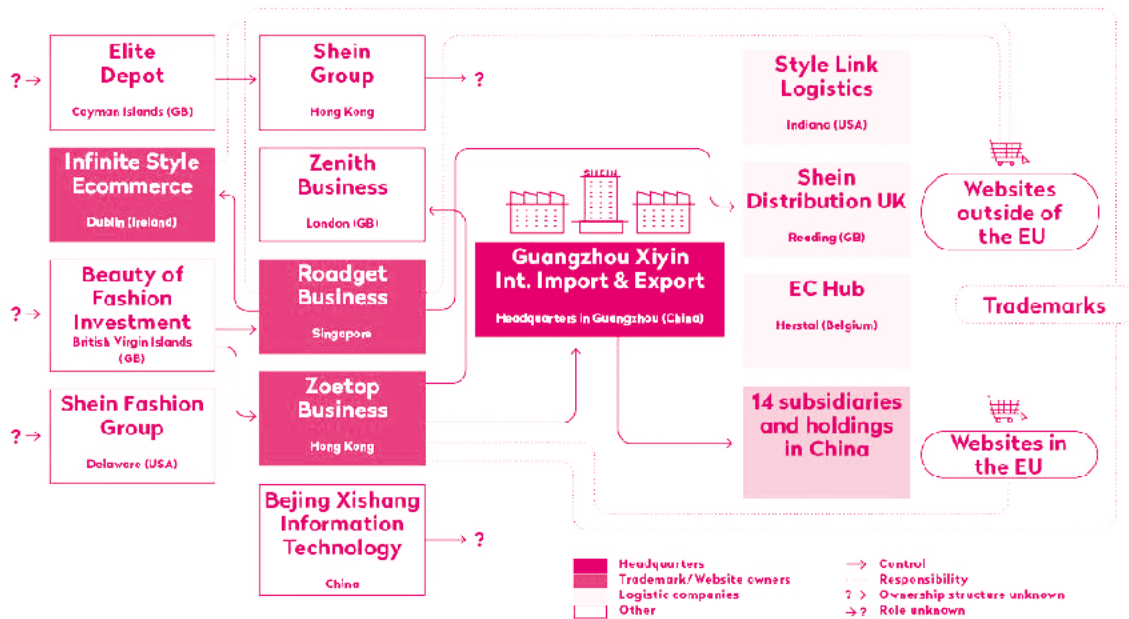


The US ranking (retail value) shows SHEIN's insane rise in the US.

Source: Euromonitor: <https://www.businessoffashion.com/articles/retail/why-shein-might-be-worth-100-billion-in-four-charts/>

Its growth has been driven by the exploitation of tax loopholes that were created during the trade war between the US and China, which enables SHEIN to avoid paying tax on its exports.¹¹¹ In the US, the market where SHEIN first tested its appeal,¹¹² it also avoids the need for import taxes, and can undercut its competitors by roughly 24%, giving it an enormous competitive advantage.¹¹³ SHEIN's business model depends on its lack of transparency in all areas, for example, old versions of the website state that it was founded in New Jersey.¹¹⁴ The corporate structure is also non-transparent and tax-optimised, making use of tax havens in the British Virgin Islands, the British Cayman Islands, Delaware in the USA and in Dublin,¹¹⁵ with other companies belonging to the group, such as ZZKKO Inc in Delaware.¹¹⁶ A SHEIN Corporation also appears in the Panama Papers.¹¹⁷

Opaque and tax-optimised: Shein's corporate structure



Source: <https://www.publiceye.ch/de/themen/mode/sheins-undurchsichtige-konzernstruktur>

Brands sold via shein.com	Brands also or exclusively sold via their own website
<p>SHEIN EMERY ROSE Luolite</p> <p>SHEIN CURVE SHEIN / PREMIUM SHE&IN</p> <p>SHEINKIDS GLOWMODE DAZY</p>	<p>SHEGLAM MOTF</p> <p>EMMACLOTH ROMWE</p>
Earlier Shein brands	Shein brands sold by or through Amazon
<p>Sheinside SheIn SheIn Dine Out</p> <p>SheIn Sheintee</p>	<p>MAKEMECHIC SolyLux Floerns</p> <p>SweatyRocks WDIRARA Verdusa</p> <p>DIDK Milumia</p>

Source: <https://www.publiceye.ch/de/themen/mode/sheins-undurchsichtige-konzernstruktur>

CONSEQUENCES – HUMAN RIGHTS

SHEIN might look shiny and glamorous in the digital world, but unfortunately the way it runs its business has real-world consequences. Much has been written about the catastrophic working conditions at its thousands of suppliers in Guangdong, with working hours of 11 hours a day, 29 days a month,¹¹⁸ or 12-14 hours in its main warehouse in Foshan,¹¹⁹ and as long as 18 hours a day at two cut and sew suppliers, as revealed in a recent undercover investigation by Channel 4.¹²⁰

These conditions don't only violate SHEIN's own code of conduct, they are also illegal in China. The low wages, penalties for mistakes or for missing targets, lack of employment contracts or social security contributions¹²¹ all put enormous pressures on workers to perform and work very long hours. The lack of attention to health and safety is also dramatic, with many emergency exits blocked in production facilities and upper floors repeatedly barred.¹²² It's not only the supply chain in China that is affected: employees at its former logistics centre in Liège, Belgium, also complained of inhumane working hours.¹²³

In the UK, SHEIN was found to be in breach of the Modern Slavery Act 2015, which is a prerequisite for selling clothes on the British market. This requires certification to prove, for example, that no child labour is being used. SHEIN's claim to be "proudly in compliance with strict fair labour standards set by international organisations like SA8000" turned out to be fictitious, with no such certification available.¹²⁴

... AND THE PLANET

SHEIN's products are mostly made of plastic. In the case of women's clothing alone, nearly 60% are made of polyester¹²⁵ with many other products made of nylon, acrylic, PU, spandex or other materials derived from petroleum. The fashion industry uses as much oil each year as the whole of Spain, a dependency which is fuelling the war in Ukraine, as the two major suppliers of polyester are sourcing their oil from Russia.¹²⁶ Its clothing and shoes are therefore adding to the global plastics crisis, including the release of microplastic fibres when the clothes are washed - every year 0.5 million tonnes of microplastic fibres are released into

the ocean from washing synthetic clothes; this accounts for 35% of the primary microplastics that are released.¹²⁷

Experts and NGOs universally have a negative assessment of the company's sustainability: "SHEIN scores zero points in our sustainability assessment", says Remake, an NGO that examines the environmental compatibility and working conditions of fashion brands.¹²⁸ The site "Good on You", summarises its assessment as follows:¹²⁹ "SHEIN's environment rating is 'very poor'. [...] There is no evidence that it has taken meaningful action to reduce or eliminate hazardous chemicals. There is no evidence it reduces its carbon and other greenhouse gas emissions in its supply chain. There is no evidence it has a policy to minimise the impacts of microplastics." And according to the Fashion Transparency Index, published by Fashion Revolution, the company is in the worst possible category, scoring below 5% overall.¹³⁰

SHEIN also received a poor ranking on the Chinese NGO IPE's databases CITI (Corporate Information Transparency Index) and CATI (Corporate Climate Action Transparency Index) databases. For CITI, SHEIN scored 3.15 out of 100 points, ranking 92nd among a total of 124 companies in the fashion industry. For CATI, SHEIN received zero points out of 100, ranking 133rd among 155 fashion companies (although, with its recent announcement on cutting 25% of Scope 3 carbon emissions by 2030, SHEIN's CATI score could be boosted in next year's ranking).¹³¹

SHEIN claims to do its best to use recycled materials, but it performs even worse than the fashion industry average on this count;¹³² a check of its website found that out of 55,000 items of women's clothing, only 237 were made using recycled polyester (0.43%), with only 2 containing recycled cotton.¹³³

There's Greenwashing – and then there's SHEIN-washing

"Circularity" has become the buzzword among global fashion brands trying to clean up their image. But circularity is virtually non-existent in the fashion industry; while less than 1% of clothes are recycled into new clothes, garment production volumes are growing by 2.7% annually.¹³⁴ Every second a truckload of garments is burnt or sent to landfill.¹³⁵ Helped by newer online retailers like SHEIN, the destructive fast fashion fad is speeding up, not slowing down - coupled with a corresponding increase in greenwashing. A recent screening of sustainability claims in the textile, garment and shoe sector suggested that 39% could be false or deceptive.¹³⁶

Fast fashion brand H&M has recently been called out by the Norwegian Consumer Authority for its greenwashing, because the scorecard it was using for its sustainable clothing – called its Conscious Collection – portrayed products as being better for the environment than they actually were, with even some apparent instances where the information about the sustainability of a product was completely opposite from the truth.¹³⁷ The scorecards were created based on the Higg Material Sustainability Index (MSI) by the Sustainable Apparel Coalition (SAC), which has paused the use of the scorecards and is reassessing their methodology. Experts are warning that "the industry cannot rely on trade associations as the arbiters of sustainability or eco-impact scoring," pointing out that there is a "huge conflict of interest", and that brands that want to be credible must use more independent, rigorous systems with integrity.¹³⁸

Since then, the Netherlands Authority for Consumers and Markets (ACM) has also sought reparations from Decathlon and H&M for making what it considers "unclear and insufficiently substantiated sustainability claims",¹³⁹ part of a growing crackdown on greenwashing, which includes the UK Competition and Markets Authority's investigation into

claims made by ASOS, Boohoo and George at Asda, as part of a larger effort to develop its Green Claims Code.¹⁴⁰

While these brands have finally been caught out by the authorities for their greenwashing because they relied on inaccurate industry information for their marketing, SHEIN is taking greenwashing to a new level, aiming for maximum kudos, while at the same time avoiding of the need to tackle problems at their source or to provide evidence to back up its claims.



Textile and plastic waste at Dandora dump site in Nairobi. Greenpeace visits places of textile production, distribution, markets and waste disposals. Used and new clothes are sent to Kenya from Europe and China to be sold as so called “Mitumba” but often they end up being dumped in landfills due to the huge volumes that are imported.

In June 2022, SHEIN made headlines when it announced a donation of \$15m to an NGO working with textile waste workers in Ghana, describing it as an “extended producer responsibility fund”.¹⁴¹ While Or Foundation’s work is certainly needed, it should not be dependent on donations. Following the ‘Polluter Pays’ principle, producers like SHEIN should be made financially responsible for the cost of cleaning up the environmental and health damage caused throughout the supply chain, wherever it occurs. And if products contain hazardous chemicals – as shown in this report – cleaning up the pollution comes with greater costs and difficulties. But the biggest priority is SHEIN’s ongoing role in creating the problem of post-consumer textiles waste - not least the poorly made, disposable clothes and their promotion of overconsumption.

“At SHEIN, we believe it’s our responsibility to create fashion of the future while accelerating solutions to reduce textile waste,” said Adam Whinston, Global Head of ESG at SHEIN, announcing SHEIN’s latest initiative in the US, a new second hand community SHEIN Exchange, where customers can swap their used SHEIN clothes.¹⁴² But promoting the reuse of clothes, while continuing to make excessive volumes of clothes that are made to be disposable, is worse than greenwashing as it makes no sense at all. ThredUp, one of the

world’s largest online resale platforms, even asked its customers to pledge not to shop at SHEIN’s pop-up shop in San Francisco, citing SHEIN’s “thousands of brand-new styles every day, encouraging endless consumption and creating disposable fashion waste – the antithesis of circularity.”¹⁴³

In its defence, SHEIN promotes

its modern production techniques and the fact that it limits excess inventory and has less production waste,¹⁴⁴ which is described as part of “an innovative and unique business model approach that has enabled us to be a more sustainable company since our founding.”¹⁴⁵ But if this is so, why are industry experts concerned that its low-cost, high-volume approach to fashion is fuelling wasteful overconsumption and “becoming the biggest threat to its continued success”.¹⁴⁶

In the “latest in a series of initiatives to address criticism of the company’s environmental and social impact”,¹⁴⁷ SHEIN recently announced targets to reduce its supply chain emissions of greenhouse gases by 25% by 2030, outlining projects to drive greater energy efficiency and support a transition to renewable power among its manufacturers.¹⁴⁸

Unfortunately, this target is well below the 45% reduction that the UN says is needed by 2030 to limit warming to within 1.5 degrees, or the Fashion Industry Charter for Climate Action to halve emissions by the end of the decade. Tackling supply chain emissions of GHGs would be a “game changer” for the impact of corporate climate action,¹⁴⁹ with textiles one of the eight sectors making up 50% of supply chain emissions. However, SHEIN has zero credibility on the transparency of its supply chain, which will make it impossible for it to move beyond the first recommended step of transparency. It will need to publish its supplier’s list – and especially its wet processing factories, which are the most energy-intensive part of the textiles supply chain – as well as all the relevant GHG emission data, to even establish a baseline that can be independently verified.

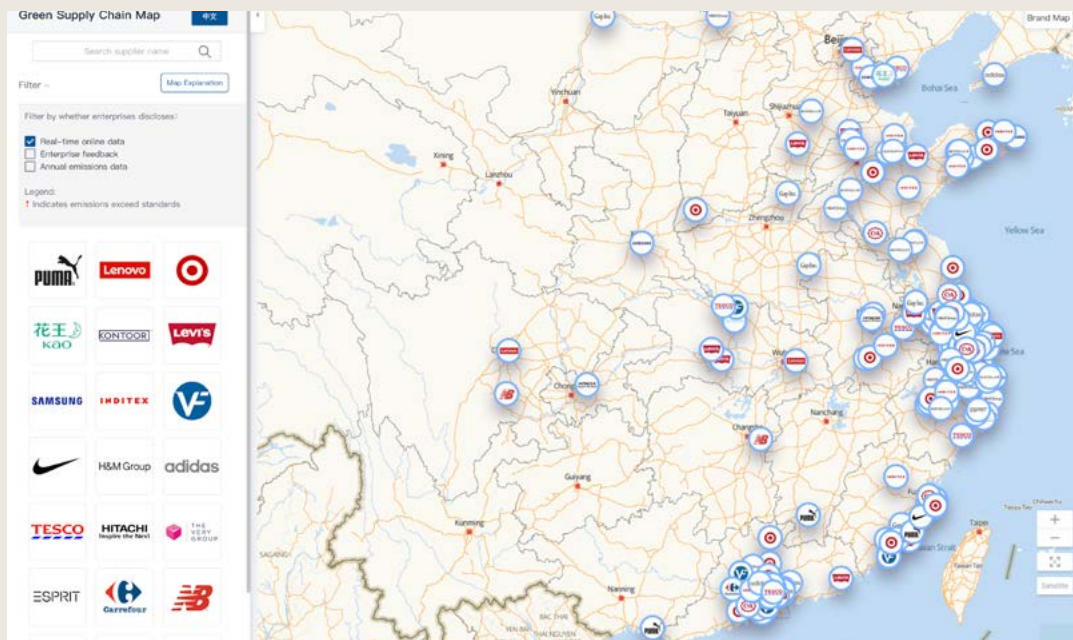
Its clothing and shoes are completely dependent on fossil fuels for their raw materials. Its recent announcement of a recycled clothing line evoluSHEIN is a long way from circularity.¹⁵⁰ The recycled polyester is made from bottles from the food industry, a practice that even the European Commission recently highlighted as greenwashing in its Textiles Strategy.¹⁵¹ SHEIN gives the initiative a positive spin by supporting Vital Voices – womens’ leaders who are taking on challenges such as the climate crisis and economic inequities, when perhaps it would be better focusing on the pay and conditions for workers in its supply chain, a more ambitious target for reducing greenhouse gases, or – using less fossil fuel based plastic.

However, its hazardous chemical problem reveals its true lack of credible action on the environment. In response to a recent customer complaint about lead being found in its clothing in Canada, SHEIN states on Twitter:¹⁵² “SHEIN is committed to product safety. Suppliers must abide by our Restricted Substance List and strict product safety standards that are based on international regulations. We regularly test products and take action when non-compliance is found, including terminating suppliers.”

This sounds like SHEIN is taking hazardous chemicals seriously, but it doesn’t publish any Restricted Substances List, (let alone a MRSL - which is the basic requirement for good chemical management in the supply chain - see Box 4) and provides no information about how it manages hazardous chemicals, which are mentioned only briefly in its 2021 Sustainability Report, its Suppliers’ Code of Conduct, Responsible Sourcing Policy¹⁵³ and its Environmental Impact Statement.¹⁵⁴ It also doesn’t publish a suppliers list, which would need to include its wet process suppliers, where hazardous chemicals are most likely to be used and discharged, although such a list does seem to exist.¹⁵⁵ These are just the basics of a responsible chemicals management policy – if SHEIN truly wants to tackle its hazardous chemical problem, Greenpeace would expect to see its suppliers and their wastewater discharge data published on the Chinese NGO IPE’s Green Supply Chain map, as well as the ZDHC’s Detox Live system, and working with the ZDHC on a programme to eliminate the use and discharge of hazardous chemicals.¹⁵⁶

BOX 3: IPE AND TRANSPARENCY OF SUPPLY CHAIN DATA

A core demand of Greenpeace's Detox My Fashion Campaign is the publication of wastewater data from the analysis of hazardous chemicals being discharged by suppliers. Brands that committed to Detox were asked to ensure that their suppliers publish this data on the public platform of the Institute for Public & Environmental Affairs (IPE), and later on the ZDHC's (Zero Discharges of Hazardous Chemicals Foundation) Detox Live map¹⁵⁷ – a commitment which all of them delivered on. The data on IPE's Green Supply Chain map¹⁵⁸ is publicly accessible (login is required) and shows the brands, their suppliers lists, and environmental data for their suppliers in China, with a pop-up window to show companies' wastewater data. This gives communities living by the discharge pipes, civil society or consumers the Right to Know about hazardous chemicals being released into our waterways. In addition, some brands are going all in with transparency and are publishing the wastewater data of their suppliers on their own websites.



Source: <https://www.detox.live/>

BOX 4: RSLs, MRSLs AND THE DIFFERENT KINDS OF MRSLs¹⁵⁹

RSL. Restricted Substances List. This sets limits for the presence of hazardous chemicals in the final product.

MRSL. A Manufacturing Restricted Substances List (MRSL) is the core element of the Detox roadmap, developed and implemented by all Detox committed brands and companies. It sets a black list of chemicals, starting with the 11 Detox priority hazardous chemical groups. The Detox commitment requires that these are banned at all stages of production, with specific reporting limits for discharges to wastewater, used as target levels. To implement, brands check manufacturing facilities for compliance with the reporting limits, by testing the wastewater before treatment and residual sludge from the wastewater treatment plant.

A MRSL is a binding and evolving document that translates the ambition of a brand's Detox roadmap in terms of its scope, (at least the 11 Detox priority groups, expanding to all textile-related hazardous chemicals) and its limits, that should reflect the lowest technically achievable levels (technical zero).

Current examples of best practice MRSLs, both for scope and limits, are:

- The ZDHC MRSL (inputs and wastewater guidelines, used by the majority of brands: some brands add other chemicals and chemical groups to this list.
- Individual MRSLs, used by some brands, eg. Inditex, Miroglio, Valentino, as well as the Detox Committed suppliers in Italy CID (Italian Detox Consortium).
- The OEKO-TEX® STeP/DETOX TO ZERO Chemicals List, used by some German retailers (eg. Kaufland) and also the Detox Committed supplier Utenos, a manufacturer of textile products complying with Greenpeace's Standard for its own textiles procurement.

ZDHC, whose signatory brands currently include 20 Detox brands and 13 other brands, set a common MRSL in 2015 (version 1.1) and have recently published version 3. Wastewater guidelines were added in 2017 which set limits for MRSL chemicals in wastewater and sludge.

Detox Live, ZDHC's platform for brands and suppliers to add their wastewater data, currently includes data from 52 brands, representing 6983 suppliers around the world.

After the haul - the hangover

What happens after your package from SHEIN arrives? You may be overjoyed with the products – many are. Nevertheless, overconsumption has been shown to have adverse effects on the well-being of young consumers. A 2017 Greenpeace report¹⁶⁰ looked at the psychological effects of shopping on consumers in East Asia, Germany and Italy, and showed that people already own too much and they know it. Around 50% report that their shopping excitement wears off within a day, with one third feeling even more empty and unfulfilled afterwards. It's understandable that people will seek out that feeling of excitement again, regardless of the need for the clothes, perhaps unaware of the consequences.

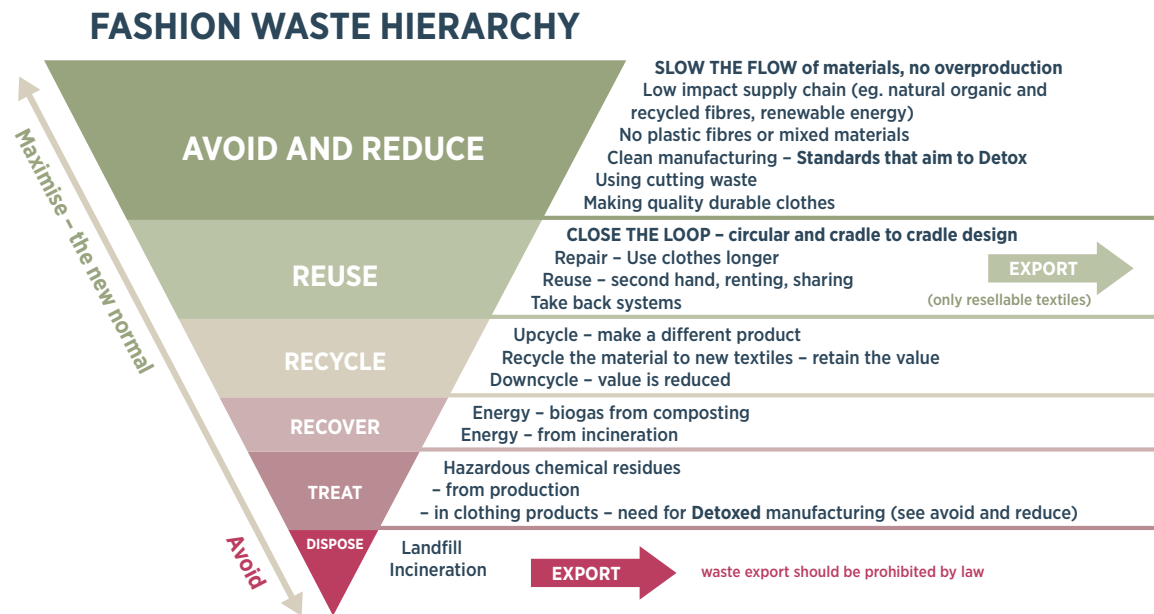
Maybe something doesn't look so good in real life, or as good on you as it did on the model on the website, it doesn't fit, or it falls apart at the seams? You might realise you've ordered more than you actually needed, and feel regret. And what if it has a strong smell of chemicals? You'd be wise to think twice – especially if you bought the product for your baby or child. No problem – you can make an online return.

ONLINE RETURNS

Over the last few years, the disposable clothes made by ultra fast fashion brands have increasingly become part of the ever growing pile of textile waste. In the UK the CEO of clothing recycling charity Traid reports that while they used to get more high quality clothing that would stay in the circular loop, now there's a high proportion of fast fashion clothes that are not built to last. The quantities of low quality disposable clothes from SHEIN have dramatically increased over the last couple of years, with some of them still brand new.¹⁶¹

According to Public Eye¹⁶² SHEIN used to have a returns processing centre for Europe known as the "EC Hub" next to the airport in Liège, Belgium. But in the summer of 2021 it was closed from one day to the next. Although Public Eye could not get official confirmation, the Chinese Company Yun Express Belgium,¹⁶³ situated just next door, now seems to be handling returns.

At its peak, 30,000 returns were said to arrive at the EC Hub every day.¹⁶⁴ Former workers describe how customer returns are reimbursed regardless of the state of the piece of clothing, because they often have faults when they leave the factory. Employees were processing up to 1,500 faulty products a day that SHEIN no longer had any use for.



Source: <https://www.greenpeace.de/publikationen/report-vergiftete-geschenke>

PEST SALE

SALE

SALE
OFF

SALE

SPECIAL OFFER | BEST OFFER

SPECIAL OFFER | BEST OFFER



Workers of an import company load bales of clothing onto a truck.



Textile and plastic waste at Dandora dump site in Nairobi.



Used and new clothes are sent to Kenya from Europe and China to be sold as so called "Mitumba" but often they end up being dumped in landfills due to the huge volumes that are imported.

FREE SHIPPING | GET THE SHEIN APP | 50% ON YOUR FIRST BILL

SHOPPING % SHOPPING % SHOPPING %

BLACK FRIDAY SALE

To begin with, employees could take these clothes home. Later on, faulty returns were assigned to charities, and finally they were sold per kilo to a trader who removed the SHEIN labels and sold the clothes “somewhere outside Europe”.¹⁶⁵

According to a market analysis by Euromonitor, 230 million new garments are shredded every year.¹⁶⁶ In response, some European countries are implementing laws to ban the destruction of new goods. For example, France implemented an anti-waste and circular economy bill in 2020 that forbids the destruction of unsold goods, including clothing,¹⁶⁷ and requires producers, importers and distributors, including online firms, to donate unsold non-food goods except those that pose a health or safety risk.¹⁶⁸ In Spain, the destruction or disposal of unsold surplus non-perishable products such as textiles, toys, electrical appliances in landfills is also prohibited,¹⁶⁹ while there is a proposal for such a ban in Scotland.¹⁷⁰ In the EU, the European Commission’s Sustainable Products Initiative proposes regulation that includes measures to ban the destruction of unsold non-perishable goods.¹⁷¹ There is also a transparency obligation in the proposal of the new ecodesign regulation that was published by the Commission in March 2022.¹⁷²

In Germany, there is a duty of care for producers to take responsibility for products that are taken back or returned, to ensure that their fitness for use is maintained and that they do not become waste.¹⁷³ However, regulations to implement the law are pending and there is no ban on the destruction of goods; online retailers such as Amazon continue to destroy products.¹⁷⁴

PACKAGING WASTE

Of course every single product also comes with its own packaging, made of plastic, which brings the same problems of recyclability and non-biodegradability as its plastic products. While SHEIN is starting to advertise its efforts on sustainable packaging, and has introduced 50% recycled plastic into its polybags for the European market in August 2022,¹⁷⁵ it’s not clear how and if these can be collected and recycled.

The amount of plastic packaging waste generated by SHEIN is also not known, however, we can compare data collected about Amazon’s packaging: 599 million pounds of plastic packaging waste were generated by Amazon in 2020, a 29% increase on 2019. It’s also estimated that up to 23.5 million pounds of Amazon’s plastic packaging waste entered and polluted the world’s waterways and oceans in 2020, the equivalent of a delivery van payload of plastic being dumped every 67 minutes.¹⁷⁶

In Austria, a new programme from the Austrian postal service will offer reusable packaging starting in 2023.¹⁷⁷ Other examples exist in Germany, however, there’s no general requirement for reusable packaging. Greenpeace Germany is campaigning for a law to require reusable packaging.

In China, the Central Government set a goal in 2020 that by the end of 2022, postal mail services and express delivery services in two big cities and four big provinces (including Guangdong, where most of SHEIN’s manufacturing capacity is located) must stop the use of single-use plastic bags.¹⁷⁸ In 2021, China’s 14th Five Year Plan on the circular economy set a target of putting 10 million reusable packaging boxes on the market for express delivery.¹⁷⁹

Recommendations

Fast fashion, and its unruly offspring, the recent, more damaging ultra fast fashion trend, has turned clothes into throwaway items like disposable packaging, non-degradable because many are made of plastic and mixed materials, which are not even recyclable, and equally harmful to the environment and biodiversity. But it’s not only the waste which is a problem. The toxic system starts with oil based synthetic materials, and continues with the catastrophic and often irreversible environmental damage from supply chain factories in regions like East Asia, ending with the flood of textiles waste dumped in Global South countries. The problem of these toxic linear business models needs to be solved, and there is no way around the need to massively slow down fast fashion.

Greenpeace Germany's 2021 report "Self-regulation: a fashion fairytale" has clearly demonstrated that while there is a trend for global fashion brands to talk about circularity, very few of them actually have effective measures in place to become circular and even less or none of them are taking steps to slow down the flow of materials. This is why global regulation is necessary and the report explains in detail the key points that are needed.¹⁸⁰

Global fashion brands simply cannot green-wash their way around the issue, and must instead completely change their linear business models and become service providers instead of only producers. They need to start producing fewer clothes that are designed to be better quality, long lasting, repairable and reusable and take responsibility for establishing take-back systems and services to maintain, repair and share items of clothing. This has to become the new normal; Greenpeace is demanding a target of only about 40% of clothes to be newly made, with 60% from alternative systems such repair, second-hand, renting and sharing by 2035 at the latest.¹⁸¹

In the face of the planetary climate and biodiversity crisis – as well as a recently added third crisis of chemicals¹⁸² – we clearly cannot afford to continue this mad and destructive system. The choice is change, or die out.

WHAT SHOULD SHEIN DO?

A destructive system such as the one being spread around the world by SHEIN should not be permitted to exist. However, if SHEIN honestly wants to address its environmental and social impacts it should start with the following urgent steps:

Firstly, SHEIN needs to urgently address its hazardous chemical problem. It won't be enough to just make a few changes when 'problem' products are highlighted. As long as hazardous chemicals are used by its suppliers, there will continue to be scandals. SHEIN needs to Detox its supply chain,¹⁸³ with a public commitment to Detox, including an individual action plan with an ambitious timeline for the following key steps:

- Setting up a Manufacturing Restricted Substance List (MRSL)¹⁸⁴ including all hazardous chemicals to be eliminated in the entire supply chain;
- Elimination policies for priority chemical groups such as Alkylphenols (APs) and Alkylphenol Ethoxylates (APEOs), per and polyfluorinated chemicals (PFCs) and phthalates;
- Publishing the wastewater testing results of wet process facilities regularly on a public platform;¹⁸⁵
- Publishing a suppliers list, including wet process facilities;
- Regular Detox progress reports;
- Publish a list of its suppliers and ensure that upstream wet processing factories are included and clearly identified.

To facilitate the above, SHEIN should become a member of the ZDHC and participate in its Roadmap to Zero programme,¹⁸⁶ which has many tools on eliminating the use of hazardous chemicals and their discharge into wastewater, including an MRSL and wastewater guidelines.

With the same urgency, SHEIN also needs to work towards creating slow, circular fashion that respects environmental boundaries and the rights and wellbeing of people. This is a much more fundamental change, which involves re-inventing its business model, where success is not defined by the volumes that are produced and sold, but by the high standards in supply chains and the innovation in alternative ways to engage with customers on fashion, beyond the model of buying new. This is not an optional extra: if companies don't act voluntarily to change their business models to adapt to the reality of the climate crisis, ultimately the courts or governments will be forced to intervene, as in the recent cases in the Netherlands and France.¹⁸⁷

The rise of fast fashion

2030 = 206 billion pieces

2020: global sales of clothing dip to 160 billion pieces due to COVID-19

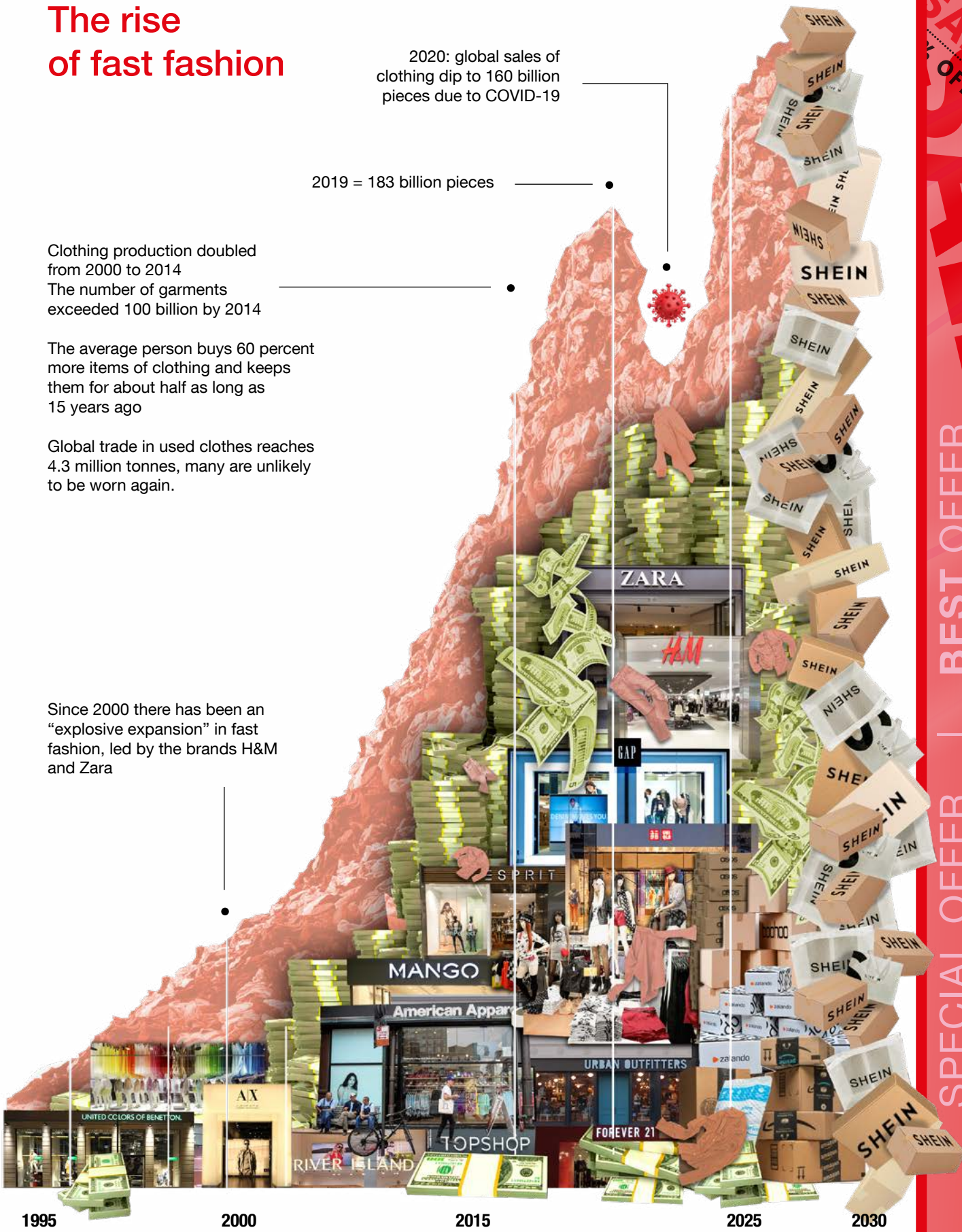
2019 = 183 billion pieces

Clothing production doubled from 2000 to 2014
The number of garments exceeded 100 billion by 2014

The average person buys 60 percent more items of clothing and keeps them for about half as long as 15 years ago

Global trade in used clothes reaches 4.3 million tonnes, many are unlikely to be worn again.

Since 2000 there has been an "explosive expansion" in fast fashion, led by the brands H&M and Zara



1995

2000

2015

2025

2030

Quelle: <https://www.greenpeace.de/publikationen/nachhaltigkeit-tragbar>

Recommendations for regulators

EU TEXTILES STRATEGY

Recently the new EU textile strategy has been approved and after many years of pressure from environmental groups like Greenpeace it finally addresses some of these key points, such as:

1. A vision that “by 2030 textile products placed on the EU market are long-lived and recyclable, to a great extent made of recycled fibres, free of hazardous substances and produced in respect of social rights and the environment”;
2. Plans for binding requirements on durability, recyclability, repair and reuse;
3. Extended Producer Responsibility (EPR) schemes that will be dedicated to waste prevention measures and preparing for reuse;
4. Commitment to develop specific EU level criteria to make a distinction between waste and certain second-hand textile products to avoid waste being labelled as secondhand goods, and thereby preventing companies sidestepping the EU’s proposal for tighter rules on exporting textile waste to non-OECD countries;
5. A proposal for a transparency obligation, requiring large companies to publicly disclose the number of products they discard and destroy, including textiles, and the intention to introduce a ban on the destruction of products, including as appropriate, unsold or returned textiles. However, the definition of what is “appropriate” or not has not been made clear yet;
6. Commitment to introduce a “Digital Product Passport for textiles based on mandatory information requirements on circularity and other key environmental aspects”. But unfortunately full supply chain mapping and facility disclosure is not included;

Unfortunately it also does not include:

7. A strategy to Detox the textiles supply chain and prevent chemical pollution of Global South waterways;
8. A phase out of synthetic fibres in the production of textiles; products should be biodegradable and compostable (Cradle to Cradle) and free from hazardous chemicals to prevent end of life impacts.

We welcome the positive developments in the EU textile strategy, but for them to be successful they need to be implemented effectively on the ground through legally binding measures.

Also, the implementation of the EU’s textiles strategy is partly dependent on the Product Environmental Footprint (PEF). However, public interest groups are concerned about the current development of the PEF and “believe there is a risk that the PEF-CR for apparel and footwear will give a limited and unholistic picture of product impact. As such, it is our view that the PEF-CR for apparel and footwear should not be used as a standalone method for underpinning labelling, green claims made in marketing, or any other EU policy measures announced as part of the EU Strategy for Sustainable and Circular Textiles”.

EU DUE DILIGENCE DIRECTIVE - SUPPLY CHAIN RESPONSIBILITY

In February 2022, the Commission adopted a proposal for a Directive on corporate sustainability due diligence.¹⁸⁸ This binding EU law would ensure that companies are held accountable and liable when they harm - or contribute to harming - human rights and the environment or undermine good governance. Due diligence would require companies to identify, address and remedy their impact on human rights and the environment throughout their supply chain. Sanctions for non-compliance and legal support for victims of corporations in third countries would apply. The legislative proposal has not yet been formally adopted.

EU proposed legislation needs to avoid these weaknesses, to ensure that anyone who makes global profit must also assume global responsibility, and also include both environmental protection and social justice aspects as well as requirements for verification and sanctions by regulatory bodies.

The Greenpeace Detox My Fashion campaign demonstrates that implementing an ambitious supply chain or due diligence law is possible. Experience with implementing Detox commitments shows that a global brand can take responsibility for its supply chains, clean them up, and implement high environmental standards in a publicly transparent way. The following elements are key for success and need to be included in legislation for supply chain responsibility or due diligence:

- Transparency and the Public's Right to Know: Public disclosure of suppliers¹⁸⁹ by companies (to the raw material level, including all manufacturing steps, using a unique identification number for facilities). Public disclosure of testing and auditing results;¹⁹⁰
- Institutional support for global harmonised platforms and reporting systems (such as the IPE or ZDHC disclosure platforms,¹⁹¹ although the latter is still missing public data access);
- Best practice needs to be specified to ensure the highest standards and proper accountability (eg. best practice laboratories and testing requirements).

CHEMICALS SUSTAINABILITY STRATEGY AND REVISION OF REACH:

As revealed by this report, even the REACH regulation that has already been adopted is not being fully enforced or respected. Therefore, as a priority, the process of revising the regulation should include:

- Allowing citizens or civil society groups to alert competent authorities when they uncover evidence of high concern or of non-compliance, such as the evidence presented in this report - and to access justice in case the authority does not follow

through on such reports;

- Require the application of severe sanctions in the case of non-compliance, such as the ones that are applied for in cases of illegal commercial practice.

In addition, the current promises made by the Commission must be followed through in the updated Regulation, as follows:

- Allowing the EU institutions and States to use a fast track process to quickly ban hazardous groups of chemicals from consumer and professional products, to fully implement the approach to regulate chemicals as groups and not chemical by chemical;
- Banning the export of chemicals where their use is banned in the EU;
- Ban the use of some of the most hazardous groups, such as PFAS and endocrine disruptors.

A further requirement on the most hazardous groups of chemicals, in particular those which are toxic, persistent and bioaccumulative, is that REACH and other EU regulations on, for example, water pollution and waste, need to take the following into account:

- The need to remediate the legacy pollution from these hazardous chemicals and implement the Polluter Pays Principle.

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- 173 Closed Substance Cycle Waste Management Act with a 2020 amendment “Product responsibility includes in particular [...] a duty of care with regard to the products distributed, in particular the duty to ensure, when distributing the products, also in connection with their take-back or return, that the fitness for use of the products is maintained and that they do not become waste.”
- 174 For examples of regulations and the destruction of new, unsold or returned products, see: <https://www.gesetze-im-internet.de/krwg/BJNR021210012.html#BJNR021210012BJNG000700000> <https://www.tagesschau.de/investigativ/ndr/amazon-297.html> <https://www.tagesschau.de/investigativ/kontraste/kreislaufwirtschaftsgesetz-101.html> <https://www.rnd.de/politik/schlussmit-retouren-vernichtung-kabinett-beschliesst-gesetzentwurf-DWQSE677OZHQA5SLMU5VYGG5M.html>
- 175 SHEIN Accelerates efforts for more sustainable packaging; <https://www.sheingroup.com/corporate-news/shein-accelerates-efforts-for-more-sustainable-packaging/>
- 176 Oceana (2021), Exposed: Amazon’s enormous and rapidly growing plastic pollution problem, December 2021; <https://oceana.org/reports/amazon-report-2021/>
- 177 Business-Live (2022), Swiss Post will offer reusable packaging for online shopping from spring 2023; 3rd November 2022; <https://www.oe24.at/businesslive/handel/post-bietet-ab-fruehjahr-2023-mehrweg-verpackungen-fuer-online-shopping-an/534994607>
- 178 National Development and Reform Commission (1) (in Chinese); https://www.ndrc.gov.cn/xxgk/zcfb/tz/202001/t20200119_1219275.html?code=&state=123
- 179 National Development and Reform Commission (2) (in Chinese); <https://www.ndrc.gov.cn/xxgk/zcfb/ghwb/202107/P020210707324072693362.pdf>
- 180 Greenpeace Germany (2021): Self regulation: a fashion fairy tale, op.cit. See Part 1, section 3 for details
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- 182 New Scientist (2021) Why chemical pollution is turning into a third great planetary crisis, 21st July 2021; <https://www.newscientist.com/article/mg25133440-700-why-chemical-pollution-is-turning-into-a-third-great-planetary-crisis/>
- 183 Greenpeace (2018), Destination Zero, main report and Annexes; <https://www.greenpeace.org/international/publication/17612/destination-zero/>
- 184 Manufacturing Restricted Substances List. At a minimum, SHEIN should adopt version 3 of the Zero Discharges of Hazardous Chemicals MRSL; <https://www.roadmapzero.com/post/zdhc-releases-the-updates-to-the-zdhc-mrsl-version-3-0-and-its-supporting-documents>
- 185 IPE, Green Supply Chain Map, op.cit.
- 186 Zero Discharges of Hazardous Chemicals (ZDHC), Roadmap to Zero; <https://www.roadmapzero.com/>
- 187 Deutschlandfunk (2022), Signale, dass mit Klimaverschmutzung kein Geld mehr zu machen ist, November 2022; https://www.deutschlandfunk.de/klimaerteil-gegen-shell-signale-dass-mitklimaverschmutzung.694.de.html?dram:article_id=497918
- 188 European Commission, Corporate sustainability due diligence; https://ec.europa.eu/info/business-economy-euro/doing-business-eu/corporate-sustainability-due-diligence_en
- 189 CC&A suppliers list. For a good example, see C&A suppliers list; <https://www.c-and-a.com/uk/en/corporate/company/sustainability/suppliers-list/>
- 190 Benetton website; see published wastewater test reports as a good example; <https://www.benettongroup.com/sustainability/detox/wet-process/water-test-results/>
- 191 IPE: <http://www.ipe.org.cn/MapBrand/Brand.aspx?q=6> ZDHC: <https://www.detox.live/map>

Appendix

Table A1: Overview of chemical testing results, per product: key findings

Product number (prefaced by L 6777)	Product name and image, links are below	Category	Materials (as described on SHEIN website)	Country of online order	Chemical analysed, according to positive findings (1)	Findings mg/kg	Exceedances of REACH, other EU regulations	Exceedances of OEKO-TEX® Standard 100 Annex 6 (where REACH is not already breached)
FT-1	Toddler girls halter dress, fish scales colourblock, mesh panel with headband 	Baby articles	100% Nylon	Italy	Volatile Organic Compounds (VOCs) (2)	Detected		
					Formaldehyde In green strap & purple tulle	40	Toys Directive<30	
					In purple tulle (second analysis)	130	REACH<75	
					Extractable heavy metals, various parts printed top - antimony	0.3		
					mixed sample - antimony - nickel	1 0.1		
					accessory/trim - antimony	0.4		
FT-2	Toddler girls colourful tutu skirt and wing headband 	Baby articles	100% Polyester	Germany	Volatile Organic Compounds (VOCs)	Detected		
					Extractable heavy metals, various parts - antimony	0.3		
FT-3	Baby Christmas print mesh yoke gown dress 	Baby articles	Material:Satin Composition: 100% Polyester	Germany	Volatile Organic Compounds (VOCs)	Detected		
					Extractable heavy metals, various parts - antimony	2.8		

FT-4	Over-the-knee socks with figure graphics 	Special	100% Polyester	Germany	Volatile Organic Compounds (VOCs)	Detected		
FT-5	SHEIN holographic raglan sleeve hooded coat with slant pockets 	Jackets	95% Polyester, 5% Elastane	Germany	Volatile Organic Compounds (VOCs)	Detected		
					Plastics and coated material - bromine	50		
					Extractable heavy metals, material Antimony	0.1		
					Aromatic amines p-PDA	110		
FT-6	Newborn photographic floral print wrap blanket and bow front headband 	Baby article	100% Polyester	Germany	Alkylphenol ethoxylates NPE	10		
					Extractable heavy metals, material antimony	13		
FT-7	SHEIN men's zip-up PU leather jacket 	Jackets	Material:PU Leather Lining composition: 100% Polyester	Germany	Volatile Organic Compounds (VOCs)	Detected		
					Extractable heavy metals, material & lining Antimony	1.6		
					Aromatic amines 4,4-DAPDM	24		S100 <20
					DMF – material	145		S100 <0.05 - <0.10
					Other plasticisers DEHP	347000		

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FT-8	Extended Sizes men's drop shoulder varsity jacket with letter graphics and striped trim 	Jackets	100% Polyester	Italy	Nickel in metal parts	30000		
					Extractable heavy metals, material Antimony	5.2		
					Aromatic amines 4,4-DAPDM	6.5		
FT-9	EVER-PRETTY maternity mesh dress with applique detail 	Special	100% Polyester	Italy	Volatile Organic Compounds (VOCs)	Detected		
					Extractable heavy metals, material & lining antimony	0.5		
FT-10	SHEIN BAE bodycon dress PU leather 	Special	Material:PU Leather Lining composition: 90% Polyester, 10% Elastane	Germany	Volatile Organic Compounds (VOCs)	Detected		
					Extractable heavy metals, PU leather Antimony	9.5		
					DMF	1200		\$100 <0.05 - <0.10
FT-11	Maternity nursing bra with scallop trim, bow and lace 	Special	94% Polyamide, 6% Elastane	Germany	Volatile Organic Compounds (VOCs)	Detected		
					Nickel in metal parts	100000		
					Extractable heavy metals, various parts - Antimony	0.2		

FT-12 Bikini with snakeskin print and rhinestone decor 	Swim-suits	82% Polyester, 18% Elastane	Italy	Alkylphenol ethoxylates NPE	36		
				Volatile Organic Compounds (VOCs)	Detected		
				Nickel in metal parts Nickel in metal jewellery with gemstones	56000 130000		
				Extractable heavy metals, material Antimony	10		
				Nickel	0.2		
FT-13 Triangle Bikini top with leopard sequins and halter neck 	Swim-suits	82% Polyester, 18% Elastane	Germany	Volatile Organic Compounds (VOCs)	Detected		
				Extractable heavy metals, material & straps antimony	6		
FT-14 Men's swim trunks with floral print and letter patched detail 	Swim-suits	100% Polyester	Germany	Volatile Organic Compounds (VOCs)	Detected		
				Extractable heavy metals, printed fabric Antimony	1.8		
FT-15 Block heel, slip on rubber rain boots 	Shoes	Insole material: fabric Sole:PVC Outer material: PVC	Germany	Volatile Organic Compounds (VOCs)	Detected		
				Plastics and coated material Tin (possible connection to organotin)	800		S100 <0.5 for organotins
				DMF - shaft and sole	35		S100 <0.05 - <0.10
				Phthalates			
				DMP	750		S100 <0.010 Sum <0.025
				DIBP	63000	REACH <1000	
				DBP	52000	REACH <1000	
				DEHP	518000	REACH <1000	
Other plasticisers DEHP	6700						





FT-16 Pull-on closed-toe booties with rhinestones 	Shoes	Insole material: PU Leather Sole: PVC Lining: PU Leather	Italy	Volatile Organic Compounds (VOCs) Detected		
				Plastics and coated material - bromine 150		
				Extractable heavy metals, textile upper antimony 4.2		
FT-17 Men's combat boots with buckle decor and lace up front 	Shoes	Sole: rubber Outer material: PU leather Insole material: PU leather Lining: fabric	Germany	Volatile Organic Compounds (VOCs) Detected		
				DMF Upper material 480		S100 <0.05 - <0.10
				Black outsole 330		S100 <0.05 - <0.10
				Phthalates - synthetic upper		
				DMP 27		S100 <0.010 Sum <0.025
				DIDP 1800	REACH <1000	
				DBP 960	REACH <1000	
				Others plasticisers – synthetic upper DEHP 750		
				Phthalates - black outsole		
				DIBP 457000	REACH <1000	
DBP 9200	REACH <1000					
Other plasticisers – black outsole DEHP 1400						
FT-18 Baby bodysuit with rainbow letter graphic 	Baby articles	95% Cotton, 5% Elastane	Spain	Alkylphenol ethoxylates NPE 7		
				Volatile Organic Compounds (VOCs) Detected		
				Extractable heavy metals, printed area Antimony nickel 0.2 1.3		
FT-19 Simple plain tights 	Special	85% Nylon, 15% Elastane	Spain	Volatile Organic Compounds (VOCs) Detected		





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FT-20 Push-up bikini swimsuit with contrast sequin fringe 	Swim-suits	82% Polyester, 18% Elastane	Spain	Volatile Organic Compounds (VOCs) Detected		
				Nickel in metal parts 33000		
				Extractable heavy metals, material Antimony 5		
FT-21 Belted suedette zip up moto jacket with lapel neck 	Jackets	Material: Velour, Composition: 65% Polyester, 35% Cotton	Spain	Alkylphenol ethoxylates OPE 3		
				Nickel in metal parts Button eyelets 360000 460000		
				Nickel release 0.7 (3) REACH <0.5		
				Extractable heavy metals, material - Antimony 0.6		
FT-22 CUCCOO Trending suedette stiletto heeled boots with side lace-up and pointed toes 	Shoes	Insole material: Lycra Sole: rubber Lining: polyester Upper: suede	Spain	Alkylphenol ethoxylates NPE 3		
				Volatile Organic Compounds (VOCs) Detected		
				Nickel in metal parts 96000		
				Nickel release 1.5 REACH <0.5		
				Plastics and coated material - bromine 400		
				Extractable heavy metals, material Antimony 0.1		
				Nickel 0.4		
				DMF - upper material 150		S100 <0.05 - <0.10
FT-23 Baby raglan sleeve tee jumpsuit with Christmas and striped print 	Baby articles	95% Cotton, 5% Elastane	Switzerland	Volatile Organic Compounds (VOCs) Detected		
				Extractable heavy metals, material & print Antimony Nickel 10 0.1		


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FT-24	Toddler girl's moto PU jacket and hat with ruffle trim 	Baby articles	Material:PU Leather Composition: 100% Poly- urethane	Switzer- land	Volatile Organic Compounds (VOCs)	Detected		
					Nickel in metal parts	25000		
					Extractable heavy metals, various parts antimony	0.3		
FT - 25	Joyfunear mesh cami formal evening gown with sequin bodice 	Special	95% Polyester, 5% Elastane	Switzer- land	Volatile Organic Compounds (VOCs)	Detected		
					Formaldehyde	5		
					Nickel in metal parts	94000		
					Extractable heavy metals, various parts antimony	0.6		
FT-26	Men's swim trunks with pineapple galaxy print 	Swim- wear	80% Polyester, 20% Elastane	Switzer- land	Volatile Organic Compounds (VOCs)	Detected		
					Extractable heavy metals, printed area Antimony	2.5		
FT-27	Snow boots with lace-up front and patch detail 	Shoes	Sole: PU leather Lining: Poly- ester Upper: Nylon Insole mate- rial: Polyester	Switzer- land	Volatile Organic Compounds (VOCs)	Detected		
					Extractable heavy metals, various parts Antimony	0.6		
					DMF, faux leather	130		\$100 <0.5 - <10
					Phthalates - Plastic label „Sport“			
					DIBP	3300	REACH <1000	
					DBP	1400	REACH <1000	
DEHP	658000	REACH <1000						

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FT-28	Newborn girl mesh skirt with headband photography prop 	Baby articles	100% Polyester	Austria	Volatile Organic Compounds (VOCs)	Detected		
					Extractable heavy metals, various parts Antimony	0.1		
FT-29	Toddler boy's one-piece swimsuit and hat with random cartoon striped graphic 	swim-suits	82% Polyester, 18% Elastane	Austria	Volatile Organic Compounds (VOCs)	Detected		
					Extractable heavy metals, printed material Antimony	20		
FT - 30	Drop shoulder ombre sweater 	Special	58% Acrylic, 29% Polyester, 9% Nylon, 4% Wool	Austria	Volatile Organic Compounds (VOCs)	Detected		
					Extractable heavy metals, material antimony	0.5		
FT-31	Mens Expression fleece jacket without Tee, print contrast side seam 	Jackets	Material: non-woven composition: 65% Polyester, 35% Cotton	Austria	Volatile Organic Compounds (VOCs)	Detected		
					Extractable heavy metals, various parts Antimony	5.2		
					Phthalates			
					DIBP	360		\$100 <0.010 Sum <0.025
					DBP	92		\$100 <0.010 Sum <0.025
					Other plasticisers DEHP	7700		
FT-32	Zip-back clear chunky heeled boots 	Shoes	Inner sole material: PU leather Sole: rubber Lining: PVC Upper: PVC	Austria	Volatile Organic Compounds (VOCs)	Detected		
					Plastics and coated Material - Heel/ outsole Bromine	50		
					Tin (possible connection to organotin)	50		

FT-33	Toddler girl's one piece swimsuit with cartoon unicorn 	Swim-suits	82% Polyester, 18% Elastane	Germany	Alkylphenol ethoxylates NPE	6		
					Volatile Organic Compounds (VOCs)	Detected		
					Extractable heavy metals, printed area Antimony	6.5		
FT-34	SHEIN baby 1 piece zip-up vest coat 	Jackets	Filling:100% Polyester Material: Polyester	Germany	Alkylphenol ethoxylates NPE	14		
					Volatile Organic Compounds (VOCs)	Detected		
					Extractable heavy metals, upper & lining - antimony	0.1		
FT-35	Clogs with flower decor 	Shoes	Lining: ethylene Upper: ethylene Insole material: ethylene	Germany	Volatile Organic Compounds (VOCs)	Detected		
					Plastics and coated material Lead	4500		\$100 <75
					Cadmium	200	REACH <100	
					Phthalates			
					DEHP	290000	REACH <1000	
					DIBP	110	REACH <1000	
					DBP	27	REACH <1000	
					Other plasticisers DEHP	1500		
FT-36	Newborn girl photography floral print blanket & hat 	Baby articles	100% Polyester	Germany	Alkylphenol ethoxylates NPE	9		
					Volatile Organic Compounds (VOCs)	Detected		
					Extractable heavy metals, printed area antimony	10		

FT-37	Baby Halloween skull & letter graphic contrast binding bodysuit 	Baby articles	100% Polyester	Germany	Volatile Organic Compounds (VOCs)	Detected		
					Extractable heavy metals, printed area Antimony	0.3		
					Phthalates, printed area DIBP	10	<0.010 Sum <0.025	
FT-38	Fishnet tights with rhinestone decor 	Special	88% Polyamide, 12% Elastane	Germany	Volatile Organic Compounds (VOCs)	Detected		
					Extractable heavy metals, material & elastic antimony	0.3		
FT-39	DAZY zip-front one piece swimsuit 	Swim-suits	82% Polyester, 18% Elastane	Germany	Volatile Organic Compounds (VOCs)	Detected		
					Metals in metal parts			
					Nickel	12000		
					Lead	20000		S100, Pb metallic material <90
					in a plastic part Tin (possible connection to organotin)	700		S100 <0.5 for organotins
Extractable heavy metals, material & mesh Antimony	0.4							
FT-40	All over print button-front shirt 	Special	100% Polyester	Germany	Volatile Organic Compounds (VOCs)	Detected		
					Extractable heavy metals, printed area antimony	9.5		

FT-41 SHEIN Plus grunge skeleton floral print PU leather jacket 	Jackets Coating: 100% Polyurethane Material: PU Leather Lining composition: 100% Polyester	Germany	Alkylphenol ethoxylates NPE	22		
			Formaldehyde, printed area	18		
			Volatile Organic Compounds (VOCs)	Detected		
			Nickel in metal parts	35000		
			Extractable heavy metals, printed area	nd		
			Phthalates, printed area DIBP	28		S100 <0.010 Sum <0.025
FT-42 Men's letter graphic running shoes 	Shoes Insole material: PU leather Upper: suede Sole: TPR Lining: net	Germany	Volatile Organic Compounds (VOCs)	Detected		
			Extractable heavy metals, upper & lining Antimony	1.3		
			Phthalates			
			Upper & lining, padding DIBP	5200		REACH <1000
			Synthetic leather inner sole DIBP	19500		REACH <1000
			Outer sole DIBP	250000		REACH <1000
FT-43 Orange bucket hat  <p>https://m.shein.com/de/EIMERHUT-p-10808020-cat-1772.htm?ici=&ref=m&rep=dir&ret=m-de</p>	Hat Polyester	Pop up Store Munich	Extractable heavy metals, fabric Nickel	0.1		
FT-44 Overall dress with ribbon, buckle, without blouse  <p>https://m.shein.com/de/OVERALL%20KLEID%20MIT%20BAND.%20SCHNALLE.%20OHNE%20BLUSE-p-11197639-cat-1727.htm?ici=&ref=m&rep=dir&ret=m-de</p>	Kleid, Tracht 95% Polyester 5% Elastane	Pop up Store Munich	Nickel in metal parts	6000		
			Extractable heavy metals, fabric Antimony	0.4		
			Nickel	0.1		



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FT-45	Sweater with polo collar, drop shoulder, letters graphic https://m.shein.com/de/PULL-OVER%20MIT%20POLO%20KRAGEN.%20DROP%20SHOULDER%20BUCHSTABEN%20GRAFIK-p-7722202-cat-1773.html?ici=&ref=m&rep=dir&ret=mde	Jumper	95% Polyester 5% Elastane	Pop up Store Munich	Alkylphenols OPE	21		
					Volatile Organic Compounds (VOCs)	Detected		
					Extractable heavy metals, printed area antimony	0.2		
FT-46	SHEIN X Penelope Ping PU leather blazer with lapel collar, eyelets and asymmetrical trim https://m.shein.com/de/PU%20LEDER%20LAZER%20MIT%20REVERSKRAGEN.%20C3%96SEN%20LUND%20ASYM-METRISCHEM%20BESATZ-p-2696714-cat-1739.html?ici=&ref=m&rep=dir&ret=mde	Jacket	40% Polyester 60% Polyurethane	Pop up Store Munich	Volatile Organic Compounds (VOCs)	Detected		
					Extractable heavy metals, main material Antimony	0.1		
					nickel	0.1		
FT-47	Jeans with rips https://m.shein.com/de/JEANS%20MIT%20RISS-p-2420834-cat-1989.html?ici=&ref=m&rep=dir&ret=mde	-1 Jeans	80% Cotton, 20% Polyester	Pop up Store Munich	Alkylphenol ethoxylates NPE	8		
					Volatile Organic Compounds (VOCs)	Detected		
					Nickel in metal parts	65000		
					Extractable heavy metals, main material Antimony	0.1		
					nickel	0.1		

Notes

- (1) This table shows the key highlights of the results for each product. For a full list of all chemicals tested in each product, the methods used and the Limit of Quantification or Detection Limits, please see the BUI Analysis Report in this Appendix.
- (2) Screening for Volatile Organic Compounds (VOCs) identifies the likely presence of VOCs, which need to be followed up by further tests to be confirmed.
- (3) Although 0.7 exceeds the REACH limit for the release of nickel, the Analysis Report notes that “Due to the combined measurement uncertainty of 46% given in the DIN standard used, the limit value according to REACH Regulation Annex XVII of 0,5 µg/m²/week is exceeded only from a nickel release of 0,88 µg/m²/week.”

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Links to products on SHEIN website

- FT-1: <https://de.shein.com/Toddler-Girls-Fish-Scales-Colorblock-Mesh-Panel-Halter-Dress-With-Headband-p-2855050-cat-2383.html>
- FT-2: <https://de.shein.com/Toddler-Girls-Colorful-Tutu-Skirt-And-Wing-Headband-p-3240909-cat-2383.html>
- FT-3: <https://de.shein.com/Baby-Christmas-Print-Mesh-Yoke-Gown-Dress-p-5614062-cat-2381.html>
- FT-4: <https://de.shein.com/Figure-Graphic-Over-The-Knee-Socks-p-10708657-cat-1899.html>
- FT-5: <https://de.shein.com/SHEIN-Holographic-Raglan-Sleeve-Slant-Pockets-Hooded-Coat-p-11020466-cat-1735.html>
- FT-6: <https://de.shein.com/Newborn-Photography-Floral-Print-Wrap-Blanket-Bow-Front-Headband-p-10597159-cat-2399.html>
- FT-7: <https://de.shein.com/SHEIN-Men-Zip-Up-PU-Leather-Jacket-p-11147605-cat-1983.html>
- FT-8: <https://de.shein.com/Extended-Sizes-Men-Letter-Graphic-Striped-Trim-Drop-Shoulder-Varsity-Jacket-p-11209139-cat-1983.html>
- FT-9: <https://de.shein.com/EVER-PRETTY-Maternity-Applications-Detail-Mesh-Dress-p-2543510-cat-2366.html>
- FT-10: <https://de.shein.com/SHEIN-BAE-PU-Leather-Bodycon-Dress-p-5384602-cat-1727.html>
- FT-11: <https://de.shein.com/Maternity-Scallop-Trim-Bow-Lace-Nursing-Bra-p-11164023-cat-2380.html>
- FT-12: <https://de.shein.com/Snakeskin-Print-Rhinestone-Decor-Bikini-Swimsuit-p-11274918-cat-1866.html>
- FT-13: <https://de.shein.com/Leopard-Sequin-Halter-Triangle-Bikini-Top-p-9350902-cat-2291.html>
- FT-14: <https://de.shein.com/Men-Floral-Print-Letter-Patched-Detail-Swim-Trunks-p-10375948-cat-2025.html>
- FT-15: <https://de.shein.com/Rubber-Block-Heel-Slip-On-Rain-Boots-p-11298659-cat-1748.html>
- FT-16: <https://de.shein.com/Rhinestone-Closed-Toe-Pull-On-Booties-p-11310170-cat-1748.html>
- FT-17: <https://de.shein.com/Men-Buckle-Decor-Lace-up-Front-Combat-Boots-p-11188657-cat-2094.html>
- FT-18: <https://de.shein.com/Baby-Rainbow-Letter-Graphic-Bodysuit-p-11278440-cat-2838.html>
- FT-19: <https://de.shein.com/Simple-Plain-Tights-p-2327152-cat-3290.html>
- FT-20: <https://de.shein.com/Contrast-Sequin-Fringe-Push-Up-Bikini-Swimsuit-p-10066851-cat-1866.html>
- FT-21: <https://de.shein.com/Lapel-Neck-Zip-Up-Belted-Suedette-Moto-Jacket-p-864164-cat-1776.html>
- FT-22: <https://de.shein.com/CUCCOO-Trending-Suedette-Lace-up-Side-Point-Toe-Stiletto-Heeled-Boots-p-11068169-cat-1748.html>
- FT-23: <https://de.shein.com/Baby-Christmas-And-Striped-Print-Raglan-Sleeve-Tee-Jumpsuit-p-11442116-cat-2133.html>
- FT-24: <https://de.shein.com/Toddler-Girls-Ruffle-Trim-PU-Moto-Jacket-Hat-p-10493012-cat-2560.html>
- FT-25: <https://de.shein.com/Joyfunear-Sequin-Bodice-Backless-Mesh-Cami-Formal-Evening-Gowns-p-3575371-cat-1727.html>
- FT-26: <https://de.shein.com/Men-Pineapple-Galaxy-Print-Swim-Trunks-p-11131491-cat-3797.html>
- FT-27: <https://de.shein.com/Patch-Detail-Lace-up-Front-Snow-Boots-p-11339328-cat-3182.html>
- FT-28: <https://de.shein.com/Newborn-Girl-Mesh-Skirt-With-Headband-Photography-Prop-p-10182869-cat-2399.html>
- FT-29: <https://de.shein.com/Toddler-Boys-Random-Cartoon-Striped-Graphic-One-Piece-Swimsuit-Hat-p-9872227-cat-2113.html>
- FT-30: <https://de.shein.com/Drop-Shoulder-Ombre-Sweater-p-3897471-cat-1734.html>
- FT-31: <https://de.shein.com/Men-Expression-Print-Contrast-Side-Seam-Fleece-Jacket-Without-Tee-p-3861286-cat-1983.html>
- FT-32: <https://de.shein.com/Zip-Back-Clear-Chunky-Heeled-Boots-p-11136745-cat-1748.html>
- FT-33: <https://de.shein.com/Baby-Christmas-And-Striped-Print-Raglan-Sleeve-Tee-Jumpsuit-p-11442116-cat-2133.html>
- FT-34: <https://de.shein.com/Men-Pineapple-Galaxy-Print-Swim-Trunks-p-11131491-cat-3797.html>
- FT-35: <https://de.shein.com/Flower-Decor-Hollow-Out-Vented-Clogs-p-11349590-cat-3189.html>
- FT-36: <https://de.shein.com/Newborn-Girl-Photography-Floral-Print-Blanket-Hat-p-2486898-cat-2399.html>
- FT-37: <https://de.shein.com/Baby-Halloween-Skull-Letter-Graphic-Contrast-Binding-Bodysuit-p-11278437-cat-2838.html>
- FT-38: <https://de.shein.com/Rhinestone-Decor-Fishnet-Tights-p-11152480-cat-3290.html>
- FT-39: <https://de.shein.com/DAZY-Zip-Front-One-Piece-Swimsuit-p-9958926-cat-2193.html>
- FT-40: <https://de.shein.com/All-Over-Print-Button-Front-Shirt-p-8679397-cat-1733.html>
- FT-41: <https://de.shein.com/SHEIN-Plus-Grunge-Skeleton-Floral-Print-PU-Leather-Jacket-p-11248908-cat-2245.html>
- FT-42: <https://de.shein.com/Men-Letter-Graphic-Running-Shoes-p-11416397-cat-2093.html>
- FT-43: <https://m.shein.com/de/EIMER-HUT-p-10808020-cat-1772.html?ici=&ref=m&rep=dir&ret=mde>
- FT-44: <https://m.shein.com/de/OVERALL-KLEID-MIT-BAND,-SCHNALLE,-OHNE-BLUSE-p-11197639-cat-1727.html>
- FT-45: <https://m.shein.com/de/PULLOVER-MIT-POLO-KRAGEN,-DROP-SHOULDER-BUCHSTABEN-GRAFIK-p-7722202-cat-1773.html>
- FT-46: <https://m.shein.com/de/PU-LEDER-LAZER-MIT-REVERSKRAGEN,-C-SEN-UND-ASYMMETRISCHES-BESATZ-p-2696714-cat-1739.html>
- FT-47: <https://m.shein.com/de/JEANS%20MIT%20RISS-p-2420834-cat-1989.html?ici=&ref=m&rep=dir&ret=mde>

ANALYSIS REPORT

1 Description of Order

Client: Greenpeace e.V.
Viola Wohlgemut
Hongkongstr. 10
20457 Hamburg

Date of order: 04-10-2022

Agent: Bremer Umweltinstitut
Gesellschaft für Schadstoffanalytik und Begutachtung mbH
Fahrenheitstraße 1
28359 Bremen



Number of report: L 6777 FT III




Sample receipt: 23-09-2022 (Hamburg), L 6777 FT -1 to L 6777 FT -17, including 5 samples originally from Italy: L 6777 FT -1, -8, -9, -12, -16
27-09-2022 (Spain), L 6777 FT -18 to L 6777 FT -22
29-09-2022 (Vienna), L 6777 FT- 23 to L 6777 FT - 27
29-09-2022 (Switzerland), L 6777 FT-28 to L 6777 FT -32
07-10-2022 (Hamburg), L 6777 FT -33 to L 6777 FT -42
14-10-2022 (Hamburg), L 6777 FT -43 to L 6777 FT -47

Sampling period: 04-10-2022 to 03-11-2022 for samples L 6777 FT -1 to -32
11-10-2022 to 03-11-2022 for samples L 6777 FT -33 to -47





Sampling: The samples were taken and sent by the client.





1.1 Description of samples


Sample Number	Article	Test Intention
L 6777 FT - 1	<p><i>Textile sample</i> Toddler dress with tulle and fish scales, skparty, Art.-No. 25210607253, 08/22, size 100, 100 % nylon with hair decoration</p> <div style="display: flex; justify-content: space-around;">   </div>	




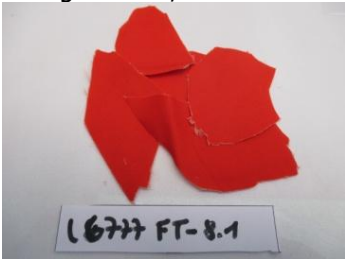
Sample Number	Article	Test Intention
L 6777 FT - 1.1	<p><i>Textile sample</i> Printed top children dress, skparty, Art.-No. 25210607253, 08/22</p> 	<ul style="list-style-type: none"> - Formaldehyde, - Heavy metals - Ethoxylated alkylphenols (APEO) - Screening for volatile organic compounds (VOC) - X-ray fluorescence analysis (XRF)
L 6777 FT - 1.2	<p><i>Textile sample</i> Mixed sample green strap and purple tulle, children dress skparty, Art.-No. 25210607253, 08/22</p> 	<ul style="list-style-type: none"> - Aromatic amines - Formaldehyde - Heavy metals
L 6777 FT - 1.2.1	<p>Purple tulle, children dress skparty, Art.-No. 25210607253, 08/22</p>	<ul style="list-style-type: none"> - Formaldehyde
L 6777 FT - 1.3	<p><i>Textile sample</i> Mixed sample accessory/trim headdress: sea stars pink, fin green, fin blue, skparty, Art.-No. 25210607253, 08/22</p> 	<ul style="list-style-type: none"> - Heavy metals - VOC-Screening



Sample Number	Article	Test Intention
<p>L 6777 FT - 2</p>	<p><i>Textile sample</i> Toddler girl colorful tutu skirt and wings & head-dress, skparty, Art.-No. 21072702466 66324, 08/2022, size 100, 100 % polyester</p> 	
<p>L 6777 FT - 2.1</p>	<p><i>Textile sample</i> Coated fabric, skparty, Art.-No. 21072702466 66324, 08/2022, colours "blue, green, yellow, purple, pink"</p> 	<ul style="list-style-type: none"> - APEO - Formaldehyde, - Heavy metals - VOC screening
<p>L 6777 FT - 2.2</p>	<p><i>Textile sample</i> Coated fabric, skparty, Art.-No. 21072702466 66324, 08/2022, colours "blue, green, yellow"</p> 	<ul style="list-style-type: none"> - Aromatic amines
<p>L 6777 FT - 2.3</p>	<p><i>Textile sample</i> Headdress "Ears" pink, skparty, Art.-No. 21072702466 66324, 08/2022</p> 	<ul style="list-style-type: none"> - XRF


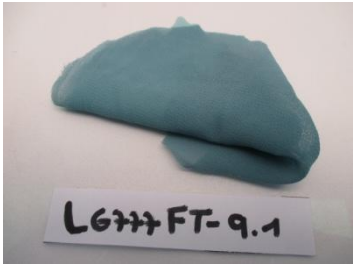


Sample Number	Article	Test Intention
L 6777 FT - 3	<p><i>Textile sample</i> Baby evening dress with christmas pattern, Art.-No. sa21092784794 25785, 10/2021, size 74, 100 % polyester</p> 	
L 6777 FT - 3.1	<p><i>Textile sample</i> Printed skirt with winter motif , Art.-No. sa21092784794 25785, 10/2021, size 74, 100 % polyester</p> 	<ul style="list-style-type: none"> - Aromatic amines - APEO - Formaldehyde, - Heavy metals - VOC screening
L 6777 FT - 4	<p><i>Textile sample</i> Overknee stockings with figure graphic, 100 % polyester, printed, Art.- No. si2204241194449882</p> 	
L 6777 FT - 4.1	<p><i>Textile sample</i> Overknee stockings with figure graphic, 100 % polyester, printed, Art.- No. si2204241194449882 selected colours</p> 	<ul style="list-style-type: none"> - APEO - Formaldehyde, - Heavy metals - VOC screening





Sample Number	Article	Test Intention
<p>L 6777 FT - 4.2</p>	<p><i>Textile sample</i> Printed area overknee stockings, colours „red, green, black), Art.- No. si2204241194449882</p> 	<p>- Aromatic amines</p>
<p>L 6777 FT - 5</p>	<p><i>Textile sample</i> Coat with hood, holographic raglan sleeves, slanted pockets, multicoloured printed/coated black fabric, Art.-no. JIT9345261, SKC#sw220608316961 9442, 5 % elastane, 95 % polyester, size S</p> 	
<p>L 6777 FT - 5.1</p>	<p><i>Textile sample</i> Coat with hood, holographic raglan sleeves, slanted pockets, multicoloured printed/coated black fabric, Art.-no. JIT9345261, SKC#sw220608316961 9442, 5 % elastane, 95 % polyester, size S, selected colours</p> 	<ul style="list-style-type: none"> - Aromatic amines - APEO - Formaldehyde, - Heavy metals - VOC screening - XRF
<p>L 6777 FT - 5.2</p>	<p><i>Sample</i> Plastic holder from the drawstring, colour "black" from coat with hood, Art.-No.sw220608316961</p> 	<p>- XRF</p>

Sample Number	Article	Test Intention
L 6777 FT - 6	<p><i>Textile sample</i> Newborn photography wrap with floral pattern & headband with front bow, multicoloured print, Art.-No. sa22042793260 23263, 08/2022, 0-1M, 100 % polyester</p> 	
L 6777 FT - 6.1	<p><i>Textile sample</i> Newborn photography wrap with floral pattern, Art.-No. sa22042793260</p> 	<ul style="list-style-type: none"> - APEO - Formaldehyde, - Heavy metals - VOC screening
L 6777 FT - 6.2	<p><i>Textile sample</i> Newborn photography wrap with floral pattern, Art.-No. sa22042793260 colours "black, red, pink"</p> 	<ul style="list-style-type: none"> - Aromatic amines
L 6777 FT - 7	<p><i>Textile sample</i> Men's jacket with zipper, PU leather, black with black lining, Art.-No.. JIT9707550, SKC#sm22060703659549, size M, 100 % polyester</p> 	





Sample Number	Article	Test Intention
L 6777 FT - 7.1	<p><i>Textile sample</i> Main material and lining black from men's jacket, PU leather, black Art.-No.. sm22060703659549</p> 	<ul style="list-style-type: none"> - Aromatic amines - APEO - Formaldehyde, - Heavy metals - VOC screening - XRF
L 6777 FT - 7.2	<p><i>Metal sample</i> Push button, metal, jacket, Art.-No. JIT9707550</p> 	<ul style="list-style-type: none"> - XRF
L 6777 FT - 7.3	<p><i>Metal sample</i> Main material from men's jacket, PU leather, black Art.-No.. sm22060703659549</p>	<ul style="list-style-type: none"> - Phthalates
L 6777 FT - 8	<p><i>Textile sample</i> Extended Sizes Men's College Jacket with Letter Graphic, Stripe Drop Shoulder, red, multicolor printed with black lining and knitted hem, Art.-No. YIT9169001 SKC#sm220525558666 4128, 100 % Polyester, Size 2XL</p> 	
L 6777 FT - 8.1	<p><i>Textile sample</i> Main material red from Extended Sizes Men's College Jacket, Art.-No. sm220525558666 4128</p> 	<ul style="list-style-type: none"> - Heavy metals





Sample Number	Article	Test Intention
L 6777 FT - 8.2	<p><i>Textile sample</i> Printed area "Los Angeles", black, white, yellow, blue, Art.-No. sm220525558666 4128,</p> 	- APEO
L 6777 FT - 8.3	<p><i>Textile sample</i> Printed area "Impact", yellow, blue, black white, Art.-No. sm220525558666 4128,</p> 	- Formaldehyde
L 6777 FT - 8.4	<p><i>Metal sample</i> push buttons for Art.-No. sm220525558666 4128,</p> 	- XRF
L 6777 FT - 8.5	<p><i>Textile sample</i> Mixed sample lining and knitted edge black, Art.-No. YIT9169001 SKC#sm220525558666 4128, 100 % Polyester</p> 	- Aromatic amines





Sample Number	Article	Test Intention
L 6777 FT - 9	<p><i>Textile sample</i> EVER-PRETTY mesh dress with appliqué detail, color mint, underskirt lighter green, style no. 20809-17E, 100 % polyester (Art.-No. 112-2010-21-165, swmatern 31210421256, EY20788DB (<u>on package only, different dress than announced in the sample overview, smell of washing powder</u>))</p> 	
L 6777 FT - 9.1	<p><i>Textile sample</i> Main material and underskirt from EVER-PRETTY mesh dress Art.-No. 112-2010-21-165</p> 	<ul style="list-style-type: none"> - Aromatic amines - APEO - Formaldehyde, - Heavy metals - VOC screening
L 6777 FT - 10	<p><i>Textile sample</i> SHEIN BAE figure-hugging dress with PU leather, black, coated, inside brushed, Art.-No. JIT9826702, SKC#sw211007499353 3780, 10 % spandex, 90 % polyester, size S</p> 	
L 6777 FT - 10.1	<p><i>Textile sample</i> SHEIN BAE figure-hugging dress with PU leather, black Art.-No. sw211007499353 3780</p> 	<ul style="list-style-type: none"> - Aromatic amines - APEO - Formaldehyde, - Heavy metals - VOC screening - XRF


Sample Number	Article	Test Intention
L 6777 FT - 11	<p><i>Textile sample</i> Maternity nursing bra with scalloped edge, bow, lace red, Art.-No. sa2207187080532781 (on package only), 94 % polyamide, 6 % spandex, size M, with metal and red plastic buckles, foam padding, red lace, red elastic band</p> 	
L 6777 FT - 11.1	<p><i>Textile sample</i> Mixed sample base material (mesh), tip and inner support from maternity nursing bra Art.-No. sa2207187080532781</p> 	<ul style="list-style-type: none"> - Aromatic amines - APEO - Formaldehyde, - Heavy metals - VOC screening
L 6777 FT - 11.2	<p><i>Textile sample</i> Mixed sample straps (elastic band), felt clasp, fabric cover cups from maternity nursing bra Art.-No. sa2207187080532781</p> 	<ul style="list-style-type: none"> - Aromatic amines
L 6777 FT - 11.3	<p><i>Textile sample</i> Mixed sample fabric cover cups, red and padding cups (foam) from maternity nursing bra Art.-No. sa2207187080532781</p> 	<ul style="list-style-type: none"> - VOC screening - XRF

Sample Number	Article	Test Intention
L 6777 FT - 11.4	<p><i>Metal sample</i> Metal parts from maternity nursing bra Art.-No. sa2207187080532781</p> 	<ul style="list-style-type: none"> - XRF - Nickel release
L 6777 FT - 11.5	<p><i>Plastic sample</i> Plastic holder from maternity nursing bra Art.-No. sa2207187080532781</p> 	<ul style="list-style-type: none"> -XRF
L 6777 FT - 12	<p><i>Textile sample</i> Bikini with snakeskin pattern, rhinestone decor, printed orange, black, green, Art.-No. sw2208083708338774 (on package only), 82 % polyester, 18 % spandex, size S, with metal clasps and metal jewelry (with gemstones)</p> 	
L 6777 FT - 12.1	<p><i>Textile sample</i> Main material orange, black, green from bikini with snakeskin pattern Art.-No. sw2208083708338774</p> 	<ul style="list-style-type: none"> - Aromatic amines - APEO - Formaldehyde, - Heavy metals - VOC screening - PFAS





Sample Number	Article	Test Intention
L 6777 FT - 12.2	<p><i>Metal sample</i> Metal clasp and metal rings from bikini with snake-skin pattern Art.-No. sw2208083708338774</p> 	- XRF
L 6777 FT - 12.3	<p><i>Metal sample</i> Metal jewelry with gemstones from bikini with snakeskin pattern Art.-No. sw2208083708338774</p> 	- XRF - Nickel release
L 6777 FT - 13	<p><i>Textile sample</i> Triangle bikini top with leopard sequin, neck-holder top black with sequins, Art.-No. F0130-1sw2112171025058583, 82 % polyester, 18 % spandex, size S, with black ribbons and foam cups</p> 	
L 6777 FT - 13.1	<p><i>Textile sample</i> Sequins from triangle bikini top Art.-No. F0130-1sw2112171025058583,</p> 	- XRF





Sample Number	Article	Test Intention
<p>L 6777 FT - 13.2</p>	<p><i>Textile sample</i> Base material and tapes, black from triangle bikini top with leopard sequin Art.-No. sw2112171025058583</p> 	<ul style="list-style-type: none"> - Aromatic amines - APEO - Formaldehyde, - Heavy metals
<p>L 6777 FT - 13.3</p>	<p><i>Textile sample</i> Cups (foam) from triangle bikini top Art.-No. sw2112171025058583</p> 	<ul style="list-style-type: none"> - VOC screening
<p>L 6777 FT - 14</p>	<p><i>Textile sample</i> Men's swim shorts with floral pattern, Art.-No. SH3448#H6325, sm2204197060333335 (on package only), 100 % polyester, size S, with white inner shorts, rubber drawstring, band and outer pocket with velcro closure</p> 	
<p>L 6777 FT - 14.1</p>	<p><i>Textile sample</i> Printed base fabric (blue, pink, orange, green, light green, red) from Men's swim shorts with floral pattern Art.-No. sm2204197060333335</p> 	<ul style="list-style-type: none"> - APEO - Formaldehyde, - Heavy metals - VOC screening - PFAS





Sample Number	Article	Test Intention
L 6777 FT - 14.2	<p><i>Textile sample</i> Printed base fabric (blue, pink, red) from Men's swim shorts with floral pattern Art.-No. sm220419706033335</p> 	- Aromatic amines
L 6777 FT - 15	<p><i>Plastic sample</i> Rain boots with rubber block heel, slip on "myron blue", Art.-No sx2206028390566629, size 7, with zipper, textile lining and faux leather lining on zipper.</p> 	
L 6777 FT - 15.1	<p><i>Plastic sample</i> Shaft and sole, Rain boots Art.-No sx2206028390566629</p> 	- Phthalates - VOC screening
L 6777 FT - 15.2	<p><i>Plastic sample</i> Heel, zipper, shaft and sole, Rain boots Art.-No sx2206028390566629</p> 	- XRF

Sample Number	Article	Test Intention
L 6777 FT - 16	<p><i>Textile sample</i> Pull on ankle boots with rhinestones, closed toe, Art.-No. sx2205138928965536, size 5,5, insole synthetic leather on foam, upper textile black with rhinestones, outsole synthetic material</p> 	
L 6777 FT - 16.1	<p><i>Textile sample</i> Textile upper with rhinestones, black from pull on ankle boots Art.-No. sx2205138928965536</p> 	<ul style="list-style-type: none"> - Aromatic amines - APEO - Formaldehyde, - Heavy metals - VOC screening
L 6777 FT - 16.2	<p><i>Textile sample</i> Inner sole from pull on ankle boots Art.-No. sx2205138928965536</p> 	<ul style="list-style-type: none"> - VOC screening
L 6777 FT - 16.3	<p><i>Textile sample</i> Outsole/Heel, black from pull on ankle boots Art.-No. sx2205138928965536</p> 	<ul style="list-style-type: none"> - VOC screening - XRF

Sample Number	Article	Test Intention
L 6777 FT - 17	<p><i>Textile sample</i> Men's combat boots with buckle decoration, front strap, Art.-No. CF 2012, sx2207190360223893, size 39, synthetic leather upper black, metal eyelets, laces black, textile lining black, outsole rubber/EVA black, insole synthetic material.</p> 	
L 6777 FT - 17.1	<p><i>Textile sample</i> Upper material synthetic leather from men's combat boots Art.-No. CF 2012, sx2207190360223893</p> 	<ul style="list-style-type: none"> - APEO - VOC screening - XRF - Phthalates
L 6777 FT - 17.2	<p><i>Plastic sample</i> Outsole black, from men's combat boots Art.-No. CF 2012, sx2207190360223893</p> 	<ul style="list-style-type: none"> - VOC screening - XRF - Phthalates
L 6777 FT - 17.3	<p><i>Textile sample</i> Inner lining, from men's combat boots Art.-No. CF 2012, sx2207190360223893</p> 	<ul style="list-style-type: none"> - Aromatic amines


Sample Number	Article	Test Intention
L 6777 FT - 17.4	<p><i>Metal sample</i> Metal eyelets, from men's combat boots Art.-No. CF 2012, sx2207190360223893</p> 	- XRF
L 6777 FT - 17.5	<p><i>Textile sample</i> Mixed sample lining fabric, webbing and foam from men's combat boots Art.-No. CF 2012, sx2207190360223893</p> 	- Formaldehyde
L 6777 FT - 18	<p><i>Textile sample</i> Baby bodysuit with rainbow & letters graphic, Art.-No. GS112207002, sa2207148680482424, 08/2022, size 6-9M, 95 % cotton, 5 % elastane</p> 	
L 6777 FT - 18.1	<p><i>Textile sample</i> Printed area baby bodysuit (rainbow), Art.-No. sa2207148680482424</p> 	<ul style="list-style-type: none"> - Aromatic amines - APEO - Formaldehyde, - Heavy metals - VOC screening - XRF





Sample Number	Article	Test Intention
L 6777 FT - 18.2	<p><i>Plastic sample</i> Push buttons, baby bodysuit (rainbow), Art.-No. sa2207148680482424</p> 	- XRF
L 6777 FT - 19	<p><i>Textile sample</i> Simple pantyhose, red, Art.-No.: MV70, swsock18210316423, 85 % nylon, 15 % spandex/elasthan</p> 	
L 6777 FT - 19.1	<p><i>Textile sample</i> Simple pantyhose, red, Art.-No.: swsock18210316423</p> 	<ul style="list-style-type: none"> - Aromatic amines - APEO - Formaldehyde, - Heavy metals - VOC screening
L 6777 FT - 20	<p><i>Textile sample</i> Push-up bikini with contrast sequins, fringes, color: silver, Art.-No. T2259, sw2201112417752411, 82 % polyester, 18 % spandex, size L</p> 	





Sample Number	Article	Test Intention
L 6777 FT - 20.1	<p><i>Textile sample</i> Base material silver, push-up bikini Art.-No. T2259, sw2201112417752411</p>  <p>L 6777 FT - 20.1</p>	<ul style="list-style-type: none"> - Aromatic amines - APEO - Formaldehyde, - Heavy metals - VOC screening - PFAS
L 6777 FT - 20.2	<p><i>Metal sample</i> Metal clasp and metal rings, push-up bikini Art.-No. T2259, sw2201112417752411</p>  <p>L 6777 FT - 20.2</p>	<ul style="list-style-type: none"> - XRF - Nickel release
L 6777 FT - 20.3	<p><i>Textile sample</i> Sequins, push-up bikini Art.-No. T2259, sw2201112417752411,</p>  <p>L 6777 FT - 20.3</p>	<ul style="list-style-type: none"> - XRF
L 6777 FT - 20.4	<p><i>Textile sample</i> Cups (foam) Push-Up bikini Art.-No. T2259, sw2201112417752411</p>  <p>L 6777 FT-20.4</p>	<ul style="list-style-type: none"> - VOC screening



Sample Number	Article	Test Intention
L 6777 FT - 21	<p><i>Textile sample</i> Faux suede bike jacket with lapel collar, zipper and belt, Art.-No. swjacket00190927489, size L, 65 % polyester, 35 % cotton</p> 	
L 6777 FT - 21.1	<p><i>Textile sample</i> Basic material, black, bike jacket, Art.-No. swjacket00190927489</p> 	<ul style="list-style-type: none"> - Aromatic amines - APEO - Formaldehyde, - Heavy metals - VOC screening
L 6777 FT - 21.2	<p><i>Metal sample</i> Metal zipper, bike jacket, Art.-No. swjacket00190927489</p> 	<ul style="list-style-type: none"> - XRF
L 6777 FT - 21.3	<p><i>Metal sample</i> Push button (with skin contact), bike jacket, Art.-No. swjacket00190927489</p> 	<ul style="list-style-type: none"> - XRF





Sample Number	Article	Test Intention
<p>L 6777 FT - 21.4</p>	<p><i>Textile sample</i> Eyelets and buckle from belt, bike jacket, Art.-No. swjacket00190927489</p> 	<ul style="list-style-type: none"> - XRF - Nickel release
<p>L 6777 FT - 22</p>	<p><i>Textile sample</i> CUCCOO trending boots with faux leather side strap, pointed toe, stiletto heel, Art.-No. sx2206309416110607</p> 	
<p>L 6777 FT - 22.1</p>	<p><i>Textile sample</i> Upper material red, trending boots Art.-No. sx2206309416110607</p> 	<ul style="list-style-type: none"> - Aromatic amines - APEO - Formaldehyde, - Heavy metals - VOC screening - Phthalates
<p>L 6777 FT - 22.2</p>	<p><i>Textile sample</i> Seam reinforcement inside (synthetic leather) red, trending boots Art.-No. sx2206309416110607</p> 	<ul style="list-style-type: none"> - VOC screening - XRF





Sample Number	Article	Test Intention
L 6777 FT - 22.3	<p><i>Metal sample</i> Eyelets, trending boots Art.-No. sx2206309416110607</p> 	<ul style="list-style-type: none"> - XRF - Nickel release
L 6777 FT - 22.4	<p><i>Textile sample</i> Shoelaces with rhinestones, trending boots Art.-No. sx2206309416110607</p> 	<ul style="list-style-type: none"> - VOC screening - XRF
L 6777 FT - 22.5	<p><i>Textile sample</i> Inner sole, trending boots Art.-No. sx2206309416110607</p> 	<ul style="list-style-type: none"> - VOC screening
L 6777 FT - 22.6	<p><i>Plastic sample</i> Outsole black, trending boots Art.-No. sx2206309416110607</p> 	<ul style="list-style-type: none"> - VOC screening - XRF - PAH





Sample Number	Article	Test Intention
L 6777 FT - 23	<p><i>Textile sample</i> Baby t-shirt jumpsuit with Christmas and stripes pattern, raglan sleeves, Art.-No. sa2208223277968674, 08/2022, 95 % cotton, 5 % spandex, size: 3-6 M</p> 	
L 6777 FT - 23.1	<p><i>Textile sample</i> Base material and printed sleeves green and red, baby t-shirt jumpsuit, Art.-No. sa2208223277968674</p> 	<ul style="list-style-type: none"> - Aromatic amines - Formaldehyd, - Heavy metals
L 6777 FT - 23.2	<p><i>Textile sample</i> Printed area on front side, baby t-shirt jumpsuit, Art.-No. sa2208223277968674</p> 	<ul style="list-style-type: none"> - APEO - VOC screening - XRF
L 6777 FT - 23.3	<p><i>Plastic sample</i> Plastic buttons, baby t-shirt jumpsuit, Art.-No. sa2208223277968674</p> 	<ul style="list-style-type: none"> - XRF




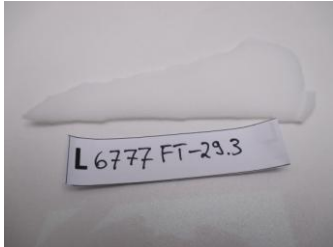
Sample Number	Article	Test Intention
L 6777 FT - 24	<p><i>Textile sample</i> Toddler-Girls PU motorcycle jacket & hat with ruffle trim, red, Art.-No. sk 2204190312209389, 08/2022, Size 90100 % PU</p> 	
L 6777 FT - 24.1	<p><i>Textile sample</i> Base material red, Toddler-Girls PU motorcycle jacket, Art.-No. sk 2204190312209389</p> 	<ul style="list-style-type: none"> - Aromatic amines - APEO - Formaldehyde, - Heavy metals - VOC screening - XRF
L 6777 FT - 24.2	<p><i>Metal sample</i> Push buttons, Toddler-Girls PU motorcycle jacket, Art.-No. sk 2204190312209389</p> 	<ul style="list-style-type: none"> - XRF - Nickel release
L 6777 FT - 24.3	<p><i>Textile sample</i> Metal zipper and slider, Toddler-Girls PU motorcycle jacket, Art.-No. sk 2204190312209389</p> 	<ul style="list-style-type: none"> - XRF




Sample Number	Article	Test Intention
L 6777 FT - 25	<p><i>Textile sample</i> Joyfunear Backless Cami Evening Dress with sequins, mesh, green, Art.-No. DHM789-Dark Green M, sw2108275850655534, 95% Poly-ester, 5 % Spandex</p> 	
L 6777 FT - 25.1	<p><i>Textile sample</i> Mixed sample basic material green with Tulle green, Cami Evening Dress, Art.-No. sw2108275850655534</p> 	<ul style="list-style-type: none"> - Aromatic amines - APEO - Formaldehyde, - Heavy metals - VOC screening
L 6777 FT - 25.2	<p><i>Textile sample</i> Sequins, Cami Evening Dress, Art.-No. sw2108275850655534</p> 	<ul style="list-style-type: none"> - XRF
L 6777 FT - 25.3	<p><i>Metal sample</i> Metal rings, Cami Evening Dress, Art.-No. sw2108275850655534</p> 	<ul style="list-style-type: none"> - XRF






Sample Number	Article	Test Intention
L 6777 FT - 26	<p><i>Textile sample</i> Men's swim trunks with pineapple & galaxy pattern, Art.-No. sm2207267662672155, 80 % polyester, 20 % spandex/elastane, size M</p> 	
L 6777 FT - 26.1	<p><i>Textile sample</i> Printed main material, swim trunks with pineapple & galaxy pattern, Art.-No. sm2207267662672155</p> 	<ul style="list-style-type: none"> - APEO - Formaldehyde, - PFAS - VOC screening
L 6777 FT - 26.2	<p><i>Textile sample</i> Mixed sample colours purple yellow pink, swim trunks with pineapple & galaxy pattern, Art.-No. sm2207267662672155</p> 	<ul style="list-style-type: none"> - Aromatic amines
L 6777 FT - 26.3	<p><i>Textilprobe</i> Printed area pineapple, swim trunks with pineapple & galaxy pattern, Art.-No. sm2207267662672155</p> 	<ul style="list-style-type: none"> - Heavy metals






Sample Number	Article	Test Intention
L 6777 FT - 27	<p><i>Textile sample</i> Snow boots with patch detail, band in front, Art.-No. sx2208227515194139, size 39</p> 	
L 6777 FT - 27.1	<p><i>Textile sample</i> Mixed sample upper textile and lining faux fur black, snow boots Art.-No. sx2208227515194139</p> 	<ul style="list-style-type: none"> - Aromatic amines - Formaldehyde - Heavy metals - PFAS - VOC screening
L 6777 FT - 27.2	<p><i>Textile sample</i> Faux leather black, snow boots Art.-No. sx2208227515194139</p> 	<ul style="list-style-type: none"> - VOC screening - XRF
L 6777 FT - 27.3	<p><i>Textile sample</i> Mixed sample insole (foam with synthetic fur) and foam padding, snow boots Art.-No. sx2208227515194139</p> 	<ul style="list-style-type: none"> - VOC screening





Sample Number	Article	Test Intention
L 6777 FT - 27.4	<p><i>Plastic sample</i> Outsole (rubber and plastic black / gray / transparent), snow boots Art.-No. sx2208227515194139</p> 	- VOC screening
L 6777 FT - 27.5	<p><i>Plastic sample</i> Plastic label "Sport",), snow boots Art.-No. sx2208227515194139</p> 	- Phthalates
L 6777 FT - 28	<p><i>Textile sample</i> Newborn girl skirt with mesh & headband photography prop, Art.-No. sa2203302808433784, 09/2022, size 56, 100% polyester</p> 	
L 6777 FT - 28.1	<p><i>Textile sample</i> Mixed sample tulle skirt, lace and fabric, newborn girl skirt Art.-No. sa2203302808433784</p> 	<ul style="list-style-type: none"> - APEO - Aromatic amines - Formaldehyde - Heavy metals - VOC screening

Sample Number	Article	Test Intention
<p>L 6777 FT - 29</p>	<p><i>Textile sample</i> Toddler boys swimsuit with random cartoon & stripes graphic (AOP) & hat, Art.-No. sk2201111492330412, 08/2022, size 90, 82% polyester, 18% spandex</p> 	
<p>L 6777 FT - 29.1</p>	<p><i>Textile sample</i> Printed main material, mixed sample dark blue, green, orange, toddler boys swimsuit, Art.-No. sk2201111492330412</p> 	<ul style="list-style-type: none"> - APEO - Aromatic amines - Heavy metals - PFAS - VOC-Screening
<p>L 6777 FT - 29.2</p>	<p><i>Textile sample</i> Printed main material, mixed sample blue, green, orange, toddler boys swimsuit, Art.-No. sk2201111492330412</p> 	<ul style="list-style-type: none"> - Heavy metals
<p>L 6777 FT - 29.3</p>	<p><i>Textile sample</i> Foam from hat, toddler boys swimsuit, Art.-No. sk2201111492330412</p> 	<ul style="list-style-type: none"> - VOC-Screening





Sample Number	Article	Test Intention
L 6777 FT - 30	<p><i>Textile sample</i> Pullover with color gradient, Art.-No. sw2108306086196316, size S, 58% acrylic, 29% polyester, 8% nylon.</p> 	
L 6777 FT - 30.1	<p><i>Textile sample</i> Basematerial, pullover with color gradient, Art.-No. sw2108306086196316</p> 	<ul style="list-style-type: none"> - APEO - Formaldehyde - Heavy metals - VOC screening
L 6777 FT - 30.2	<p><i>Textile sample</i> Base material, colours green yellow, pink, pullover with color gradient, Art.-No. sw2108306086196316</p> 	<ul style="list-style-type: none"> - Aromatic amines
L 6777 FT - 31	<p><i>Textile sample</i> Men's jacket with printout pattern, contrast trim, fleece without shirt, black, Art.-No. sm2108274336442452, 35% cotton, 65% polyester, size L</p> 	





Sample Number	Article	Test Intention
L 6777 FT - 31.1	<p><i>Textile sample</i> Main material (smooth and fleece, men's jacket Art.-No. sm2108274336442452</p> 	<ul style="list-style-type: none"> - APEO - Formaldehyde - VOC screening
L 6777 FT - 31.2	<p><i>Textile sample</i> Mixed sample colours black and pink, men's jacket Art.-No. sm2108274336442452</p> 	<ul style="list-style-type: none"> - Aromatic amines - Heavy metals
L 6777 FT - 31.3	<p><i>Textile sample</i> Label from sleeve, black with white print, men's jacket Art.-No. sm2108274336442452</p> 	<ul style="list-style-type: none"> - Phthalates
L 6777 FT - 32	<p><i>Textile sample</i> Boot with zipper back, chunky heel, Art.-No. sx220809135251, plastic with rubber sole.</p> 	
L 6777 FT - 32.1	<p><i>Plastic sample</i> Upper material, boot Art.-No. sx220809135251</p> 	<ul style="list-style-type: none"> - VOC screening - XRF





Sample Number	Article	Test Intention
L 6777 FT - 32.2	<p><i>Material sample</i> Heel/outsole (rubber), boot Art.-No. sx220809135251</p> 	- XRF
L 6777 FT - 32.3	<p><i>Material sample</i> Inner sole, boot Art.-No. sx220809135251</p> 	- VOC screening
L 6777 FT - 32.4	<p><i>Material sample</i> Outsole (rubber), boot Art.-No. sx220809135251</p> 	- VOC screening
L 6777 FT - 33	<p><i>Textile sample</i> Toddler girl swimsuit with cartoon unicorn, Art-No: ks212207285600057, 12/2021, 82% polyester, 18 % spandex</p> 	- PFAS
L 6777 FT - 33.1	<p><i>Textile sample</i> Printed area, color "pink, blue, orange, green", swimsuit with cartoon unicorn, Art-No: ks212207285600057</p> 	<ul style="list-style-type: none"> - APEO - Formaldehyde - Heavy metals - VOC screening




Sample Number	Article	Test Intention
<p>L 6777 FT – 33.2</p>	<p><i>Textile sample</i> Printed area, color "pink, blue, yellow", swimsuit with cartoon unicorn, Art-No:ks212207285600057</p> 	<p>- Aromatic amines</p>
<p>L 6777 FT - 34</p>	<p><i>Textile sample</i> West for babies with zipper, Art-No: JIT9777319, SKC#sa2206021814111078, size 6-9M, 100 % polyester</p> 	
<p>L 6777 FT – 34.1</p>	<p><i>Textile sample</i> Upper and lining, black, vest for babies, Ar.-Nr. JIT9777319, SKC#sa2206021814111078</p> 	<p>- Aromatic amines - Heavy metals - VOC screening</p>
<p>L 6777 FT – 34.2</p>	<p><i>Textile sample</i> Upper and lining (black) and padding (white), vest for babies, Ar.-Nr. JIT9777319, SKC#sa2206021814111078</p> 	<p>- APEO - Formaldehyde</p>

Sample Number	Article	Test Intention
<p>L 6777 FT - 35</p>	<p><i>Plastic sample</i> Clogs with flower decor, Art.-No. sx2208240552909055, size. 36-37, Ethylene</p> 	
<p>L 6777 FT - 35.1</p>	<p><i>Plastic sample</i> Main material, color „orange“, Clogs, Art.-No. sx2208240552909055</p> 	<ul style="list-style-type: none"> - VOC screening - XRF
<p>L 6777 FT - 35.2</p>	<p><i>Plastic sample</i> Main material, color „orange“ and blossom “green” and “purple, Clogs, Art.-No. sx2208240552909055</p> 	<ul style="list-style-type: none"> - Phthalates
<p>L 6777 FT - 35.3</p>	<p><i>Plastic sample</i> Blossoms “white, beige, pink”, Clogs, Art.-No. sx2208240552909055</p> 	<ul style="list-style-type: none"> - XRF


Sample Number	Article	Test Intention
L 6777 FT - 36	<p><i>Textile sample</i> Newborn girl photography blanket and cap with floral pattern, Art.-No. sknewborn25210413539, 08/2022, Size 56, 100 % polyester</p> 	
L 6777 FT - 36.1	<p><i>Textile sample</i> Printed area , newborn girl photography blanket, Art.-No. sknewborn25210413539</p> 	<ul style="list-style-type: none"> - Aromatic amines - APEO - Formaldehyde - Heavy metals - VOC screening
L 6777 FT - 37	<p><i>Textile sample</i> Baby bodysuit with Halloween skull & letters graphic, Contrast seam, Art.-No. sa2207228441113644 09/2022, Size. 3-6M, 100 % Polyester</p> 	
L 6777 FT - 37.1	<p><i>Textile sample</i> Main material, colors „black/orange“, Baby bodysuit Art.-No. sa2207228441113644</p> 	<ul style="list-style-type: none"> - Aromatic amines - Formaldehyde





Sample Number	Article	Test Intention
L 6777 FT - 37.2	<p><i>Textile sample</i> Printed area, Baby bodysuit, Art.-No. sa2207228441113644</p> 	<ul style="list-style-type: none"> - Phthalates - Heavy metals - VOC screening - APEO
L 6777 FT - 38	<p><i>Textile sample</i> Fishnet tights with rhinestones, Art.-No. si2207275525167969, 88 % polyamid, 12 % spandex</p> 	
L 6777 FT - 38.1	<p><i>Textile sample</i> Main material and elastic band, Fishnet tights, Art.-No. si2207275525167969</p> 	<ul style="list-style-type: none"> - Aromatic amines - APEO - Formaldehyde - Heavy metals - VOC screening
L 6777 FT - 38.2	<p><i>Textile sample</i> Rhinestones, Fishnet tights, Art.-No. si2207275525167969</p> 	<ul style="list-style-type: none"> - XRF



Sample Number	Article	Test Intention
L 6777 FT - 39	<p><i>Textile sample</i> DAZY swimsuit with zipper front, Art.-No. sw2202203378221451, Size S, 82 % polyester, 18 % spandex</p> 	
L 6777 FT - 39.1	<p><i>Textile sample</i> Main material and mesh, DAZY swimsuit, Art.-No. sw2202203378221451</p> 	<ul style="list-style-type: none"> - Aromatic amines - APEO - Formaldehyde - Heavy metals - VOC screening - PFAS
L 6777 FT - 39.2	<p><i>Metal sample</i> Zipper slider (metal) with plastic end, DAZY swimsuit, Art.-No. sw2202203378221451</p> 	<ul style="list-style-type: none"> - XRF
L 6777 FT - 40	<p><i>Textile sample</i> Shirt with AOP, multicolored, Art.-No. sw2112113505318381, size S, 100 % polyester</p> 	<ul style="list-style-type: none"> - VOC screening - APEO




Sample Number	Article	Test Intention
<p>L 6777 FT - 40.1</p>	<p><i>Textile sample</i> Printed area, colors „pink, purple, yellow“, Shirt with AOP, multicolored, Art.-No. sw2112113505318381,</p> 	<ul style="list-style-type: none"> - Aromatic amines - Formaldehyde - Heavy metals
<p>L 6777 FT - 41</p>	<p><i>Textile sample</i> Jacket with grunge skeleton & flower pattern, PU leather, Art.-No. JIT9806805, SKC#sf2207065528288418, size. XL, 100 % polyester, coating 100 % polyurethan</p> 	
<p>L 6777 FT - 41.1</p>	<p><i>Textile sample</i> Printed area, jacket with grunge skeleton, Art.-No. JIT9806805</p> 	<ul style="list-style-type: none"> - Aromatic amines - APEO - Formaldehyde - Heavy metals - VOC screening - Phthalates

Sample Number	Article	Test Intention
L 6777 FT - 41.2	<p><i>Metal sample</i> Push buttons area neck and sleeves, jacket with grunge skeleton, Art.-No. JIT9806805</p> 	- XRF
L 6777 FT - 42	<p><i>Textile sample</i> Men's running shoes with letter graphic, size 39, Art-No. sx2205163381777606</p> 	
L 6777 FT - 42.1	<p><i>Textile sample</i> Upper and lining / padding, Men's running shoes, Art-No. sx2205163381777606</p> 	<ul style="list-style-type: none"> - Aromatic amines - APEO - Formaldehyde - Heavy metals - VOC screening - Phthalates
L 6777 FT - 42.2	<p><i>Textile sample</i> Inner sole (foamed) with synthetic leather, Men's running shoes, Art-No. sx2205163381777606</p> 	<ul style="list-style-type: none"> - VOC screening - Phthalates

Sample Number	Article	Test Intention
<p>L 6777 FT – 42.3</p>	<p><i>Plastic sample</i> Outsole, Men´s running shoes, Art-No. sx2205163381777606</p> 	<ul style="list-style-type: none"> - VOC screening - XRF - Phthalates
<p>L 6777 FT - 43</p>	<p><i>Textile sample</i> Bucket hat, color orange, Art- No:SC2206102819531718, without specifying the material</p> 	
<p>L 6777 FT – 43.1</p>	<p><i>Textile sample</i> Fabric orange with reinforcement beige from bucket, Art-No:SC2206102819531718</p> 	<ul style="list-style-type: none"> - APEO - Formaldehyde - Heavy metals - VOC screening
<p>L 6777 FT – 43.2</p>	<p><i>Textile sample</i> Fabric orange from bucket hat, Art- No:SC2206102819531718</p> 	<ul style="list-style-type: none"> - Aromatic amines

Sample Number	Article	Test Intention
L 6777 FT - 44	<p><i>Textile sample</i> Overall dress with ribbon, buckle without blouse, size S, color: khaki, Art.-No. SW2206289446692292, 95 % polyester, 5 % spandex</p> 	
L 6777 FT - 44.1	<p><i>Textile sample</i> Basic fabric khaki and light green, overall dress, Art.-No. SW2206289446692292</p> 	<ul style="list-style-type: none"> - Aromatic amines - APEO - Formaldehyde - Heavy metals - VOC screening
L 6777 FT - 44.2	<p><i>Plastic sample</i> Plastic buckle from shoulder strap, overall dress, Art.-No. SW2206289446692292</p> 	<ul style="list-style-type: none"> - XRF
L 6777 FT - 44.3	<p><i>Metal sample</i> Metal eyelets and thorn buckle from shoulder strap, overall dress, Art.-No. SW2206289446692292</p> 	<ul style="list-style-type: none"> - XRF

Sample Number	Article	Test Intention
L 6777 FT – 45	<p><i>Textile sample</i> Pullover with polo collar, drop shoulder, letter graphic, color: navy blue, Art-No: SW2111187767327472, size L, 95 % polyester, 5 % spandex</p> 	
L 6777 FT – 45.1	<p><i>Textile sample</i> Printed area "YORK" pullover with polo collar, Art.-No: SW2111187767327472</p> 	<ul style="list-style-type: none"> - Aromatic amines - APEO - Formaldehyde - Heavy metals - VOC screening
L 6777 FT - 46	<p><i>Textile sample</i> PU leather lazer with lapel collar, eyelets and asymmetric trim, size L, color: chocolate brown, Art-No: SWBLAZER07210514580, 40 % polyester, 60 % polyurethane</p> 	
L 6777 FT – 46.1	<p><i>Textile sample</i> Main material and lining, PU leather blazer brown, Art-No: SWBLAZER07210514580</p> 	<ul style="list-style-type: none"> - Aromatic amines - APEO - Formaldehyde - Heavy metals - VOC screening - XRF

Sample Number	Article	Test Intention
<p>L 6777 FT – 47</p>	<p><i>Textile sample</i> Jeans with rip, color: dark wash, Art-No: SMPANTS25210331062, size 30, 80 % cotton, 20 % polyester</p> 	
<p>L 6777 FT – 47.1</p>	<p><i>Textile sample</i> Main material jeans with rip, color: dark wash, Art-No: SMPANTS25210331062</p> 	<ul style="list-style-type: none"> - Aromatic amines - APEO - Formaldehyde - Heavy metals - VOC screening
<p>L 6777 FT – 47.2</p>	<p><i>Metal sample</i> Metal button from jeans with rip, color: dark wash, Art-No: SMPANTS25210331062</p> 	<ul style="list-style-type: none"> - XRF

*The sample description is based on the information provided by the client.

2 Test methods

2.1 Test method for analysis of ethoxylated nonyl and octyl phenols

DIN EN ISO 18254-1:2016-09, LC-MS/MS, determination of ethoxylated alkyl phenols with 3-15 ethoxy groups

2.2 Test method for analysis of formaldehyde

DIN EN ISO 14184-1: 2011-12

2.3 Test method for analysis of arylamines

BVL B 82.02-2:2017-12, corresponding to DIN EN ISO 14362-1:2017-05

BVL B 82.02-15:2017-12, corresponding to DIN EN ISO 14362-3:2017-05 for p-Aminoazobenzol

2.4 Volatile organic compounds (VOC) - Screening

PAW 078:2022-03

1. Extraction with methanol for 30 minutes in an ultrasonic bath
2. Identification and quantitative determination by GC-MS. Approximately 60 compounds are quantified substance-specifically (using calibration lines). Further compounds are identified with a MS database (NIST05) and the content is estimated by the response of ethylbenzene.

2.5 Dimethylformamide

Based on DIN EN ISO 16189:2022-03

1. Extraction with methanol for 60 minutes in an ultrasonic bath (70 °C)
2. Identification and quantitative determination by GC-MS.

2.6 Test method for analysis of PFAS - perfluorinated carboxylic and sulfonic acids

DIN CEN / TS 15968; DIN SPEC 1038:2010-13

2.7 Test method for analysis of heavy metals from eluate

1. Elution with synthetic sweat-solution (DIN EN 16711-2:2016-02)
2. Quantification in accordance to DIN EN ISO 17294-2:2017-01 with ICP-MS

2.8 Test method for analysis of material surfaces of heavy metals

XRF – X-ray fluorescence analysis with reference to DIN EN 62321-3-1:2014-10

2.9 Test method for analysis of nickel release

DIN EN 112472:2004-04 and DIN EN 1811:2015-10, quantitative determination according to DIN EN ISO 17294-2:2017-01 by means of ICP-MS

2.10 Test method for analysis of phthalates

PAW 016:2018-08

1. Extraction with toluene by ultrasonic bath
2. Separation, identification and quantification with GC/MS

2.11 Test method for analysis of Polycyclic aromatic hydrocarbons (PAH)

AfPS GS 2019:01 PAK

3 Results

3.1 Ethoxylated alkylphenols

Sample number	Article	Nonylpheno- lethoxylate [mg/kg]	Oktylpheno- lethoxylate [mg/kg]
L 6777 FT – 1.1	Printed top children dress, skparty, Art.-No. 25210607253, 08/22	n.d.	n.d.
L 6777 FT – 2.1	Coated fabric, skparty, Art.-No. 21072702466 66324	n.d.	n.d.
L 6777 FT – 3.1	Printed skirt with winter motif , Art.-No. sa21092784794 25785	n.d.	n.d.
L 6777 FT – 4.1	Overknee stockings, Art.- No. si2204241194449882	n.d.	n.d.
L 6777 FT – 5.1	Coat with hood, Art.-No sw220608316961	n.d.	n.d.
L 6777 FT – 6.1	Newborn photography wrap with floral pattern, Art.-No. sa22042793260	10	n.d.
L 6777 FT – 7.1	Main material and lining black from men's jacket, PU leather, black Art.-No.. sm22060703659549	n.d.	n.d.
L 6777 FT – 8.2	Printed area "Los Angeles", black, white, yellow, blue, Art.-No. sm2205255586664128	n.d.	n.d.
L 6777 FT – 9.1	Main material and underskirt from EVER-PRETTY mesh dress Art.-No. 112-2010-21-165	n.d.	n.d.
L 6777 FT – 10.1	SHEIN BAE figure-hugging dress with PU leather, black, Art.-No. sw211007499353	n.d.	n.d.
L 6777 FT – 11.1	Mixed sample base material (mesh), tip and inner support from maternity nursing bra Art.-No. sa2207187080532781	n.d.	n.d.
L 6777 FT – 12.1	Main material orange, black, green from bikini with snake-skin pattern Art.-No. sw2208083708338774	36	n.d.
L 6777 FT – 13.2	Base material and tapes, black from triangle bikini top with leopard sequin Art.-No. sw2112171025058583	n.d.	n.d.
L 6777 FT – 14.1	Printed base fabric (blue, pink, orange, green, light green, red) from Men's swim shorts with floral pattern Art.-No. sm2204197060333335	n.d.	n.d.
L 6777 FT – 16.1	Textile upper with rhinestones, black from pull on ankle boots Art.-No. sx2205138928965536	n.d.	n.d.
L 6777 FT – 17.1	Upper material synthetic leather from men's combat boots Art.-No. CF 2012, sx2207190360223893	n.d.	n.d.
L 6777 FT – 18.1	Printed area baby bodysuit (rainbow), Art.-No. sa2207148680482424	7	n.d.
L 6777 FT – 19.1	Simple pantyhose, red, Art.-No.: ssock18210316423	n.d.	n.d.
L 6777 FT – 20.1	Base material silver, push-up bikini Art.-No. T2259, sw2201112417752411	n.d.	n.d.
L 6777 FT – 21.1	Basic material, black, bike jacket, Art.-No. swjacket00190927489	n.d.	3
L 6777 FT – 22.1	Upper material red, trending boots Art.-No. sx2206309416110607	3	n.d.
L 6777 FT – 23.2	Printed area on front side, baby t-shirt jumpsuit, Art.-No. sa2208223277968674	n.d.	n.d.
L 6777 FT – 24.1	Base material red, Toddler-Girls PU motorcycle jacket, Art.-No. sk 2204190312209389	n.d.	n.d.
L 6777 FT – 25.1	Mixed sample basic material green with Tulle green, Cami Evening Dress, Art.-No. sw2108275850655534	n.d.	n.d.
L 6777 FT – 26.1	Printed main material, swim trunks with pineapple & galaxy pattern, Art.-No. sm2207267662672155	n.d.	n.d.
L 6777 FT – 28.1	Mixed sample tulle skirt, lace and fabric, Newborn girl skirt Art.-No. sa2203302808433784	n.d.	n.d.

Sample number	Article	Nonylpheno- lethoxylate [mg/kg]	Oktylpheno- lethoxylate [mg/kg]
L 6777 FT – 29.1	Printed main material, mixed sample dark blue, green, orange, Toddler boys swimsuit, Art.-No. sk2201111492330412	n.d.	n.d.
L 6777 FT – 30.1	Basematerial, pullover with color gradient, Art.-No. sw2108306086196316	n.d.	n.d.
L 6777 FT – 31.1	Main material (smooth and fleece, men's jacket Art.-No. sm2108274336442452	n.d.	n.d.
L 6777 FT – 33.1	Printed area, colors "pink, blue, orange, green", swimsuit Art-No:ks212207285600057	6	n.d.
L 6777 FT – 34.2	Upper and lining (black) and padding (white), vest for babies, Ar.-Nr. JIT9777319, SKC#sa2206021814111078	14	n.d.
L 6777 FT – 36.1	Printed area, newborn girl photography blanket, Art.-No. sknewborn25210413539	9	n.d.
L 6777 FT – 37.2	Printed area, Baby bodysuit, Art.-No: sa2207228441113644 09/2022	n.d.	n.d.
L 6777 FT – 38.1	Main material and elastic band, Fishnet tights, Art.-No. si2207275525167969	n.d.	n.d.
L 6777 FT – 39.1	Main material and mesh, DAZY swimsuit, Art.-No. sw2202203378221451	n.d.	n.d.
L 6777 FT - 40	Shirt multicolored printed, Art.-No. sw2112113505318381	n.d.	n.d.
L 6777 FT – 41.1	Printed area, jacket with grunge skeleton, Art.-No. JIT9806805	22	n.d.
L 6777 FT – 42.1	Men's running shoes with letter graphic, size 39, Art.-No. sx2205163381777606	n.d.	n.d.
L 6777 FT – 43.1	Fabric orange with reinforcement beige from bucket, Art-No:SC2206102819531718	n.d.	n.d.
L 6777 FT – 44.1	Basic fabric khaki and light green, overall dress, Art.-No. SW2206289446692292	n.d.	n.d.
L 6777 FT – 45.1	Printed area "YORK" pullover with polo collar, Art.-No: SW2111187767327472	n.d.	21
L 6777 FT – 46.1	Main material and lining, PU leather blazer brown, Art-No: SWBLAZER07210514580	n.d.	n.d.
L 6777 FT – 47.1	Main material jeans with rip, color: dark wash, Art-No: SMPANTS25210331062	8	n.d.
DL		3	3
Requirements REACH		< 100	-

n.d. = not detected mg/kg = milligram per kilogram DL = detection limit
 REACH = Regulation (EG) No. 1907/2006, annex XVII, no. 46 a, ethoxylated nonylphenols: shall not be placed on the market after 3 February 2021 in textile products which can reasonably be expected to be washed in water during their normal life cycle, at concentrations > 100 mg/kg

3.2 Formaldehyde

Sample Number	Article	Formaldehyde [mg/kg]
L 6777 FT – 1.1	Printed top children dress, skparty, Art.-No. 25210607253, 08/22	n.d.
L 6777 FT – 1.2	Mixed sample green strap and purple tulle, children dress skparty, Art.-No. 25210607253, 08/22	40
L 6777 FT – 1.2.1	Purple tulle, children dress skparty, Art.-No. 25210607253, 08/22	130
L 6777 FT – 2.1	Coated fabric, skparty, Art.-No. 21072702466 66324	n.d.
L 6777 FT – 3.1	Printed skirt with winter motif , Art.-No. sa21092784794 25785	n.d.
L 6777 FT – 4.1	Overknee stockings, Art.- No. si2204241194449882	n.d.
L 6777 FT – 5.1	Coat with hood, Art.-No sw220608316961	n.d.
L 6777 FT – 6.1	Newborn photography wrap with floral pattern, Art.-No. sa22042793260	n.d.
L 6777 FT – 7.1	Men's jacket, PU leather, black Art.-No.. sm22060703659549	n.d.
L 6777 FT – 8.3	Printed area "Impact", yellow, blue, black white, Art.-No. sm220525558666 4128	n.d.
L 6777 FT – 9.1	Main material and underskirt from EVER-PRETTY mesh dress Art.-No. 112-2010-21-165	n.d.
L 6777 FT – 10.1	SHEIN BAE figure-hugging dress with PU leather, black, Art.-No. sw211007499353	n.d.
L 6777 FT – 11.1	Mixed sample base material (mesh), tip and inner support from maternity nursing bra Art.-No. sa2207187080532781	n.d.
L 6777 FT – 12.1	Main material orange, black, green from bikini with snakeskin pattern Art.-No. sw2208083708338774	n.d.
L 6777 FT – 13.2	Base material and tapes, black from triangle bikini top with leopard sequin Art.-No. sw2112171025058583	n.d.
L 6777 FT – 14.1	Printed base fabric (blue, pink, orange, green, light green, red) from Men's swim shorts with floral pattern Art.-No. sm2204197060333335	n.d.
L 6777 FT – 16.1	Textile upper with rhinestones, black from pull on ankle boots Art.-No. sx2205138928965536	n.d.
L 6777 FT – 17.5	Mixed sample lining fabric, webbing and foam from men's combat boots Art.-No. CF 2012, sx2207190360223893	n.d.
L 6777 FT – 18.1	Printed area baby bodysuit (rainbow), Art.-No. sa2207148680482424	n.d.
L 6777 FT – 19.1	Simple pantyhose, red, Art.-No.: swnock18210316423	n.d.
L 6777 FT – 20.1	Base material silver, push-up bikini Art.-No. T2259, sw2201112417752411	n.d.
L 6777 FT – 21.1	Basic material, black, bike jacket, Art.-No. swjacket00190927489	n.d.
L 6777 FT – 22.1	Upper material red, trending boots Art.-No. sx2206309416110607	n.d.
L 6777 FT – 23.2	Printed area on front side, baby t-shirt jumpsuit, Art.-No. sa2208223277968674	n.d.
L 6777 FT – 24.1	Base material red, Toddler-Girls PU motorcycle jacket, Art.-No. sk 2204190312209389	n.d.
L 6777 FT – 25.1	Mixed sample basic material green with Tulle green, Cami Evening Dress, Art.-No. sw2108275850655534	5
L 6777 FT – 26.1	Printed main material, swim trunks with pineapple & galaxy pattern, Art.-No. sm2207267662672155	n.d.
L 6777 FT – 27.1	Mixed pattern upper textile and lining faux fur black, snow boots Art.-No. sx2208227515194139	n.d.
L 6777 FT – 28.1	Mixed sample tulle skirt, lace and fabric, Newborn girl skirt Art.-No. sa2203302808433784	n.d.
L 6777 FT – 30.1	Basematerial, pullover with color gradient, Art.-No. sw2108306086196316	n.d.
L 6777 FT – 31.1	Main material (smooth and fleece, men's jacket Art.-No. sm2108274336442452	n.d.
L 6777 FT – 33.1	Printed area, colors "pink, blue, orange, green", swimsuit Art.-No:ks212207285600057	6
L 6777 FT – 34.2	Upper and lining (black) and padding (white), vest for babies, Ar.-Nr. JIT9777319, SKC#sa2206021814111078	14
L 6777 FT – 36.1	Printed area , newborn girl photography blanket, Art.-No. sknewborn25210413539	9
L 6777 FT – 37.2	Printed area, Baby bodysuit, Art.-No: sa2207228441113644 09/2022	n.d.

Sample Number	Article	Formaldehyde [mg/kg]
L 6777 FT – 38.1	Main material and elastic band, Fishnet tights, Art.-No. si2207275525167969	n.d.
L 6777 FT – 39.1	Main material and mesh, DAZY swimsuit, Art.-No. sw2202203378221451	n.d.
L 6777 FT - 40	Shirt multicolored printed, Art.-No. sw2112113505318381	n.d.
L 6777 FT – 41.1	Printed area, jacket with grunge skeleton, Art.-No. JIT9806805	22
L 6777 FT – 42.1	Men's running shoes with letter graphic, size 39, Art.-No. sx2205163381777606	n.d.
L 6777 FT – 43.1	Fabric orange with reinforcement beige from bucket, Art-No:SC2206102819531718	n.d.
L 6777 FT – 44.1	Basic fabric khaki and light green, overall dress, Art.-No. SW2206289446692292	n.d.
L 6777 FT – 45.1	Printed area "YORK" pullover with polo collar, Art.-No: SW2111187767327472	n.d.
L 6777 FT – 46.1	Main material and lining, PU leather blazer brown, Art-No: SWBLAZER07210514580	n.d.
L 6777 FT – 47.1	Main material jeans with rip, color: dark wash, Art-No: SMPANTS25210331062	8
DL		5
Requirements REACH		< 75
Requirements Toys Directive*		< 30

n.d. = not detected

mg/kg = milligram per kilogram

DL = detection limit

REACH = Regulation (EG) No. 1907/2006, annex XVII, no. 72 for textiles and shoes, Exception: a concentration limit of 300 mg/kg applies to jackets, coats or upholstery until November 1, 2023.

* RL 2009/48/EG, European Directive on the Safety of Toys, specific limit value for formaldehyde in textile content of toys used for children up to 36 months.

3.3 XRF – metal parts

Sample Number	Article	Cd, Ni, Pb [mg/kg]
L 6777 FT – 7.2	Push button, metal, jacket, Art.-No. JIT9707550	each < LOQ
L 6777 FT – 8.4	Push buttons for Art.-No. sm220525558666 4128	Ni 30000, all others <LOQ
L 6777 FT – 11.4	Metal parts from maternity nursing bra Art.-No. sa2207187080532781	Ni 100000, all others <LOQ
L 6777 FT – 12.2	Metal clasp and metal rings from bikini with snakeskin pattern Art.-No. sw2208083708338774	Ni 56000, all others <LOQ
L 6777 FT – 12.3	Metal jewelry with gemstones from bikini with snakeskin pattern Art.-No. sw2208083708338774	Ni 130000, all others <LOQ
L 6777 FT – 17.4	Metal eyelets, from men's combat boots Art.-No. CF 2012, sx2207190360223893 sx2207190360223893	each < LOQ
L 6777 FT – 20.2	Metal clasp and metal rings, push-up bikini Art.-No. T2259, sw2201112417752411	Ni 33000, all others <LOQ
L 6777 FT – 21.2	Metal zipper, bike jacket, Art.-No. swjacket00190927489	each < LOQ
L 6777 FT – 21.3	Push button (with skin contact), bike jacket, Art.-No. swjacket00190927489	Ni 360000, all others <LOQ
L 6777 FT – 21.4	Eyelets and buckle from belt, bike jacket, Art.-No. swjacket00190927489	Ni 460000, all others <LOQ
L 6777 FT – 22.3	Eyelets, trending boots Art.-No. sx2206309416110607	Ni 96000, all others <LOQ
L 6777 FT – 24.2	Push buttons, Toddler-Girls PU motorcycle jacket, Art.-No. sk 2204190312209389	Ni 25000, all others <LOQ
L 6777 FT – 24.3	Metal zipper and slider, Toddler-Girls PU motorcycle jacket, Art.-No. sk 2204190312209389	each < LOQ
L 6777 FT – 25.3	Metal rings, Cami Evening Dress, Art.-No. sw2108275850655534	Ni 94000, all others <LOQ
LOQ Cd		500
LOQ Ni		1000
LOQ Pb		200
Sample Number	Article	Cd, Ni, Pb [mg/kg]
L 6777 FT – 39.2	Zipper slider (metal) with plastic end, DAZY swimsuit, Art.-No. sw2202203378221451	Ni 12000, Pb 20000, Sn* 700, all others <LOQ
L 6777 FT – 41.2	Push buttons area neck and sleeves, jacket with grunge skeleton, Art.-No. JIT9806805	Ni 35000, all others <LOQ
L 6777 FT – 44.3	Metal eyelets and thorn buckle from shoulder strap, overall dress, Art.-No. SW2206289446692292	Ni 6000, all others <LOQ
L 6777 FT – 47.2	Metal button from jeans with rip, color: dark wash, Art.-No: SMPANTS25210331062	Ni 65000, all others <LOQ
LOQ Cd		50
LOQ Ni		50
LOQ Pb		50
Requirements REACH Pb in jewelry products		< 500

mg/kg = milligram per kilogram

LOQ = Limit of quantification

REACH = Regulation (EG) No. 1907/2006, annex XVII, No. 63: May not be placed on the market or used in any single part of a jewelry product if the lead content (in metal) of that part is 0.05% or more by weight.

3.4 XRF - plastics and coated material

Sample Number	Article	Br, Cd, Ni, Pb, Sn [mg/kg]
L 6777 FT – 1.1	Printed top children dress, skparty, Art.-No. 25210607253, 08/22	each < 50
L 6777 FT – 2.3	Headdress "Ears" pink, skparty, Art.-No. 21072702466 66324, 08/2022	each < 50
L 6777 FT – 5.1	Coat with hood, Art.-No sw220608316961	each < 50
L 6777 FT – 5.2	Plastic holder from the drawstring, colour "black" from coat with hood, Art.-No.sw220608316961	Br 50, all others <50
L 6777 FT – 7.1	Main material and lining black from men's jacket, PU leather, black Art.-No.. sm22060703659549	each < 50
L 6777 FT – 10.1	SHEIN BAE figure-hugging dress with PU leather, black, Art.-No. sw211007499353	each < 50
L 6777 FT – 11.3	Mixed sample fabric cover cups, red and padding cups (foam) from maternity nursing bra Art.-No. sa2207187080532781	each < 50
L 6777 FT – 11.5	Plastic holder from maternity nursing bra Art.-No. sa2207187080532781	each < 50
L 6777 FT – 13.1	Sequins from triangle bikini top Art.-No. F0130-1sw2112171025058583	each < 50
L 6777 FT – 15.2	Heel, zipper, shaft and sole, Rain boots Art.-No sx2206028390566629	Sn 800, all others <50
L 6777 FT – 16.1	Textile upper with rhinestones, black from pull on ankle boots Art.-No. sx2205138928965536	each < 50
L 6777 FT – 16.3	Outsole/Heel, black from pull on ankle boots Art.-No. sx2205138928965536	Br 150, all others <50
L 6777 FT – 17.1	Upper material synthetic leather from men's combat boots Art.-No. CF 2012, sx2207190360223893	each < 50
L 6777 FT – 17.2	Outsole black, from men's combat boots Art.-No. CF 2012, sx2207190360223893	each < 50
L 6777 FT – 18.1	Printed area baby bodysuit (rainbow), Art.-No. sa2207148680482424	each < 50
L 6777 FT – 18.2	Push buttons, baby bodysuit (rainbow), Art.-No. sa2207148680482424	each < 50
L 6777 FT – 20.3	Sequins, push-up bikini Art.-No. T2259, sw2201112417752411	each < 50
L 6777 FT – 22.2	Seam reinforcement inside (synthetic leather) red, trending boots Art.-No. sx2206309416110607	each < 50
L 6777 FT – 22.4	Shoelaces with rhinestones, trending boots Art.-No. sx2206309416110607	each < 50
L 6777 FT – 22.6	Outsole black, trending boots Art.-No. sx2206309416110607sx2206309416110607	Br 400, all others <50
L 6777 FT – 23.2	Printed area on front side, baby t-shirt jumpsuit, Art.-No. sa2208223277968674	each < 50
L 6777 FT – 23.3	Plastic buttons, baby t-shirt jumpsuit, Art.-No. sa2208223277968674	each < 50
L 6777 FT – 24.1	Base material red, Toddler-Girls PU motorcycle jacket, Art.-No. sk 2204190312209389	each < 50
L 6777 FT – 25.2	Sequins, Cami Evening Dress, Art.-No. sw2108275850655534	each < 50
L 6777 FT – 27.2	Faux leather black, snow boots Art.-No. sx2208227515194139	each < 50
L 6777 FT – 27.4	Outsole (rubber and plastic black / gray / transparent), snow boots Art.-No. sx2208227515194139	each < 50
L 6777 FT – 32.1	Upper material,. boot Art.-No. sx220809135251	each < 50
L 6777 FT – 32.2	Heel/outsole (rubber), boot Art.-No. sx220809135251	Br 50, Sn 50, all o. <50
L 6777 FT – 35.1	Main material, color „orange“, Clogs, Art.-No. sx2208240552909055	each < 50
L 6777 FT – 35.3	Blossoms "yellow", Clogs, Art.-No. sx2208240552909055	Pb 4500, Cd 200, all others < 50
L 6777 FT – 38.2	Rhinestones, Fishnet tights, Art.-No. si2207275525167969	each < 50
L 6777 FT – 42.3	Outsole, Men´s running shoes, Art.-No. sx2205163381777606	each < 50
L 6777 FT – 44.2	Plastic buckle from shoulder strap, overall dress, Art.-No. SW2206289446692292	each <50
LOQ Br, Cd, Ni, Pb, Sn		each 50
Requirements REACH Cd in polymers		< 100
Requirements REACH organotin compounds, Sn in articles		≤ 1000
Requirements REACH Pb in jewelry products		< 500

mg/kg = milligram per kilogram

LOQ = Limit of quantification

REACH = Regulation (EG) No. 1907/2006, annex XVII,

No. 20: Trisubstituted organotin compounds, such as tributyltin compounds (TBT) and triphenyltin compounds (TPT) and dibutyltin compounds (DBT), may not be used after January 1, 2012, in mixtures and articles intended to be supplied to the general public if the concentration of tin in the mixture or article, or in any part thereof, exceeds 0.1 percent by weight.

No. 23: Mixtures and articles made from plastics, may not be placed on the market if their cadmium (Cd metal) content is 0.01% or more by weight of the plastic.

No. 63: May not be placed on the market or used in any single part of a jewelry product if the lead content (in metal) of that part is 0.05% or more by weight.

3.5 Nickel release of suspected cases

Sample Number	Article	Nickel release [$\mu\text{g}/\text{m}^2/\text{week}$]
L 6777 FT – 11.4	Metal parts from maternity nursing bra Art.-No. sa2207187080532781	< 0,1
L 6777 FT – 12.3	Metal jewelry with gemstones from bikini with snakeskin pattern Art.-No. sw2208083708338774	< 0,1
L 6777 FT – 20.2	Metal clasp and metal rings, push-up bikini Art.-No. T2259, sw2201112417752411	< 0,1
L 6777 FT – 21.4.1	Buckle from belt, bike jacket, Art.-No. swjacket00190927489	0,7*
L 6777 FT – 22.3	Eyelets, trending boots Art.-No. sx2206309416110607	1,5
L 6777 FT – 24.2	Push buttons, Toddler-Girls PU motorcycle jacket, Art.-No. sk 2204190312209389	< 0,1
LOQ		0,1
Requirements REACH		$\leq 0,5$

$\mu\text{g}/\text{m}^2/\text{week}$ = micrograms per square meter per week

LOQ = Limit of quantification

REACH = Regulation (EG) No. 1907/2006, annex XVII, No. 27: Must not be used: In articles intended to come into direct and prolonged contact with the skin, such as: Rivet buttons, clasps, rivets, zippers and metal parts when used in garments, provided that the release of nickel from the parts of these articles exceeds $0,5 \mu\text{g}/\text{cm}^2/\text{week}$;

*Interpretation of the result: Due to the combined measurement uncertainty of 46% given in the DIN standard used, the limit value according to REACH Regulation Annex XVII of $0,5 \mu\text{g}/\text{m}^2/\text{week}$ is exceeded only from a nickel release of $0,88 \mu\text{g}/\text{m}^2/\text{week}$.

3.6 Heavy metals - extractable

Sample Number	Article	As, Cd, Cr, Hg, Ni, Pb, Sb [mg/kg]
L 6777 FT – 1.1	Printed top children dress, skparty, Art.-No. 25210607253, 08/22	Sb 0,3 all others <LOQ
L 6777 FT – 1.2	Mixed sample green strap and purple tulle, children dress skparty, Art.-No. 25210607253, 08/22	Sb 1,0, Ni 0,1 all others <LOQ
L 6777 FT – 1.3	Mixed sample accessory/trim headdress: sea stars pink, fin green, fin blue, skparty, Art.-No. 25210607253, 08/22	Sb 0,4 all others <LOQ
L 6777 FT – 2.1	Coated fabric, skparty, Art.-No. 21072702466 66324	Sb 0,3 all others <LOQ
L 6777 FT – 3.1	Printed skirt with winter motif , Art.-No. sa21092784794 25785	Sb 2,8 all others <LOQ
L 6777 FT – 4.1	Overknee stockings, Art.- No. si2204241194449882	each <LOQ
L 6777 FT – 5.1	Coat with hood, Art.-No sw220608316961	Sb 0,1 all others <LOQ
L 6777 FT – 6.1	Newborn photography wrap with floral pattern, Art.-No. sa22042793260	Sb 13 all others <LOQ
L 6777 FT – 7.1	Main material and lining black from men's jacket, PU leather, black Art.-No.. sm22060703659549	Sb 1,6 all others <LOQ
L 6777 FT – 8.1	Main material red from Extended Sizes Men's College Jacket, Art.-No. sm220525558666 4128	Sb 5,2 all others <LOQ
L 6777 FT – 9.1	Main material and underskirt from EVER-PRETTY mesh dress Art.-No. 112-2010-21-165	Sb 0,5 all others <LOQ
L 6777 FT – 10.1	SHEIN BAE figure-hugging dress with PU leather, black, Art.-No. sw211007499353	Sb 9,5 all others <LOQ
L 6777 FT – 11.1	Mixed sample base material (mesh), tip and inner support from maternity nursing bra Art.-No. sa2207187080532781	Sb 0,2 all others <LOQ
L 6777 FT – 12.1	Main material orange, black, green from bikini with snakeskin pattern Art.-No. sw2208083708338774	Sb 10, Ni 0,2 all others <LOQ
L 6777 FT – 13.2	Base material and tapes, black from triangle bikini top with leopard sequin Art.-No. sw2112171025058583	Sb 6,0 all others <LOQ
L 6777 FT – 14.1	Printed base fabric (blue, pink, orange, green, light green, red) from Men's swim shorts with floral pattern Art.-No. sm2204197060333335	Sb 1,8 all others <LOQ
L 6777 FT – 16.1	Textile upper with rhinestones, black from pull on ankle boots Art.-No. sx2205138928965536	Sb 4,2 all others <LOQ
L 6777 FT – 18.1	Printed area baby bodysuit (rainbow), Art.-No. sa2207148680482424	Sb 0,2, Ni 1,3 all others <LOQ
L 6777 FT – 19.1	Simple pantyhose, red, Art.-No.: swsock18210316423	each <LOQ
L 6777 FT – 20.1	Base material silver, push-up bikini Art.-No. T2259, sw2201112417752411	Sb 5,0 all others <LOQ
L 6777 FT – 21.1	Basic material, black, bike jacket, Art.-No. swjacket00190927489	Sb 0,6 all others <LOQ
L 6777 FT – 22.1	Upper material red, trending boots Art.-No. sx2206309416110607	Sb 0,1, Ni 0,4 all others <LOQ
L 6777 FT – 23.1	Base material and prited sleeves green and red, baby t-shirt jumpsuit, Art.-No. sa2208223277968674	Sb 10, Ni 0,1 all others <LOQ
L 6777 FT – 24.1	Base material red, Toddler-Girls PU motorcycle jacket, Art.-No. sk 2204190312209389	Sb 0,3 all others <LOQ
L 6777 FT – 25.1	Mixed sample basic material green with Tulle green, Cami Evening Dress, Art.-No. sw2108275850655534	Sb 0,6 all others <LOQ
L 6777 FT – 26.3	Printed area pineapple, swim trunks with pineapple & galaxy pattern, Art.-No. sm2207267662672155	Sb 2,5 all others <LOQ
L 6777 FT – 27.1	Mixed pattern upper textile and lining faux fur black, snow boots Art.-No. sx2208227515194139	Sb 0,6 all others <LOQ
L 6777 FT – 28.1	Mixed sample tulle skirt, lace and fabric, Newborn girl skirt Art.-No. sa2203302808433784	Sb 0,1 all others <LOQ
L 6777 FT – 29.2	Printed main material, mixed sample blue, green, orange, toddler boys swimsuit, Art.-No. sk2201111492330412	Sb 20 all others <LOQ

Sample Number	Article	As, Cd, Cr, Hg, Ni, Pb, Sb [mg/kg]
L 6777 FT – 30.1	Basematerial, pullover with color gradient, Art.-No. sw2108306086196316	Sb 0,5 all others <LOQ
L 6777 FT – 31.2	Mixed sample colours black and pink, men's jacket Art.-No. sm2108274336442452	Sb 5,2 all others <LOQ
L 6777 FT – 33.1	Printed area, colors "pink, blue, orange, green", swimsuit Art.-No:ks212207285600057	Sb 6,5 all others <LOQ
L 6777 FT – 34.1	Upper and lining, black, vest for babies, Ar.-Nr. JIT9777319, SKC#sa2206021814111078	Sb 0,1 all others <LOQ
L 6777 FT – 36.1	Printed area , newborn girl photography blanket, Art.-No. sknewborn25210413539	Sb 10 all others <LOQ
L 6777 FT – 37.2	Printed area, Baby bodysuit, Art.-No. sa2207228441113644	Sb 0,3 all others <LOQ
L 6777 FT – 38.1	Main material and elastic band, Fishnet tights, Art.-No. si2207275525167969	Sb 0,3 all others <LOQ
L 6777 FT – 39.1	Main material and mesh, DAZY swimsuit, Art.-No. sw2202203378221451	Sb 0,4 all others <LOQ
L 6777 FT – 40.1	Printed area, colors „pink, purple, yellow“, Shirt with AOP, multicolored, Art.-No. sw2112113505318381	Sb 9,5 all others <LOQ
L 6777 FT – 41.1	Printed area, jacket with grunge skeleton, Art.-No. JIT9806805	all <LOQ
L 6777 FT – 42.1	Upper and lining / padding, Men ´s running shoes, Art.-No. sx2205163381777606	Sb 1,3 all others <LOQ
L 6777 FT – 43.1	Fabric orange with reinforcement beige from bucket, Art.-No:SC2206102819531718	Ni 0,1 all others <LOQ
L 6777 FT – 44.1	Basic fabric khaki and light green, overall dress, Art.-No. SW2206289446692292	Sb 0,4, Ni 0,1 all others <LOQ
L 6777 FT – 45.1	Printed area "YORK" pullover with polo collar, Art.-No: SW2111187767327472	Sb 0,2 all others <LOQ
L 6777 FT – 46.1	Main material and lining, PU leather blazer brown, Art-No: SWBLAZER07210514580	Sb 0,1, Ni 0,1 all others <LOQ
L 6777 FT – 47.1	Main material jeans with rip, color: dark wash, Art-No: SMPANTS25210331062	Sb 0,1, Ni 0,1 all others <LOQ
LOQ As, Ni, Pb, Sb		0,1
LOQ Cd		0,05
LOQ Cr		0,5
LOQ Hg		0,02
Requirements REACH Cd, Cr VI, As, Pb for clothing, accessories and footwear		each < 1

n.d. = not detected mg/kg = milligram per kilogram DL = detection limit
REACH = Regulation (EG) No. 1907/2006, annex XVII, no. 72 for textiles, accessories and shoes

3.7 PFAS - perfluorinated carboxylic and sulfonic acids

Parameter	CAS-Nr.	L 6777 FT-12.1 Main material orange, black, green from bikini with snakeskin pattern Art.-No. sw220808370833 8774 [µg/kg]	L 6777 FT-14.1 Printed base fabric from Men's swim shorts with floral pattern Art.-No. sm220419706033 3335 [µg/kg]	DL [µg/kg]	Restriction EU [µg/kg]
Perfluorinated carboxylic acids					
Perfluorobutanoic acid (PFBA)	375-22-4	n.d.	n.d.	10	-
Perfluoropentanoic acid (PFPA)	2706-90-3	n.d.	n.d.	9	-
Perfluorohexanoic acid (PFHxA)	307-24-4	n.d.	n.d.	21	-
Perfluoroheptanoic acid (PFHpA)	375-85-9	n.d.	n.d.	14	-
Perfluorooctanoic acid (PFOA)	335-67-1	n.d.	n.d.	12	≤ 25 ¹
Perfluorononanoic acid (PFNA)	375-95-1	n.d.	n.d.	12	Σ < 25 ²
Perfluorodecanoic acid (PFDA)	335-76-2	n.d.	n.d.	14	
Perfluoroundecanoic acid (PFUnA)	2058-94-8	n.d.	n.d.	14	
Perfluorododecanoic acid (PFDoA)	307-55-1	n.d.	n.d.	8	
Perfluorotridecanoic acid (PFTTrA)	72629-94-8	n.d.	n.d.	9	
Perfluorotetradecanoic acid (PFTeA)	376-06-7	n.d.	n.d.	12	
Perfluoro-3,7-dimethyl octanoic acid (PF-3,7-DMOA)	172155-07-6	n.d.	n.d.	10	
Perfluorohexadecanoic acid (PFHxDA)	67905-19-5	n.d.	n.d.	15	-
Perfluorooctadecanoic acid (PFODA)	16517-11-6	n.d.	n.d.	14	-
2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy)propionic acid (HPFO-DA)	13252-13-6	n.d.	n.d.	5	-
2H,2H,3H,3H-Heptadecafluoroundecanoic acid (4HPFUnA)	34598-33-9	n.d.	n.d.	9	< 260 ²
Perfluorinated sulfonic acids (PFSA)					
Perfluorobutane sulphonic acid (PFBS)	375-73-5	n.d.	n.d.	13	-
Perfluoropentane sulphonic acid (PFPS)	2706-91-4	n.d.	n.d.	14	-
Perfluorohexane sulphonic acid (PFHxS)	355-46-4	n.d.	n.d.	15	-
Perfluoroheptane sulphonic acid (PFHpS)	375-92-8	n.d.	n.d.	12	-
Perfluorooctane sulphonic acid (PFOS)	1763-23-1	n.d./n.d. ³	n.d./n.d. ³	14/0,5 ³	1 µg/m ² ¹
Perfluorononane sulphonic acid (PFNS)	68259-12-1	n.d.	n.d.	12	-
Perfluorodecane sulphonic acid (PFDS)	335-77-3	n.d.	n.d.	11	-
Perfluorododecane sulphonic acid (PFDoS)	79780-39-5	n.d.	n.d.	8	-

n.d. = not detected

µg/kg = microgram per kilogram

DL = detection limit

¹POP = Regulation (EU) 2019/1021 on persistent organic pollutants

²REACH = Regulation (EG) No. 1907/2006, annex XVII, No. 68: May no longer be used or placed on the market after February 25, 2023

³calculated in µg/m², area-related

Parameter	CAS-Nr.	L 6777 FT-20.1 Base material silver, push-up bikini Art.-No. T2259, sw220111241775 2411 [µg/kg]	L 6777 FT-26.1 Printed main material, swim trunks with pine- apple & galaxy pattern, Art.-No. sm220726766267 2155 [µg/kg]	DL [µg/kg]	Restriction EU [µg/kg]
Perfluorinated carboxylic acids					
Perfluorobutanoic acid (PFBA)	375-22-4	n.d.	n.d.	10	-
Perfluoropentanoic acid (PFPA)	2706-90-3	n.d.	n.d.	9	-
Perfluorohexanoic acid (PFHxA)	307-24-4	n.d.	n.d.	21	-
Perfluoroheptanoic acid (PFHpA)	375-85-9	n.d.	n.d.	14	-
Perfluorooctanoic acid (PFOA)	335-67-1	n.d.	n.d.	12	≤ 25 ¹
Perfluorononanoic acid (PFNA)	375-95-1	n.d.	n.d.	12	Σ < 25 ²
Perfluorodecanoic acid (PFDA)	335-76-2	n.d.	n.d.	14	
Perfluoroundecanoic acid (PFUnA)	2058-94-8	n.d.	n.d.	14	
Perfluorododecanoic acid (PFDoA)	307-55-1	n.d.	n.d.	8	
Perfluorotridecanoic acid (PFTrA)	72629-94-8	n.d.	n.d.	9	
Perfluorotetradecanoic acid (PFTeA)	376-06-7	n.d.	n.d.	12	
Perfluoro-3,7-dimethyl octanoic acid (PF-3,7-DMOA)	172155-07-6	n.d.	n.d.	10	
Perfluorohexadecanoic acid (PFHxDA)	67905-19-5	n.d.	n.d.	15	-
Perfluorooctadecanoic acid (PFODA)	16517-11-6	n.d.	n.d.	14	-
2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy)propionic acid (HPFO-DA)	13252-13-6	n.d.	n.d.	5	-
2H,2H,3H,3H-Heptadecafluoroundecanoic acid (4HPFUnA)	34598-33-9	n.d.	n.d.	9	< 260 ²
Perfluorinated sulfonic acids (PFSA)					
Perfluorobutane sulphonic acid (PFBS)	375-73-5	n.d.	n.d.	13	-
Perfluoropentane sulphonic acid (PFPS)	2706-91-4	n.d.	n.d.	14	-
Perfluorohexane sulphonic acid (PFHxS)	355-46-4	n.d.	n.d.	15	-
Perfluoroheptane sulphonic acid (PFHpS)	375-92-8	n.d.	n.d.	12	-
Perfluorooctane sulphonic acid (PFOS)	1763-23-1	n.d./n.d. ³	n.d./n.d. ³	14/0,5 ³	1 µg/m ² ¹
Perfluorononane sulphonic acid (PFNS)	68259-12-1	n.d.	n.d.	12	-
Perfluorodecane sulphonic acid (PFDS)	335-77-3	n.d.	n.d.	11	-
Perfluorododecane sulphonic acid (PFDoS)	79780-39-5	n.d.	n.d.	8	-

n.d. = not detected µg/kg = microgram per kilogram

DL = detection limit

¹POP = Regulation (EU) 2019/1021 on persistent organic pollutants

²REACH = Regulation (EG) No. 1907/2006, annex XVII, No. 68: May no longer be used or placed on the market after February 25, 2023

³ calculated in µg/m², area-related

Parameter	CAS-Nr.	L 6777 FT-27.1 Mixed pattern upper textile and lining faux fur black, snow boots Art.-No. sx220822751519 4139 [µg/kg]	L 6777 FT-29.1 Printed main material, mixed sample dark blue, green, orange, Toddler boys swimsuit, Art.- No.sk220111149 2330412 [µg/kg]	DL [µg/kg]	Restriction EU [µg/kg]
Perfluorinated carboxylic acids					
Perfluorobutanoic acid (PFBA)	375-22-4	n.d.	n.d.	10	-
Perfluoropentanoic acid (PFPA)	2706-90-3	n.d.	n.d.	9	-
Perfluorohexanoic acid (PFHxA)	307-24-4	n.d.	n.d.	21	-
Perfluoroheptanoic acid (PFHpA)	375-85-9	n.d.	n.d.	14	-
Perfluorooctanoic acid (PFOA)	335-67-1	n.d.	n.d.	12	≤ 25 ¹
Perfluorononanoic acid (PFNA)	375-95-1	n.d.	n.d.	12	Σ < 25 ²
Perfluorodecanoic acid (PFDA)	335-76-2	n.d.	n.d.	14	
Perfluoroundecanoic acid (PFUnA)	2058-94-8	n.d.	n.d.	14	
Perfluorododecanoic acid (PFDoA)	307-55-1	n.d.	n.d.	8	
Perfluorotridecanoic acid (PFTrA)	72629-94-8	n.d.	n.d.	9	
Perfluorotetradecanoic acid (PFTeA)	376-06-7	n.d.	n.d.	12	
Perfluoro-3,7-dimethyl octanoic acid (PF-3,7-DMOA)	172155-07-6	n.d.	n.d.	10	
Perfluorohexadecanoic acid (PFHxDA)	67905-19-5	n.d.	n.d.	15	-
Perfluorooctadecanoic acid (PFODA)	16517-11-6	n.d.	n.d.	14	-
2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy)propionic acid (HPFO-DA)	13252-13-6	n.d.	n.d.	5	-
2H,2H,3H,3H-Heptadecafluoroundecanoic acid (4HPFUnA)	34598-33-9	n.d.	n.d.	9	< 260 ²
Perfluorinated sulfonic acids (PFSA)					
Perfluorobutane sulphonic acid (PFBS)	375-73-5	n.d.	n.d.	13	-
Perfluoropentane sulphonic acid (PFPS)	2706-91-4	n.d.	n.d.	14	-
Perfluorohexane sulphonic acid (PFHxS)	355-46-4	n.d.	n.d.	15	-
Perfluoroheptane sulphonic acid (PFHpS)	375-92-8	n.d.	n.d.	12	-
Perfluorooctane sulphonic acid (PFOS)	1763-23-1	n.d./n.d. ³	n.d./n.d. ³	14/0,5 ³	1 µg/m ² ¹
Perfluorononane sulphonic acid (PFNS)	68259-12-1	n.d.	n.d.	12	-
Perfluorodecane sulphonic acid (PFDS)	335-77-3	n.d.	n.d.	11	-
Perfluorododecane sulphonic acid (PFDoS)	79780-39-5	n.d.	n.d.	8	-

n.d. = not detected µg/kg = microgram per kilogram DL = detection limit

¹POP = Regulation (EU) 2019/1021 on persistent organic pollutants

²REACH = Regulation (EG) No. 1907/2006, annex XVII, No. 68: May no longer be used or placed on the market after February 25, 2023

³ calculated in µg/m², area-related

Parameter	CAS-Nr.	L 6777 FT-33 Toddler girl swimsuit with cartoon unicorn, Art-No: ks212207285600 057 [µg/kg]	L 6777 FT-39.1 Main material and mesh, DAZY swimsuit, Art.-No. sw220220337822 1451 [µg/kg]	DL [µg/kg]	Restriction EU [µg/kg]
Perfluorinated carboxylic acids					
Perfluorobutanoic acid (PFBA)	375-22-4	n.d.	n.d.	10	-
Perfluoropentanoic acid (PFPA)	2706-90-3	n.d.	n.d.	9	-
Perfluorohexanoic acid (PFHxA)	307-24-4	n.d.	n.d.	21	-
Perfluoroheptanoic acid (PFHpA)	375-85-9	n.d.	n.d.	14	-
Perfluorooctanoic acid (PFOA)	335-67-1	n.d.	n.d.	12	≤ 25 ¹
Perfluorononanoic acid (PFNA)	375-95-1	n.d.	n.d.	12	Σ < 25 ²
Perfluorodecanoic acid (PFDA)	335-76-2	n.d.	n.d.	14	
Perfluoroundecanoic acid (PFUnA)	2058-94-8	n.d.	n.d.	14	
Perfluorododecanoic acid (PFDoA)	307-55-1	n.d.	n.d.	8	
Perfluorotridecanoic acid (PFTrA)	72629-94-8	n.d.	n.d.	9	
Perfluorotetradecanoic acid (PFTeA)	376-06-7	n.d.	n.d.	12	
Perfluoro-3,7-dimethyl octanoic acid (PF-3,7-DMOA)	172155-07-6	n.d.	n.d.	10	
Perfluorohexadecanoic acid (PFHxDA)	67905-19-5	n.d.	n.d.	15	-
Perfluorooctadecanoic acid (PFODA)	16517-11-6	n.d.	n.d.	14	-
2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy)propionic acid (HPFO-DA)	13252-13-6	n.d.	n.d.	5	-
2H,2H,3H,3H-Heptadecafluoroundecanoic acid (4HPFUnA)	34598-33-9	n.d.	n.d.	9	< 260 ²
Perfluorinated sulfonic acids (PFSA)					
Perfluorobutane sulphonic acid (PFBS)	375-73-5	n.d.	n.d.	13	-
Perfluoropentane sulphonic acid (PFPS)	2706-91-4	n.d.	n.d.	14	-
Perfluorohexane sulphonic acid (PFHxS)	355-46-4	n.d.	n.d.	15	-
Perfluoroheptane sulphonic acid (PFHpS)	375-92-8	n.d.	n.d.	12	-
Perfluorooctane sulphonic acid (PFOS)	1763-23-1	n.d./n.d. ³	n.d./n.d. ³	14/0,5 ³	1 µg/m ² ¹
Perfluorononane sulphonic acid (PFNS)	68259-12-1	n.d.	n.d.	12	-
Perfluorodecane sulphonic acid (PFDS)	335-77-3	n.d.	n.d.	11	-
Perfluorododecane sulphonic acid (PFDoS)	79780-39-5	n.d.	n.d.	8	-

n.d. = not detected

µg/kg = microgram per kilogram

DL = detection limit

¹POP = Regulation (EU) 2019/1021 on persistent organic pollutants

²REACH = Regulation (EG) No. 1907/2006, annex XVII, No. 68: May no longer be used or placed on the market after February 25, 2023

³calculated in µg/m², area-related

3.8 Aromatic amines

Sample Number	Article	Aromatic amines ¹ [mg/kg]
L 6777 FT – 1.2	Mixed sample green strap and purple tulle, children dress skparty, Art.-No. 25210607253, 08/22	n.d.
L 6777 FT – 2.2	Coated fabric, skparty, Art.-No. 21072702466 66324, colours "blue, green, yellow"	n.d.
L 6777 FT – 3.1	Printed skirt with winter motif , Art.-No. sa21092784794 25785	n.d.
L 6777 FT – 4.2	Printed area overknee stockings, colours „red, green, black“, Art.- No. si2204241194449882	n.d.
L 6777 FT – 5.1	Coat with hood, Art.-No sw220608316961	p-PDA: 110, all others n.d.
L 6777 FT – 6.2	Newborn photography wrap with floral pattern, Art.-No. sa22042793260 colours "black, red, pink"	n.d.
L 6777 FT – 7.1	Main material and lining black from men's jacket, PU leather, black Art.-No.. sm22060703659549	4,4-DADPM* 24, all others n.d.
L 6777 FT – 8.5	Mixed sample lining and knitted edge black, from Extended Sizes Men's College Jacket Art.-No. sm220525558666 4128	4,4-DADPM* 6,5, all others n.d.
L 6777 FT – 9.1	Main material and underskirt from EVER-PRETTY mesh dress Art.-No. 112-2010-21-165	n.d.
L 6777 FT – 10.1	SHEIN BAE figure-hugging dress with PU leather, black, Art.-No. sw211007499353	n.d.
L 6777 FT – 11.1	Mixed sample base material (mesh), tip and inner support from maternity nursing bra Art.-No. sa2207187080532781	n.d.
L 6777 FT – 11.2	Mixed sample straps (elastic band), felt clasp, fabric cover cups from maternity nursing bra Art.-No. sa2207187080532781	n.d.
L 6777 FT – 12.1	Main material orange, black, green from bikini with snakeskin pattern Art.-No. sw2208083708338774	n.d.
L 6777 FT – 13.2	Base material and tapes, black from triangle bikini top with leopard sequin Art.-No. sw2112171025058583	n.d.
L 6777 FT – 14.2	Printed base fabric (blue, pink, red) from Men's swim shorts with floral pattern Art.-No. sm2204197060333335	n.d.
L 6777 FT – 16.1	Textile upper with rhinestones, black from pull on ankle boots Art.-No. sx2205138928965536	n.d.
L 6777 FT – 17.3	Inner lining, from men's combat boots Art.-No. CF 2012, sx2207190360223893	n.d.
L 6777 FT – 18.1	Printed area baby bodysuit (rainbow), Art.-No. sa2207148680482424	n.d.
L 6777 FT – 19.1	Simple pantyhose, red, Art.-No.: swsock18210316423	n.d.
L 6777 FT – 20.1	Base material silver, push-up bikini Art.-No. T2259, sw2201112417752411	n.d.
L 6777 FT – 21.1	Basic material, black, bike jacket, Art.-No. swjacket00190927489	n.d.
L 6777 FT – 22.1	Upper material red, trending boots Art.-No. sx2206309416110607	n.d.
L 6777 FT – 23.1	Base material and prited sleeves green and red, baby t-shirt jumpsuit, Art.-No. sa2208223277968674	n.d.
L 6777 FT – 24.1	Base material red, Toddler-Girls PU motorcycle jacket, Art.-No. sk 2204190312209389	n.d.
L 6777 FT – 25.1	Mixed sample basic material green with Tulle green, Cami Evening Dress, Art.-No. sw2108275850655534	n.d.
L 6777 FT – 26.2	Mixed sample colours purple yellow pink, swim trunks with pineapple & galaxy pattern, Art.-No. sm2207267662672155	n.d.
L 6777 FT – 28.1	Mixed sample tulle skirt, lace and fabric, Newborn girl skirt Art.-No. sa2203302808433784	n.d.
L 6777 FT – 29.1	Printed main material, mixed sample dark blue, green, orange, toddler boys swimsuit, Art.-No. sk2201111492330412	n.d.

Sample Number	Article	Aromatic amines ¹ [mg/kg]
L 6777 FT – 30.2	Base material, colours green yellow, pink, pullover with color gradient, Art.-No. sw2108306086196316	n.d.
L 6777 FT – 31.2	Mixed sample colours black and pink, men's jacket Art.-No. sm2108274336442452	n.d.
L 6777 FT – 33.2	Printed area, color "pink, blue, yellow", swimsuit with cartoon unicorn, Art-No:ks212207285600057	n.d.
L 6777 FT – 34.1	Upper and lining, black, vest for babies, Ar.-Nr. JIT9777319, SKC#sa2206021814111078	n.d.
L 6777 FT – 36.1	Printed area , newborn girl photography blanket, Art.-No. sknewborn25210413539	n.d.
L 6777 FT – 37.1	Main material, colors „black/orange“, Baby bodysuit Art.-No. sa2207228441113644	n.d.
L 6777 FT – 38.1	Main material and elastic band, Fishnet tights, Art.-No. si2207275525167969	n.d.
L 6777 FT - 39.1	Main material and mesh, DAZY swimsuit, Art.-No. sw2202203378221451	n.d.
L 6777 FT – 40.1	Printed area, colors „pink, purple, yellow“, Shirt with AOP, multicolored, Art.-No. sw2112113505318381	n.d.
L 6777 FT – 41.1	Printed area, jacket with grunge skeleton, Art.-No. JIT9806805	n.d.
L 6777 FT – 42.1	Upper and lining / padding, Men ´s running shoes, Art-No. sx2205163381777606	n.d.
L 6777 FT – 43.2	Fabric orange from bucket hat, Art-No:SC2206102819531718	n.d.
L 6777 FT – 44.1	Basic fabric khaki and light green, overall dress, Art.-No. SW2206289446692292	n.d.
L 6777 FT – 45.1	Printed area "YORK" pullover with polo collar, Art.-No: SW2111187767327472	n.d.
L 6777 FT – 46.1	Main material and lining, PU leather blazer brown, Art-No: SWBLAZER07210514580	n.d.
L 6777 FT – 47.1	Main material jeans with rip, color: dark wash, Art-No: SMPANTS25210331062	n.d.
DL		each 5
Requirements REACH		each and sum ≤ 30

n.d. = not detected mg/kg = milligram per kilogram DL = detection limit

REACH = Regulation (EG) No. 1907/2006, annex XVII, no. 43 for textiles and shoes

¹ individual parameters see listing below

*Note: 4,4-DADPM can also be formed by cleavage of polyurethane polymers based on MDI or crosslinking aids for printing applications.

Tested individual parameters:

Parameter	CAS-No.
4-Aminoazobenz ¹	60-09-3
4-Aminobiphenyl	92-67-1
Benzidine	92-87-5
4-Chlorotoluidine	95-69-2
2-Naphthylamine	91-59-8
o-Toluidine	95-53-4
4-Chloroaniline	106-47-8
2,4-Diaminoanisol	615-05-4
4,4'-Diaminodiphenylmethane (4,4-DADPM)	101-77-9
3,3'-Dichlorobenzidine	91-94-1
3,3'-Dimethoxybenzidine	119-90-4
3,3'-Dimethylbenzidine	119-93-7
3,3'-Dimethyl-4,4'-diaminodiphenylmethane	838-88-0
p-Cresidine	120-71-8
2-Methoxyaniline	90-04-0
4,4'-Methylen-bis(2-chloraniline)	101-14-4
4,4'-Oxydianiline	101-80-4
4,4'-Thiodianiline	139-65-1
2,4-Toluylendiamine	95-80-7
2,4,5-Trimethylaniline	137-17-7
2,4-Xylidine	95-68-1
2,6-Xylidine	87-62-7
Aniline	62-53-3
p-Phenylendiamin (p-PDA), orienting, method for this compound only inadequately	106-50-3

o-aminoazotoluene [97-56-3] analytically detected as o-toluidine

2-amino-4-nitrotoluene [99-55-8] analytically detected as 2,4-toluylendiamine

¹4-aminoazobenzene [60-09-3] analytically detected as aniline und p-phenylenediamine. In this case a test according DIN EN ISO 14362-3:2017-05 occurs.

3.9 VOC Screening

Sample Number	Article	VOC calibrated ¹ [mg/kg]	VOC estimated by response of ethylbenzene [mg/kg]
L 6777 FT – 1.1	Printed top children dress, skparty, Art.-No. 25210607253, 08/22	Cyclohexanone: 19 DMF: 10	n-Butanol: 24 Melamine: 5 Dimethyl carbonate: 6 Benzyl benzoate: 7 Ethylene glycol diphenyl ether: 7 Σ other amines: 18 Σ Isoalkanes: 8 Σ other aromatic compounds: 1 Σ other esters: 11 Σ other phthalates: 7 Σ other terpenes and terpenoids: 8 Σ Fatty acid amide: 14
L 6777 FT – 1.3	Mixed sample accessory/trim headdress: sea stars pink, fin green, fin blue, skparty, Art.-No. 25210607253	DMF: 120	DBP: 8 Σ other aromatic compounds: 82 Σ other esters: 97
L 6777 FT – 2.1	Coated fabric, skparty, Art.-No. 21072702466 66324	DMF: 23	Tetramethylsuccinonitrile: 5 1,4-Butylene adipate: 18
L 6777 FT – 3.1	Printed skirt with winter motif , Art.-No. sa21092784794 25785	n.d.	Dimethyl terephthalate: 180
L 6777 FT – 4.1	Overknee stockings, Art.- No. si2204241194449882	ε-Caprolactam: 7	Glycerine: 68 Ethylene glycol diphenyl ether: 6 Tributyl acetyl citrate: 13 Σ other aliphatic compounds : 4000 Σ Isoalkanes: 350 Σ other terpenes and terpenoids: 38 Σ Dialkyl ethers: 47 Σ other esters: 55
L 6777 FT – 5.1	Coat with hood, Art.-No sw220608316961	Cyclohexanone: 9	1,4-Butylene adipate: 7
L 6777 FT – 6.1	Newborn photography wrap with floral pattern, Art.-No. sa22042793260	n.d.	n.d.
L 6777 FT – 7.1	Main material and lining black from men's jacket, PU leather, black Art.-No.. sm22060703659549	DMF: 53	n-Dodecanol: 13 Di-(2-ethylhexyl) terephthalate (DEHP): 1600 Σ other esters: 12 Σ other phthalates: 87
L 6777 FT – 9.1	Main material and underskirt from EVER-PRETTY mesh dress Art.-No. 112-2010-21-165	n.d.	2-Ethylhexyl-p-methoxycinnamate E/Z mixture: 5 Phenylethyl benzoate: 6
L 6777 FT – 10.1	SHEIN BAE figure-hugging dress with PU leather, black, Art.-No. sw211007499353	DMF: 460 N,N-Dimethylacetamid: 10	1,4-Butylene adipate: 27 2-Ethylhexanoic acid: 60 Ethylene glycol diphenyl ether: 5 Σ other phthalates: 150 Σ other esters: 13
L 6777 FT – 11.1	Mixed sample base material (mesh), tip and inner support from maternity nursing bra Art.-No. sa2207187080532781	DMF: 38	n-Dodecanol: 100 2,2,4-Trimethylpentan: 5 Ethylene glycol diphenyl ether: 5 Σ other aliphatic compounds: 13

Sample Number	Article	VOC calibrated ¹ [mg/kg]	VOC estimated by response of ethylbenzene [mg/kg]
L 6777 FT – 11.3	Mixed sample fabric cover cups, red and padding cups (foam) from maternity nursing bra Art.-No. sa2207187080532781	DMF: 7	n-Dodecanol: 170 Di-(2-ethylhexyl) terephthalate (DEHP): 380 Σ unsaturated alcohols: 36 Σ other alcohols: 8 Σ other phthalates: 10 Σ BHT derivatives: 12
L 6777 FT – 12.1	Main material orange, black, green from bikini with snake-skin pattern Art.-No. sw2208083708338774	DMF: 5	Ethylene glycol diphenyl ether: 5 Di-2-ethylhexyl fumarate: 120 Σ Isoalkanes: 610 Σ other alkylcycloalkanes: 129 Σ other aliphatic compounds: 1700 Σ other aromatic compounds: 40
L 6777 FT – 13.3	Cups (foam) from triangle bikini top Art.-No. sw2112171025058583	DMF: 52 ε-Caprolactam: 11	Di-(2-ethylhexyl) terephthalate (DEHP): 440 Σ other phthalates: 11 Σ other esters: 68 Σ other aliphatic compounds: 2100 Σ BHT derivatives: 140 Σ other aromatic compounds: 13
L 6777 FT – 14.1	Printed base fabric (blue, pink, orange, green, light green, red) from Men's swim shorts with floral pattern Art.-No. sm2204197060333335	n.d.	Di-(2-ethylhexyl) terephthalate (DEHP): 140
L 6777 FT – 15.1	Shaft and sole, Rain boots Art.-No. sx2206028390566629	2-Ethyl-1-hexanol: 110 DMF: 24	Methyl mercaptoacetate: 24 DMP: 100 DIBP: 7300 DBP: 4800 DEHP: 2900 DEHP: 200 Σ Alkyl benzoates: 7 Σ other phthalates: 8
L 6777 FT – 16.1	Textile upper with rhinestones, black from pull on ankle boots Art.-No. sx2205138928965536	Cyclohexanone: 8 Phenol: 5 BHT: 39 DMF: 12 ε-Caprolactam: 26	Acetic acid: 16 Dimethyl carbonate: 11 1,4-Butylene adipate: 16 Glycerine: 6 Methyl methacrylate: 5 Σ Siloxanes: 24 Σ Isoalkanes: 240 Σ other aromatic compounds: 26 Σ other esters: 20 Σ other aliphatic compounds: 650

Sample Number	Article	VOC calibrated ¹ [mg/kg]	VOC estimated by response of ethylbenzene [mg/kg]
L 6777 FT – 16.2	Inner sole from pull on ankle boots Art.-No. sx2205138928965536	Cyclohexanone: 19 2-Phenyl-2-propanol: 8 Phenol: 9 BHT: 160 DMF:36 N,N-Dimethyl acetamide: 5 ε-Caprolactam:20	Carbon disulphide: 20 t-Butylamine: 21 Acetic acid: 27 m,p-Xylene: 11 o-Xylene: 15 1,4-Butanediol: 15 Glycerine: 20 Coumaran: 7 Triethylene glycol: 8 Benzothiazole: 4 Isosorbide: 36 4-t-Butylphenol: 4 DBP: 14 DEHtP: 160 2-Benzothiazolinone: 4 4,4'-Diaminodiphenylmethane: 8 Σ other ethylene glycol derivatives: 53 Σ other aromatic compounds: 180 Σ other ethylene glycol derivatives: 16 Σ other esters: 660 Σ isoalkanes: 220 Σ fatty acid amides: 5 Σ other phthalates: 5
L 6777 FT – 16.3	Outsole/Heel, black from pull on ankle boots Art.-No. sx2205138928965536	Cyclohexanone: 39' 2-Phenyl-2-propanol: 5 Phenol: 7 2,4-Di-t-Butylphenol: 6 BHT: 25 DMF:12 ε-Caprolactam:26	t-Butylamine: 240 Acetic acid: 11 Ethylbenzene: 7 m,p-Xylene: 25 o-Xylene: 24 Glycerine: 280 2-Ethylhexanoic acid: 22 Triethylene glycol: 4 Benzothiazole: 5 1,2-Dihydro-2,2,4-trimethylchinolin: 14 α,α'-Dihydroxy-1 3-Diisopropylbenzene: 15 1,4-Butylene adipate: 42 DBP: 8 Triethylene glycol di-2-ethylhexanoate: 99 Σ Isoalkanes: 50 Σ other aromatic compounds: 73 Σ other aliphatic compounds: 870 Σ other terpenes and terpenoids: 300
L 6777 FT – 17.1	Upper material synthetic leather from men's combat boots Art.-No. CF 2012, sx2207190360223893	2-Phenyl-2-propanol: 11 Formamide: 78 2-Ethyl-1-hexanol: 110 DMF: 750 N,N-Dimethylacetamide: 8	Methyl butyrate: 12 Acetic acid: 10 DIBP: 3600 DBP: 470 DEHtP: 81 Σ other phthalates: 21

Sample Number	Article	VOC calibrated ¹ [mg/kg]	VOC estimated by response of ethylbenzene [mg/kg]
L 6777 FT – 17.2	Outsole black, from men's combat boots Art.-No. CF 2012, sx2207190360223893	2-Phenyl-2-propanol: 15 Formamide: 31 DMF: 710	Isobutanol: 14 n-Butanol: 12 DIBP: 33700 DBP: 12500 DEHP: 5 DEHP: 260 Σ Alkyl benzoates: 40 Σ other phthalates: 100 Tributyl acetyl citrate: 34 Σ other terpenes and terpenoids: 48 Σ other esters: 10 Σ Fatty acid amide: 20
L 6777 FT – 18.1	Printed area baby bodysuit (rainbow), Art.-No. sa2207148680482424	N-Methylanilin: 10	1,4- Butylene adipate: 6 Glycerine: 470 Diethylene glycol: 380 2,2,4-Trimethyl-1,3-pentanediol diisobutyrate (TXIB): 5 Σ other esters: 21
L 6777 FT – 19.1	Simple pantyhose, red, Art.-No.: swsock18210316423	n.d.	2,2, Trimethyl-1,3-pentanediol diisobutyrate (TXIB): 264 Σ Isoalkanes: 600 Σ Siloxanes: 18 Σ other olefines: 10 Σ other dialkylehter: 180 Σ other aliphatic compounds: 8500
L 6777 FT – 20.1	Base material silver, push-up bikini Art.-No. T2259, sw2201112417752411	Cyclohexanone: 12 Phenol: 10 DMF: 27	Σ Isoalkanes: 63 Σ other aromatic compounds: 51 Σ other aliphatic compounds: 1500
L 6777 FT – 20.4	Cups (foam) Push-Up bikini Art.-No. T2259, sw2201112417752411	Phenol: 160	Methylpropionat: 10 2-Ethylhexansäure: 7 Σ other aromatic compounds: 190
L 6777 FT – 21.1	Basic material, black, bike jacket, Art.-No. swjacket00190927489	n.d.	n.d.
L 6777 FT – 22.1	Upper material red, trending boots Art.-No. sx2206309416110607	DMF:51 ε-Caprolactam: 9	Dimethyl carbonate: 8 Propanoic acid: 5 Diethylene glycol: 5 2-Ethylhexyl acrylate: 85 1,2-Dihydro-2,2,4-trimethylquinoline: 6 1,4-Butylene adipate: 10 DBP: 5 1-Hydroxycyclohexyl phenyl ketone: 21 Σ other esters: 35 Σ other phthalates: 370
L 6777 FT – 22.2	Seam reinforcement inside (synthetic leather) red, trending boots Art.-No. sx2206309416110607	Cyclohexanone: 5 2-Ethyl-1-hexanol: 11 DMF:100 N,N-Dmethylacetamide: 11 ε-Caprolactam: 21	Acetic acid: 10 Propanoic acid: 7 Acrylic acid: 6 Diethylene glycol: 55 2-Ethylhexyl acrylate: 52 1,2-Dihydro-2,2,4-trimethylquinoline: 7 1-Hydroxycyclohexyl phenyl ketone: 28 Σ other aromatic compounds: 30 Σ other esters: 51 Σ other ethylene glycol derivatives: 6 Σ other phthalates: 140

Sample Number	Article	VOC calibrated ¹ [mg/kg]	VOC estimated by response of ethylbenzene [mg/kg]
L 6777 FT – 22.4	Shoelaces with rhinestones, trending boots Art.-No. sx2206309416110607	Cyclohexanone: 4 2-Ethyl-1-hexanol: 52 BHT: 3 DMF:34 ε-Caprolactam: 13	2-Ethylhexyl acetate: 9 α-Terpineol: 5 2-Ethylhexyl acrylate: 270 1,2-Dihydro-2,2,4-trimethylquinoline: 4 1-Hydroxycyclohexyl phenyl ketone: 330 1,4-Butylene adipate: 8 Σ other esters: 7 Σ other terpenes and terpenoids: 24 Σ other phthalates: 76
L 6777 FT – 22.5	Inner sole, trending boots Art.-No. sx2206309416110607	Cyclohexanone: 6 2-Ethyl-1-hexanol: 7 BHT: 33 DMF:23	Acetone: 19 Acetic acid: 9 2-Ethylhexyl acrylate: 130 Longicyclen: 9 Longifolen: 68 1,2-Dihydro-2,2,4-trimethylquinoline: 5 1,4-Butylene adipate: 19 DBP: 12 DEHP:8 DEHP: 180 Σ Isoalkanes: 43 Σ aliphatic amines: 36 Σ other alkylcycloalkanes: 26 Σ other fatty acid amides: 21 Σ other aromatic compounds: 140 Σ other esters: 35 Σ other terpenes and terpenoids: 73 Σ other phthalates: 10
L 6777 FT – 22.6	Outsole black, trending boots Art.-No. sx2206309416110607	Cyclohexanone: 16 2-Ethyl-1-hexanol: 10 2,4-Di-t-Butylphenol: 15 BHT: 18 DMF:15 ε-Caprolactam: 12	t-Butylamine: 4 2-Benzothiazolinone: 17 2-Phenylbenzothiazol: 11 2-Ethylhexyl acetate: 7 2-Ethylhexyl acrylate: 180 α-Terpineol: 9 2-Methylbenzothiazole: 12 1-t-Butyl-5-methylphenol: 9 Longicyclen: 26 1,2-Dihydro-2,2,4-trimethylquinoline: 51 3,5-Di-t-butylphenol: 75 1,4-Butylene adipate: 19 2,4,6-Tri-t-butylphenol: 40 DEHP:5 DEHP: 38 4-(1,3-Dimethylbutyl)amino-diphenylamine: 110 Phenanthrene: 8 Flouranthene: 4 Pyrene: 4 Σ Isoalkanes: 52 Σ Oxime: 23 Σ Nitrogen heteroaromatic compounds: 9 Σ other aliphatic compounds: 2600 Σ other carboxylic acids: 11 Σ other fatty acid amides: 120 Σ other aromatic compounds: 130 Σ other esters: 70 Σ other fatty acid alkyl esters: 440 Σ other terpenes and terpenoids: 540

Sample Number	Article	VOC calibrated ¹ [mg/kg]	VOC estimated by response of ethylbenzene [mg/kg]
L 6777 FT – 23.2	Printed area on front side, baby t-shirt jumpsuit, Art.-No. sa2208223277968674	Cyclohexanone: 8 DMF: 26	2,2, Trimethyl-1,3-pentanediol diisobutyrate (TXIB): 7 Glycerine: 290 1,1,1-Trimethylolpropane (Ethriol): 15 Σ Isoalkanes: 150 Σ other aliphatic compounds: 1300
L 6777 FT – 24.1	Base material red, Toddler-Girls PU motorcycle jacket, Art.-No. sk 2204190312209389	Cyclohexanone: 12 DMF: 95	Acetic acid: 110 Σ other aromatic compounds: 8 Σ other ethylene glycol derivatives: 9 Σ other fatty acid alkyl esters: 57 Σ other phthalates: 7
L 6777 FT – 25.1	Mixed sample basic material green with Tulle green, Cami Evening Dress, Art.-No. sw2108275850655534	n.d.	Acetone: 6
L 6777 FT – 26.1	Printed main material, swim trunks with pineapple & galaxy pattern, Art.-No. sm2207267662672155sm2207267662672155	n.d.	DEP: 74 Σ Isoalkanes: 15 Σ other aliphatic compounds: 280 Glycerine: 22
L 6777 FT – 27.1	Mixed sample upper textile and lining faux fur black, snow boots Art.-No. sx2208227515194139	Cyclohexanone: 9 Phenol: 5 BHT: 19 DMF: 35 DABCO: 19	Acetone: 13 Methyl propionate: 6 1,4-Butylene adipate: 10 DEP: 26 Σ other esters: 7 Σ other phthalates: 764
L 6777 FT – 27.2	Faux leather black, snow boots Art.-No. sx2208227515194139	Cyclohexanone: 18 2-Phenyl-2-propanol: 5 Phenol: 7 BHT: 14 DMF: 120 N,N-Dmethylacetamide: 11 DABCO: 530	Acetone: 8 Acetic acid: 20 1,4-Butylene adipate: 31 DEP: 72 Σ Isoalkanes: 30 Σ other esters: 88 Σ other phthalates: 9
L 6777 FT – 27.3	Mixed sample insole (foam with synthetic fur) and foam padding, snow boots Art.-No. sx2208227515194139	Cyclohexanone: 10 BHT: 34 DMF: 25 DABCO: 220	Acetone: 13 Acetic acid: 12 Methyl propionate: 9 1,4-Butylene adipate: 11 2,2, Trimethyl-1,3-pentanediol diisobutyrate (TXIB): 70 DBP 13 Σ Isoalkanes: 71 Σ other esters: 23 Σ other phthalates: 22
L 6777 FT – 27.4	Outsole (rubber and plastic black / gray / transparent), snow boots Art.-No. sx2208227515194139	Cyclohexanone: 13 2-Phenyl-2-propanol: 7 Phenol: 11 BHT: 20 DMF: 34 N,N-Dmethylacetamide: 5 DABCO: 180	Acetone: 600 Dibutyl maleate: 18 1,4-Butylene adipate: 59 DEP: 8 2,2, Trimethyl-1,3-pentanediol diisobutyrate (TXIB): 10 Di-2-ethylhexyl adipate: 170 Σ other fatty acid alkyl esters: 57 Σ other esters: 620 Σ other aliphatic compounds: 2800

Sample Number	Article	VOC calibrated ¹ [mg/kg]	VOC estimated by response of ethylbenzene [mg/kg]
L 6777 FT – 28.1	Mixed sample tulle skirt, lace and fabric, Newborn girl skirt Art.-No. sa2203302808433784	2-Ethyl-1-hexanol: 13 2,4-Di-t-butylphenol: 13	Acetic acid: 18 n-Octanoic acid: 15 n-Decanoic acid: 11 Σ Isoalkanes: 110 Σ Siloxanes: 14 Σ other aromatic compounds: 23 Σ other esters: 20 Σ other aliphatic compounds: 5700 Σ other terpenes and terpenoids: 1800
L 6777 FT – 29.1	Printed main material, mixed sample dark blue, green, orange, toddler boys swimsuit, Art.-No. sk2201111492330412	BHT: 9	Glycerine: 29 Σ Isoalkanes: 17 Σ other terpenes and terpenoids: 10
L 6777 FT – 29.3	Foam from hat, toddler boys swimsuit, Art.-No. sk2201111492330412	Phenol: 40 2,4-Di-t-butylphenol: 16	DEP: 8
L 6777 FT – 30.1	Basematerial, pullover with colour gradient, Art.-No. sw2108306086196316	2,4-Di-t-butylphenol: 18 ε-Caprolactam: 170	Dimethyl carbonate: 15 Methyl propionate: 9 Σ other esters: 21 Σ other aliphatic compounds: 2000
L 6777 FT – 31.1	Main material (smooth and fleece), men's jacket Art.-No. sm2108274336442452	n.d.	Isoquinoline: 10 Σ Isoalkanes: 68 Σ other aliphatic compounds: 1200
L 6777 FT – 32.1	Upper material,. boot Art.-No. sx220809135251	Benzyl alcohol: 5 Phenol: 13 BHT: 10	1,4-Butylene adipate: 31 4,4'-Methylene diphenyl diisocyanate (4,4'-MDI): 10 Tributyl aconitate: 43 Tributyl acetyl citrate (TBAC): 51 Σ other esters: 2100 Σ BHT- derivatives: 160
L 6777 FT – 32.3	Inner sole, boot Art.-No. sx220809135251	Acethophenon: 6 2-Ethyl-1-hexanol: 19 Benzyl alcohol: 17 2-Phenyl-2-propanol Phenol: 14 2,4-Di-t-butylphenol: 20 BHT: 240 DMF: 29 N,N-Dmethylacetamide: 20	Dimethyl carbonate: 21 Methyl propionate: 12 Glycerine: 21 1,4-Butylene adipate: 32 2,4,6-Tri-tert butylphenol: 6 Propanoic acid: 25 Butanoic acid: 16 Diethylene glycol: 11 Benzothiazole: 23 1,2-Dihydro-2,2,4-trimethylquinoline: 12 Σ Isoalkanes: 21 Σ other aromatic compounds: 55 Σ other esters: 160 Σ other terpenes and terpenoids: 46 Σ unsaturated ketones: 12

Sample Number	Article	VOC calibrated ¹ [mg/kg]	VOC estimated by response of ethylbenzene [mg/kg]
L 6777 FT – 32.4	Outsole (rubber), boot Art.-No. sx220809135251	BHT: 14 Cyclohexylamine: 58	Glycerine: 41 Benzothiazole: 4 1,2-Dihydro-2,2,4-trimethylquinoline: 12 N,N-dimethyl urea: 5 3,5-Di-t-butylphenol: 17 Σ other aromatic compounds: 25 Σ other esters: 370 Σ other aliphatic compounds: 310 Σ other terpenes and terpenoids: 16
L 6777 FT – 33.1	Printed area, color "pink, blue, orange, green", swimsuit with cartoon unicorn, Art-No:ks21220728560005	n.d.	Glycerine: 31 Σ other esters: 72
L 6777 FT – 34.1	Upper and lining, black, vest for babies, Ar.-Nr. JIT9777319, SKC#sa2206021814111078	n.d.	Σ other esters: 15
L 6777 FT – 35.1	Main material, color „orange“, Clogs, Art.-No. sx2208240552909055	2-Ethyl-1-hexanol: 13 Phenol: 9	α,α'-Dihydroxy-m-diisopropylbenzene: 38 α,α'-Dihydroxy-p-diisopropylbenzene: 25 Σ Diacetylbenzenes: 40 Σ Isoalkanes: 400 Σ other esters: 12 Σ other aromatic compounds: 170
L 6777 FT – 36.1	Printed area , newborn girl photography blanket, Art.-No. sknewborn25210413539	n.d.	Glycerine: 16
L 6777 FT – 37.2	Printed area, Baby bodysuit, Art.-No. sa2207228441113644	N-Methylanilin: 12	Σ Acetals: 5 Σ Nitrogen heteroaromatic compounds: 8
L 6777 FT – 38.1	Main material and elastic band, Fishnet tights, Art.-No. si2207275525167969	2-Ethyl-1-hexanol: 12 ε-Caprolactam:29	Σ Isoalkanes: 180 Σ other aliphatic compounds: 5700 Σ other alkylcycloalkanes: 19 Σ other esters: 19 Σ other olefines: 28
L 6777 FT – 39.1	Main material and mesh, DAZY swimsuit, Art.-No. sw2202203378221451	n.d.	Acetic acid: 12 2-Naphthol: 20 Σ other aliphatic amines: 10 Σ other aliphatic compounds: 330
L 6777 FT – 40	Printed area, colors „green, purple, yellow“, Shirt with AOP, multicolored, Art.-No. sw2112113505318381	ε-Caprolactam:27	Dimethyl terephthalate (DMtP): 25
L 6777 FT – 41.1	Printed area, jacket with grunge skeleton, Art.-No. JIT9806805	2-Ethyl-1-hexanol: 21 BHT: 9 DMF: 45 N,N-Dimethylacetamide: 28 N-Ethylpyrrolidone: 11	Acetone: 2500 Glycerine: 280 Isophorone diisocyanate Isomer mixture*: 58 Triethylamine: 120 Urea: 83 2,4-Toluylene diisocyanate (2,4-TDI)*: 8 Σ other aliphatic compounds: 770 Σ other alkylcycloalkanes: 18 Σ other aromatic compounds: 98 Σ other esters: 500 Σ other olefines: 19
L 6777 FT – 42.1	Upper and lining / padding, Men´s running shoes, Art.-No. sx2205163381777606	Acetophenone: 8 2-Phenyl-2-propanol: 6 DMF: 30	Acetic acid: 10 DEP: 9 DIBP: 500 Σ Isoalkanes: 56 Σ other esters: 19

Sample Number	Article	VOC calibrated ¹ [mg/kg]	VOC estimated by response of ethylbenzene [mg/kg]
L 6777 FT – 42.2	Inner sole (foamed) with synthetic leather, Men´s running shoes, Art-No. sx2205163381777606	Acetophenone: 13 2-Ethyl-1-hexanol: 13 2-Phenyl-2-propanol: 9 DMF: 26	DIBP: 2700 Urea: 60 Σ Isoalkanes: 130 Σ other aromatic compounds: 15 Σ other alkyl benzoates: 11 Σ other esters: 23 Σ other olefines: 29 Σ other terpenes and terpenoids: 100 Σ other phthalates: 11
L 6777 FT – 42.3	Outsole, Men´s running shoes, Art-No. sx2205163381777606	2-Ethyl-1-hexanol: 7 2-Phenyl-2-propanol: 7 DMF: 15	DIBP: 8200 Urea: 9 Σ Isoalkanes: 21 Σ other aromatic compounds: 9 Σ other alkyl benzoates: 16 Σ other esters: 11 Σ other olefines: 18 Σ other terpenes and terpenoids: 100 Σ other phthalates: 850
L 6777 FT – 43.1	Fabric orange with reinforcement beige from bucket, Art-No: SC2206102819531718	n.d.	n.d.
L 6777 FT – 44.1	Basic fabric khaki and light green, overall dress, Art.-No. SW2206289446692292	n.d.	n.d.
L 6777 FT – 45.1	Printed area "YORK" pullover with polo collar, Art.-No: SW2111187767327472	n.d.	DEP: 6 Texanol: 12 Σ Isoalkanes: 71 Σ other aromatic compounds: 11 Σ other aliphatic compounds: 620
L 6777 FT – 46.1	Main material and lining, PU leather blazer brown, Art-No: SWBLAZER07210514580	DMF: 11 N,N-Dimethylacetamide: 14	Acetic acid: 11 DEHP: 100 1,4-Butylene adipate: 12 Σ other aromatic compounds: 24 Σ other esters: 410 Σ other ethylene glycol derivatives: 17 Σ other terpenes and terpenoids: 21 Σ Fatty acids: 10
L 6777 FT – 47.1	Main material jeans with rip, color: dark wash, Art-No: SMPANTS25210331062	n.d.	Σ other esters: 12 Σ other aliphatic compounds: 75
Requirements REACH DMF, N,N-Dimethylacetamid			< 3000

n.d. = not detected mg/kg = milligram per kilogram DL = detection limit
REACH = Regulation (EG) No. 1907/2006, annex XVII, no. 72 for textiles, accessories and shoes
¹ individual parameters see listing below

Detection limit for Samples L 6777 FT -1 to -32:

5 mg/kg for each compound
Formamide, Acetamid, N-Methyl acetamide: 10 mg/kg
TEHP, DABCO: 20 mg/kg

For samples L 6777 FT-15.1, -16.1, -16.3, -17.1, -18.1, -20.1, -22.4, -22.6, 23.2, 26.1, 27.4, -32.1, -32.4:

4 mg/kg for each compound
Formamide, Acetamide, N-Methyl acetamide; 7 mg/kg
TEHP, DABCO: 15 mg/kg

For samples L 6777 FT-11.3, -13.3,-20.4, -27.1, -27.3:

4 mg/kg for each compound
Formamide, Acetamide, N-Methyl acetamide: 20 mg/kg
TEHP, DABCO: 30 mg/kg
N,N-Dimethylformamid: 7 mg/kg

For samples L 6777 FT-28.1 to 31.1 and 32.3: :
Isophorone, phenol, 2,4-dimethylphenol, DMF, N,N-diethylformamide, N-methylaniline: 8 mg/kg.
Triisobutene (mixture), BHT, Cyclohexylamine: 9 mg/kg
Trichlorethylene, Benzophenone, TCPP, DEGDM, Furfural, 2-Phenylphenol, Acetamide, DMF, N,N-Dimethylacetamide, N-Ethylpyrrolidone, VOC estimated by response of ethylenbenzene, 4-tert-Butylcyclohexyl acetate: 10 mg/kg
2-Ethyl-1-hexanol, Benzyl alcohol, 3,5,5-Trimethyl-1-hexanol, 2,4-Di-tBu-phenol, 3-Methylphenol, N-Methylacetamide: 12 mg/kg
2-Chlor-1,3-butadiene, 2-Methyl-2,4-pentanediol (Hexylene glycol), Formamide, N,N-Dibutylformamide, EGMM: 20 mg/kg
Sum Dimethyl naphthalenes, butanone, THF, ϵ -Caprolactam: 25 mg/kg
TEHP, DABCO: 30 mg/kg

For samples L 6777 FT-32.1 and -32.4:
2-Ethyl-1-hexanol, Benzyl alcohol, 3,5,5-Trimethyl-1-hexanol, 2,4-Di-tBu-phenol, 3-Methylphenol, N-Methylacetamide: 6 mg/kg
2-Chlor-1,3-butadiene, 2-Methyl-2,4-pentanediol (Hexylene glycol), Formamide, N,N-Dibutylformamide, EGMM: 10 mg/kg
Sum Dimethyl naphthalenes, butanone, THF, ϵ -Caprolactam: 12 mg/kg
TEHP, DABCO: 15 mg/kg

Detection limit for samples -33 to -47:

5 mg/kg for each compound
Isophorone, phenol, 2,4-dimethylphenol, DMF, N,N-diethylformamide, N-methylaniline: 8 mg/kg.
Triisobutene (mixture), BHT, Cyclohexylamine: 9 mg/kg
Trichlorethylene, Benzophenone, TCPP, DEGDM, Furfural, 2-Phenylphenol, Acetamide, DMF, N,N-Dimethylacetamide, N-Ethylpyrrolidone, VOC estimated by response of ethylenbenzene, 4-tert-Butylcyclohexyl acetate: 10 mg/kg
2-Ethyl-1-hexanol, Benzyl alcohol, 3,5,5-Trimethyl-1-hexanol, 2,4-Di-tBu-phenol, 3-Methylphenol, N-Methylacetamide: 12 mg/kg
2-Chlor-1,3-butadiene, 2-Methyl-2,4-pentanediol (Hexylene glycol), Formamide, N,N-Dibutylformamide, EGMM: 20 mg/kg
Sum Dimethyl naphthalenes, butanone, THF, ϵ -Caprolactam: 25 mg/kg
TEHP, DABCO: 30 mg/kg

For samples L 6777 FT-42.3
2-Ethyl-1-hexanol, Benzyl alcohol, 3,5,5-Trimethyl-1-hexanol, 2,4-Di-tBu-phenol, 3-Methylphenol, N-Methylacetamide: 6 mg/kg
2-Chlor-1,3-butadiene, 2-Methyl-2,4-pentanediol (Hexylene glycol), Formamide, N,N-Dibutylformamide, EGMM: 10 mg/kg
Sum Dimethyl naphthalenes, butanone, THF, ϵ -Caprolactam: 12 mg/kg
TEHP, DABCO: 15 mg/kg



Calibrated substances:

Parameter	CAS-No.
Alkanes, aliphatics	
Triisobutene (mixture)	7756-94-7
Aromatics	
Naphthalene	91-20-3
1-Methylnaphthalene	90-12-0
2-Methylnaphthalene	91-57-6
Dimethylnaphthalenes (mixture)	-
Terpenes	
d ³ -Carene	13466-78-9
Halogenated compounds	
2-Chloro-1,3-butadiene	126-99-8
1,2-Dichloroethane	107-06-2
Trichloroethylene	79-01-6
Tetrachloroethene (PER)	127-18-4
1,1,2,2-Tetrachloroethane	79-34-5
1,3-Dichloro-2-propanol	96-23-1
(±)-Epichlorhydrin	106-89-8
4-Chloro-3-methylphenol	59-50-7
Ketones	
Butenone	78-94-4
Diacetone alcohol	123-42-2
Cyclohexanone	108-94-1
Isophorone	78-59-1
Acetophenone	98-86-2
Benzophenone	119-61-9
Ether	
Tetrahydrofuran	109-99-9
Ester	
Methyl benzoate	93-58-3
4-tert-Butylcyclohexyl acetate	32210-23-4
Tris(1-chloro-2-propyl) phosphate (TCPP)	13674-84-5
Tris(2-ethylhexyl) phosphate (TEHP)	78-42-2
Glycol derivatives	
Ethylene glycol monomethyl ether (EGMM)	109-86-4
Ethylene glycol monoethyl ether (EGME)	110-80-5
Ethylene glycol monomethyl ether acetate (EGMMA)	110-49-6
Ethylene glycol monoethyl ether acetate (EGMEA)	111-15-9
Ethylene glycol dimethyl ether (EGDM)	110-71-4
Diethylene glycol dimethyl ether(DEGDM)	111-96-6
Aldehydes	
Furfural	98-01-1
alpha-Hexylcinnamal	101-86-0
Alcohols, phenols	
2-Ethyl-1-hexanol	104-76-7
Benzyl alcohol	100-51-6
2-Methyl-2,4-pentanediol (Hexylene glycol)	107-41-5
3,5,5-Trimethyl-1-hexanol	3452-97-9
2-Phenyl-2-propanol	617-94-7
Phenol	108-95-2
2-Methylphenol	108-39-4
3-Methylphenol	95-48-7
4-Methylphenol	106-44-5
2,4-Dimethylphenol	105-67-9
2,4-Di-tBu-phenol	96-76-4
Butylated hydroxytoluene (BHT)	128-37-0
2-Phenylphenol	90-43-7

Parameter	CAS-No.
Nitrogen compounds	
Formamide	75-12-7
Acetamide	60-35-5
N,N-Dimethylformamide (DMF)	68-12-2
N,N-Diethylformamide	617-84-5
N,N-Dibutylformamide	761-65-9
N-Methylacetamide	79-16-3
N,N-Dimethylacetamide	127-19-5
N-Methylpyrrolidone	872-50-4
N-Ethylpyrrolidone	2687-91-4
N-Methylaniline	100-61-8
Cyclohexylamine	108-91-8
ε-Caprolactam	105-60-2
Triethylene diamine (DABCO)	280-57-9

3.10 DMF in conspicuous samples- analytical verification (see point 2.5)

Sample Number	Article	DMF [mg/kg]
L 6777 FT – 7.1	Main material black, from men's jacket, PU leather, black Art.-No.. sm22060703659549	145
L 6777 FT – 10.1	SHEIN BAE figure-hugging dress with PU leather, black, Art.- No. sw211007499353	1200
L 6777 FT – 15.1	Shaft and sole, Rain boots Art.-No sx2206028390566629	35
L 6777 FT – 17.1	Upper material synthetic leather from men's combat boots Art.-No. CF 2012, sx2207190360223893	480
L 6777 FT – 17.2	Outsole black, from men's combat boots Art.-No. CF 2012, sx2207190360223893	330
L 6777 FT – 22.1	Upper material red, trending boots Art.-No. sx2206309416110607	150
L 6777 FT – 27.2	Faux leather black, snow boots Art.-No. sx2208227515194139	130
DL		10
Requirements REACH DMF		< 3000

n.d. = not detected mg/kg = milligram per kilogram DL = detection limit
REACH = Regulation (EG) No. 1907/2006, annex XVII, no. 72 for textiles, accessories and shoes

3.11 Phthalates in conspicuous samples

Sample Number	Article	Phthalates/Plasticizer ¹ [mg/kg]
L 6777 FT – 7.3	Main material from men's jacket, PU leather, black Art.-No.. sm22060703659549	DEHP: 347000 all others n.d.
L 6777 FT – 15.1	Shaft and sole, Rain boots Art.-No sx2206028390566629	DMP 750, DIBP 63000, DBP: 52000, DEHP 518000, DEHP 6700 all others n.d.
L 6777 FT – 17.1	Upper material synthetic leather from men's combat boots Art.-No. CF 2012, sx2207190360223893	DMP 27, DIBP 1800, DBP 960, DEHP 750 all others n.d.
L 6777 FT – 17.2	Outsole black, from men's combat boots Art.-No. CF 2012, sx2207190360223893	DIBP 457000, DBP 9200, DEHP 1400 all others n.d.
L 6777 FT – 22.1	Upper material red, trending boots Art.-No. sx2206309416110607	n.d.
L 6777 FT – 27.5	Plastic label "Sport",), snow boots Art.-No. sx2208227515194139	DIBP 3300, DBP 1400, DEHP 658000 all others n.d.
L 6777 FT – 31.3	Label from sleeve, black with white print, men's jacket Art.-No. sm2108274336442452	DIBP 360, DBP 92, DEHP 7700 all others n.d.
L 6777 FT – 35.2	Main material, color „orange“ and blossom “green“ and “purple, mixed sample, Clogs, Art.-No. sx2208240552909055	DEHP: 290000 DIBP: 110 DBP: 27 DEHP: 1500 all others n.d.
L 6777 FT – 37.2	Printed area, Baby bodysuit, Art.-No. sa2207228441113644	DIBP 10, all others n.d.
L 6777 FT – 41.1	Printed area, jacket with grunge skeleton, Art.-No. JIT9806805	DIBP 28, all others n.d.
L 6777 FT – 42.1	Upper and lining / padding, mixed sample, Men´s running shoes, Art.-No. sx2205163381777606	DIBP 5200, all others n.d.
L 6777 FT – 42.2	Inner sole (foamed) with synthetic leather, Men´s running shoes, Art.-No. sx2205163381777606	DIBP 19500, all others n.d.
L 6777 FT – 42.3	Outsole, Men´s running shoes, Art.-No. sx2205163381777606	DIBP 250000, DBP 1100, all others n.d.
Requirements REACH² DPP, DMEP, DIPP, DnHP, single or in combination with DIBP, DBP, BBP, DEHP,		< 1000
Requirements REACH³ DIBP, DBP, BBP, DEHP, single or in combination		< 1000
Requirements REACH⁴ DINP, DIDP, DNOP		each ≤ 1000

n.d. = not detected mg/kg = milligram per kilogram

¹ individual parameters see listing below

² REACH = Regulation (EG) No. 1907/2006, annex XVII, no. 72 for textiles, accessories and shoes

³ REACH = Regulation (EG) No. 1907/2006, annex XVII, no. 51

⁴ REACH = Regulation (EG) No. 1907/2006, annex XVII, no. 52 for plasticized material in toys and articles for babies, that can be put in the mouth by children.

Tested individual parameters:

Parameter	CAS-No.	DL	DL	DL	DL	DL
		L 6777 FL -22.1, -37.2, -41.1 [mg/kg]	L 6777 FL -7.3, -15.1, -35.2 [mg/kg]	L 6777 FL -17.1 [mg/kg]	L 6777 FL -42.1, -42.2, -42.3 [mg/kg]	L 6777 FL -17.2, -27.5, -31.3 [mg/kg]
Σ Phthalates						
Benzylbutyl phthalate (BBP)	85-68-7	2	10	10	20	20
Diisobutyl phthalate (DiBP)	84-69-5	2	10	10	20	20
Di-n-butyl phthalate (DBP)	84-74-2	3	10	10	20	20
Di-(2-ethylhexyl) phthalate (DEHP)	117-81-7	10	50	500	100	500
Diisodecyl phthalate (DiDP)	26761-40-0	50	250	250	500	500
Di-n-decyl phthalate (DnDP)	84-77-5	5	25	25	200	50
Diisononyl phthalate (DiNP)	28553-12-0	50	250	250	500	500
Di-n-nonyl phthalate (DnNP)	84-76-4	10	50	50	200	100
Di-n-octyl phthalate (DnOP)	117-84-0	10	50	50	100	100
Diethyl phthalate (DEP)	84-66-2	2	10	10	50	20
Dimethyl phthalate (DMP)	131-11-3	2	10	10	20	20
Bis-Methylglycol phthalate (DMEP)	117-82-8	10	50	50	100	100
Diisopentyl phthalate (DIPP)	605-50-5	20	100	100	100	200
Iso-/n-pentyl phthalate (nPiPP)	776297-69-9	20	100	100	100	200
Di-n-pentylphthalate (DPP)	131-18-0	20	100	100	200	200
Di-n-hexyl phthalate (DnHxP)	84-75-3	20	100	100	100	200
Di-(i/n-Hexyl-/Heptyl-/Octyl-) phthalate (DiC ₆ -C ₈ P)	71888-89-6	50	250	250	200	500
Di-n-propyl phthalate (DPrP)	131-16-8	10	50	50	100	100
Di-(4-methyl-2-pentyl)-phthalate (DMPP)	84-63-9	20	100	100	100	200
Dicyclohexyl phthalate (DCHP)	84-61-7	20	100	100	100	200
Diisooctyl phthalate	27554-26-3	20	100	100	200	200
Σ other plasticizers						
Cyclohexane-1,2-dicarboxic acid diisononyl ester (DINCH)	166412-78-8	50	250	250	500	500
Di-(2-ethylhexyl) terephthalate (DEHTP)	6422-86-2	10	50	50	200	500
Di-(2-ethylhexyl)-isophthalate (DEHiP)	137-89-3	5	25	25	200	50

DL = detection limit

3.12 PAH

Parameter (CAS-No.)	L 6777 FT – 22.6 Outsole black, trending boots Art.-No. sx2206309416110607 [mg/kg]	DL [mg/kg]	Requirements REACH [mg/kg]
Naphthalene (91-20-3)	0,2	0,1	-
Acenaphthalene (208-96-8)	0,2	0,1	-
Acenaphthene (83-32-9)	0,3	0,1	-
Fluorene (86-73-7)	0,5	0,1	-
Phenanthrene (85-01-8)	7,3	0,1	-
Anthracene (120-12-7)	1,5	0,1	-
Fluoranthene (206-44-0)	6,4	0,1	-
Pyrene (129-00-0)	17	0,1	-
Chrysene (218-01-9)	4,5	0,1	≤ 1
Benz(a)anthracene (56-55-3)	6,8	0,1	≤ 1
Benzo(b)fluoranthene (205-99-2)	2,8	0,1	≤ 1
Benzo(j)fluoranthene (205-82-3)	0,6	0,1	≤ 1
Benzo(k)fluoranthene (207-08-9)	0,8	0,1	≤ 1
Benzo(a)pyrene (50-32-8)	5,0	0,1	≤ 1
Benzo(e)pyrene (192-97-2)	4,8	0,1	≤ 1
Indeno(1,2,3-cd)pyrene (193-39-5)	1,7	0,1	-
Dibenzo(a,h)anthracene (53-70-3)	1,0	0,1	≤ 1
Benzo(g,h,i)perylene (191-24-2)	6,1	0,1	-
Sum PAH, rounded	68		-

DL = Detection Limit

n.d. = not detected

REACH = Regulation (EG) No. 1907/2006, annex XVII, no. 72 for textiles, accessories and shoes

REACH = Regulation (EG) No. 1907/2006, annex XVII, no. 50: Articles shall not be placed on the market for supply to the general public, if any of their rubber or plastic components that come into direct as well as prolonged or short-term repetitive contact with the human skin or the oral cavity, under normal or reasonably foreseeable conditions of use, contain more than 1 mg/kg (0,0001 % by weight of this component) of any of the listed PAHs: Chrysene, Benz(a)anthracene, Benzo(b)fluoranthene, Benzo(j)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Benzo(e)pyrene, Dibenzo(a,h)anthracene.

- End of the ANALYTICAL REPORT -

This examination is only valid in relation to the tested material. The analyses for pos. 2.7 to 2.9 have been assigned as sub-order to a qualified (e.g. accredited) test laboratory. Analyses for pos. 2.5 do not correspond to the accredited range. This report must not be published partially, only completely.

Bremen, 16.11.2022



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