

G-STAR RAW

REPORT ON PHTHALATES ELIMINATION POLICY
PART OF THE G-STAR ZERO DISCHARGE OF HAZARDOUS CHEMICALS COMMITMENT

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INTRODUCTION

G-Star is committed to eliminate industrial releases of hazardous chemicals into the environment, and set the target to reach zero discharge of hazardous chemicals (ZDHC) from all our products and production processes by 2020.

G-Star has taken several steps to reach this target. First of all, cooperation across the entire industry is essential. Therefore, G-Star joined the ZDHC Joint Roadmap; an initiative of the brands adidas Group, C&A, Esprit, G-Star Raw, GAP Inc., H&M, Inditex, Jack Wolfskin, Levi Strauss & Co., Limited Brands, Li-Ning, M&S, New Balance Athletic Shoe, Inc., NIKE, Inc., PUMA SE and PVH Corp. to collectively work towards zero discharge of hazardous chemicals by 2020. The roadmap includes specific actions and timelines to realise this shared commitment and to set the right standard of environmental performance for the global apparel and footwear industry. G-Star supports and puts effort in the group's activities to collectively find safe substitutions for hazardous chemicals used in the apparel industry and work towards zero discharge of hazardous chemicals by 2020. More information can be found on the [ZDHC Joint Roadmap website](#).

At the same time, we have published our individual action plan that lists all measures and actions necessary to reach our ZDHC commitment. The progress G-Star makes is published each year in a progress report.

In addition, we are a system partner of [bluesign technologies ag](#). We are committed to implement their bluesign® standard in our supply chain. This is an independent standard that guarantees that products are free of hazardous chemicals. By joining bluesign technologies ag we support our environmental goals and encourage suppliers in our entire textile production chain, from raw materials to textile manufacturers, to come to a healthy, safe and environmentally friendly production process.

The basis of our Responsible Supply Chain policy is the G-Star Supplier Code of Conduct (CoC) that clarifies and elevates the expectations we have of suppliers we work with and lays down the minimum Social and Environmental, Health & Safety (EHS) standards we expect each factory to meet.

The CoC refers to the [G-Star Restricted Substances List](#) (RSL) that is the basis for monitoring the use of chemicals in G-Star products, and follows strict national and international laws. We do not allow the use of chemicals in our products that can have a harmful effect on health or the environment. Our Textile Engineers and Chemical Specialists work together with suppliers on proper use of chemicals and compliance with the RSL. To check compliance of our products with the RSL, we perform risk assessments, auditing and testing of our products.

REPORT ON PHTHALATES ELIMINATION POLICY

In line with our Detox solution commitment and consistent with the precautionary principle and the potential intrinsic hazardousness of Phthalates, we acknowledge it is a priority to eliminate their use across our global supply chain. We understand that there are multiple supply chain pathways for potential Phthalates contamination (including chemical formulations) and will enhance both training and auditing of our supply chain in conjunction with other global brands. We will also ensure our suppliers have the latest information on Phthalates, highlighting where there is a risk that Phthalates may enter into the undocumented contamination of chemical supplier formulations.

In addition to these actions, G-Star has enforced its Phthalates ban by initiating an investigation into the compliance with this requirement in our supply chain from January till September 2013 and on-going. Through this report we share the findings of this investigation as well as actions taken to ensure Phthalates-free chemical formulations are utilised.

DESCRIPTION PHTHALATES¹

Phthalates are a group of chemicals commonly used to soften and increase the flexibility of plastic and vinyl. They can be used in screen print and heat transfer links. Phthalates are used in cosmetics and personal care products, including perfume, hair spray, soap, shampoo, nail polish and skin moisturizers. They are also used

¹ Textile Exchange, *Textile Exchange Chemical Snapshot*, Phthalates, Version 1 – July 2013.

in consumer products such as flexible plastic and polyvinyl chloride (PVC) products, food packaging and plastic wrap, and also in wood finishes, detergents, adhesives, lubricants, medical tubing, insecticides or building materials. They are incorporated as an additive that is blended in and their function is to modify the performance of the material. Since there is no chemical bond holding them in place, phthalates can migrate out of the intended material and become available to the user or environment.

Phthalates are associated with human health impacts such as hormone disrupting effects, reproductive issues and development of lungs, liver and kidneys. Some phthalates are bio accumulative in aquatic animals while others have been shown toxic to aquatic organisms.

LEGAL RESTRICTIONS²

Phthalates are restricted in their use in Canada, Denmark, Egypt, European Union, South Korea, Turkey, Taiwan and USA. The restrictions on individual Phthalates vary from country to country. The European Union directive 2005/84/EC covers the restriction of certain Phthalates (DEHP, DBP, BBP, DINP, DIDP, DNOP) only for toys and childcare articles.

G-Star has set a Phthalates ban in its RSL since July 2012 after determining that Phthalates-free alternatives are available on the market.

PHTHALATES INVESTIGATION

The phase out of Phthalates started at the same time as the APEO elimination in February 2012 by communicating to all our suppliers the need to source Phthalates-free preparations and indicate possible sources of Phthalates. We also provided our suppliers a positive list with PVC and Phthalates free inks and assisted in contact between our suppliers and the suppliers of Phthalates free products.

In our communications we also requested our suppliers to further communicate throughout their own supply chains and to their chemical suppliers the need to source Phthalates free products. This was followed up by our own internal RSL compliance process; an investigation into the Phthalates use of all our direct suppliers. As an example of a direct result, we found that our underwear packaging contained PVC and Phthalates and have replaced these for PVC/Phthalates free packaging.

In January 2013 G-Star further strengthened the testing programme on this specific chemical group by increasing the amount of product testing on Phthalates and conducting water testing³ to search for possible traces of the 11 priority chemicals⁴. These steps have been extended towards the material and wet processing suppliers. Simultaneously all our suppliers have received another communication request to indicate possible sources of chemicals by way of a chemical inventory and, where necessary, this was followed by a visit by our internal Chemical Specialists to support them with our Phthalates ban from garments and production processes.

During the supplier visits by our Chemical Specialists, tailor made advice is given based on the testing results and on the ground root cause investigations on chemicals used. An example of our ground root cause investigations can be found under Phthalates Case Study in this report.

In June 2013 another G-Star supplier round table was organised in China and Bangladesh to discuss our commitment to ZDHC as we have seen that by training, sharing our goal and cooperating intensively with our suppliers, we jointly reach the best results.

PHTHALATES CASE STUDY

On Subsport a case study can be found titled: "An alternative to PVC and phthalates in high density plastisol prints".

PVC and phthalates have been extensively used for plastisol prints in textile applications. This case story describes the substitution of PVC and phthalates by silicon prints.

² Textile Exchange, *Textile Exchange Chemical Snapshot*, Phthalates, Version 1 – July 2013.

³ Please visit the [G-Star website](#) to view the Water Discharge Report I.

⁴ The 11 priority hazardous chemical groups are : 1. Alkylphenols 2. Phthalates 3. Brominated and chlorinated flame retardants 4. Azo dyes 5. Organotin compounds 6. Perfluorinated chemicals 7. Chlorobenzenes 8. Chlorinated solvents 9. Chlorophenols 10. Short chain chlorinated paraffins 11. Heavy metals such as cadmium, lead, mercury and chromium (VI).

More case studies will follow via the Subsport website.

CONCLUSION

From the research we can conclude that our direct suppliers have been able to trace back the Phthalates sources, buy Phthalates-free inks from their supplier and phase out the use of this chemical in our products. The main source of the use of Phthalates was at the level of our direct suppliers using it in prints on garments.

For other actions towards our target to reach zero discharge of hazardous chemicals, we refer to our action plan and the ZDHC Joint Roadmap.