

Why we need a list of ingredients on consumer articles

Today, information on the chemical composition of articles is very scarce, making it difficult to understand which potentially hazardous chemicals are being released to the Baltic Sea. The lack of chemical ingredient lists also hinders the scientific assessment of human indoor exposure and forms a barrier to implementing a circular economy with non-toxic material cycles.

There is an urgent need for standardised methods and legal incentives to increase the transparency of chemicals in articles, as well as to increase access to this information for authorities, researchers, and consumers.

The continuous development of new products, changing consumption behaviours, and industry's adaptation to updated chemical regulations constantly changes the load and composition of chemical mixtures transferred from land to sea.

More and more consumer articles contain complex mixtures of chemicals that potentially end up in the Baltic Sea. Emissions of chemicals may occur throughout the entire life cycle of a consumer article, from the production to the waste phase, but in many cases, the dominant source is diffuse emissions during the use phase of articles in society. These chemicals reach the sea via, for instance, wastewater treatment plants and the air.



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POLICY RECOMMENDATIONS

- **At EU level**, continue the development of harmonised tools across sectors to track chemical composition of products throughout the supply chain, including imported and recycled articles.
- **Establish a system to disclose chemical content in articles** to authorities, researchers, and the general public in order to help identification of new environmental contaminants and to fulfil the consumers' right-to-know. To ensure that confidential business information stays protected, the data could, if needed, be made available in an aggregated way.
- **Introduce labelling of articles** containing substances that are identified by the EU as being of Very High Concern (SVHCs) in order to enable consumers to make informed choices.
- **Legally oblige suppliers and companies** to grant authorities responsible for the management of chemicals (e.g. ECHA) full access to chemical composition data of articles which, in the long run, will assist the circular economy and reduce emissions of hazardous chemicals to the environment. Non-disclosure agreements can be used to ensure confidentiality for businesses.
- **Strengthen international-level support** and involvement, such as in SAICM and the Alliance for High Ambition on chemicals and waste, striving towards harmonisation of chemical regulations.

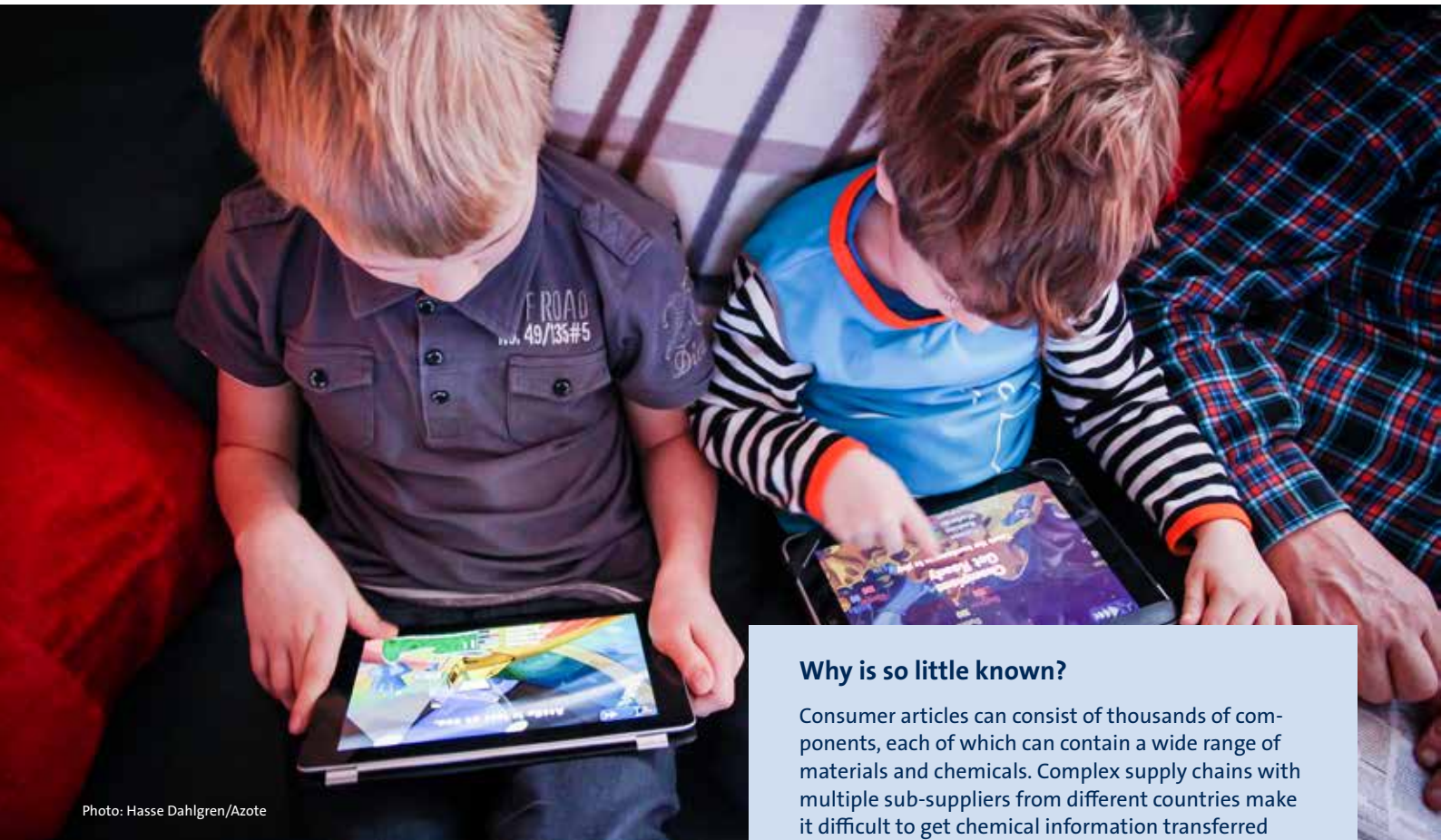


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NOT ENOUGH DATA ON CHEMICALS IN ARTICLES

It is reasonable to believe that we can use information on chemicals in everyday products to better track the chemical flows from society to the environment. However, a recent study from Stockholm University's Baltic Sea Centre found that there are currently not enough data on chemicals in articles to even answer questions such as: "Are we consuming more chemicals via everyday products in Europe now than ten years ago?" or "Is the threat posed by chemical contamination in the Baltic Sea increasing or decreasing?"

Chemical emissions during the consumer use phase of articles constitutes a particularly large knowledge gap. The chemical content of a vast range of products is confidential or unknown even to retailers. While the majority of these chemicals are likely harmless, there are also many that could pose a risk to human health and the environment.

WHY MORE INFORMATION IS ESSENTIAL

There are a number of reasons why we need better information on our consumption patterns and content of chemical products and articles:

To promote a non-toxic environment and a circular economy

With the EU striving towards a circular economy and to achieve a non-toxic environment, it is important that we know which articles or components contain chemicals that are potentially hazardous. The European Commission recognised this in their communication addressing the interface between chemical, product, and waste legislation.

Many substances that are banned or identified as being of Very High Concern (SVHCs) by the EU, continue to circulate in society

Why is so little known?

Consumer articles can consist of thousands of components, each of which can contain a wide range of materials and chemicals. Complex supply chains with multiple sub-suppliers from different countries make it difficult to get chemical information transferred along the entire supply chain.

In contrast to personal care products, most articles do not need to be accompanied by a list of ingredients. There are exceptions for toys, batteries, and certain electrical and electronic equipment for which specific regulation of chemical content exists, restricting the use of certain substances.

The introduction of REACH, the EU's chemical substances regulation, has forced actors along the entire supply chain to pass on information about hazardous chemicals in articles, including imported articles. However, this information is limited to substances of very high concern (SVHCs, as defined by REACH) at concentrations above 0.1 percent on a mass basis. Even for these substances, downstream professionals only need to be notified of the presence and name of these compounds.

There is no legal requirement for suppliers and manufacturers to pass along information regarding chemicals that are not one of the currently 191 substances defined as SVHC under REACH. Companies and retailers that do require chemical information from their suppliers most often acquire this indirectly in the form of a restricted substance list. This means that they provide the supplier with a list of chemicals that should not be in their products above certain concentrations and the supplier, in turn, has to ensure that this is the case.

As a result, many companies and retailers often do not know which chemicals their products contain. At most, they know which ones their products do not contain.

The need for companies to protect confidential business information is another issue that explains why so little is known about chemicals in articles.

via recycled materials. Currently the risk of identified hazardous substances occurring in recycled materials is high because many of them have been produced in large amounts for a very long time. Yet it is not often known in which products these chemicals have been used.

Providing information on chemical content to waste handling companies would make it possible to exclude materials or articles that contain hazardous substances from the recycling stream.

To facilitate preparedness for changes in legislation

The identification and regulation of chemicals as SVHCs is a slow process and currently only 191 chemicals have been listed as such. In contrast, the SIN list by Chemsec, the international chemical secretariat, which identifies chemicals as SVHCs using the same criteria as under REACH, currently contains 919 chemicals. The SIN list indicates that many more chemicals could be identified as substances of concern in the future and, thus, potentially be subject to further restrictions. Even more chemicals will be identified as SVHCs if the criteria to define SVHCs are updated in light of improved scientific understanding of chemical exposure and toxicity.

Today, when a new chemical is identified as SVHC under REACH, companies and retailers have to go to their supply chain to ask if that chemical is present in their articles. However, if companies had complete information on chemical content, they would be better prepared for new chemical regulations and it would help them to proactively phase out substances from their supply chains that are likely to be listed as new SVHCs.

To enable informed decision making

Voluntary actions to phase out substances that are not yet regulated at the EU level require knowledge about the presence of all chemicals in articles, i.e. not just those currently regulated. To

give an example, a recent study reported that carpets currently sold in Europe contain over 59 substances identified as potentially hazardous, including multiple mutagens, carcinogens, endocrine disruptors, and chemicals toxic for reproduction. Only ten of these substances were listed as SVHCs, meaning that they have to be reported to downstream professionals. Because retailers selling the carpets and professionals working with them have no legal right to be informed, they are likely not aware of the presence of the 49 remaining chemicals, making incentives to work proactively to phase out unwanted chemicals weak.

Under REACH Article 33, consumers are legally entitled to know if any SVHCs are present in an article of interest, but only if they specifically ask for the information and are willing to wait 45 days to get a reply. Few consumers use this right and even fewer are willing to wait that long.

Thus, companies and consumers that want to avoid potentially hazardous chemicals, such as those on the SIN list that are not yet regulated, have no possibility of doing so.

To develop chemical monitoring in the marine environment

Information on emissions from everyday articles constitutes an important piece of the puzzle to map substance flows to the marine environment. We need to know where and how chemicals are emitted in order to prioritise which chemicals to monitor and develop cost-efficient measures to reduce these emissions.

It is desirable to further develop methods to identify chemicals that have a high probability of being found in elevated levels in the environment and wildlife. An important piece of information currently lacking in such estimations is information on diffuse chemical emissions from articles, which can only be quantified if more information on chemical content in articles becomes available. Having such information could also assist in developing

More information will help define the chemical status of the Baltic Sea

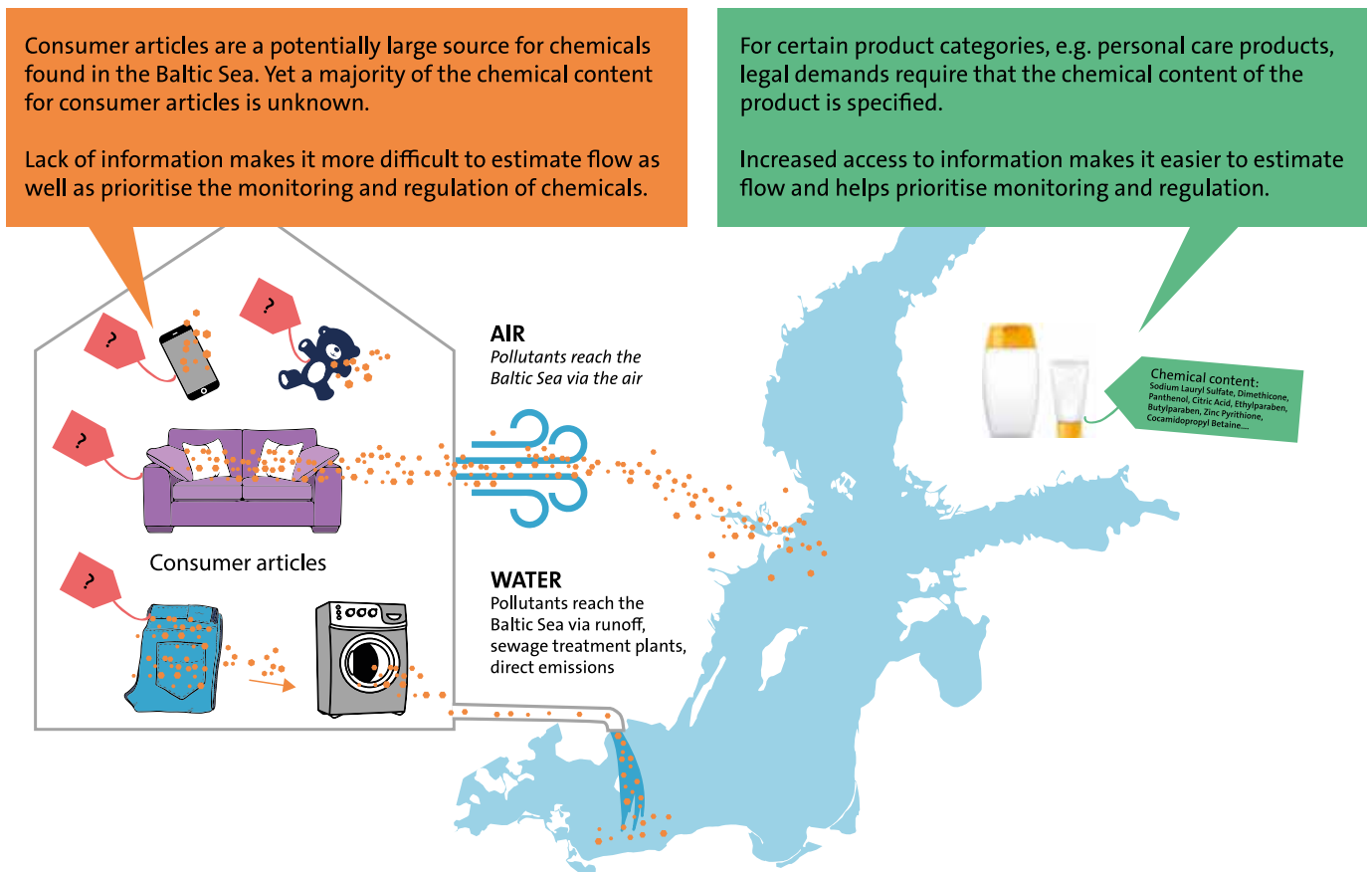




Photo: Hans Kautsky/Azote

programmes of measures and in updating the current list of 48 priority substances or substance groups under the Water and Marine Strategy Framework Directives (WFD and MSFD). The list of substances to monitor needs constant updates to include all substances that contribute significantly to any negative impact arising from the current chemical contamination of the marine ecosystem.

To increase transparency while safeguarding confidential business information

It is often argued that detailed information about the chemical composition of articles cannot be shared because of business confidentiality concerns, however, there are industry-wide initiatives that address this issue.

One such initiative is the international material data system (IMDS), which encompasses the entire supply chain for the automobile industry and allows suppliers to label up to 10 percent of the mass of their products as confidential as long as they do not

contain any restricted substances. Suppliers can also choose with which parties in the supply chain they share their information.

Another way of dealing with confidentiality is by working with third-party organisations that collect data from suppliers and then inform relevant stakeholders if the supplier complies with chemical regulations. Non-disclosure agreements between the supplier and the third party make sure that confidentiality is maintained.

To address global challenges

Even though REACH is sometimes referred to as the best chemical legislation in the world, the globalised market means that Europe faces difficulties in controlling chemicals that enter via imports. To a large extent, articles imported to the EU fall under the same legislation as those produced in the EU, with importers being responsible for the products complying with EU legislation. However, the European Commission has found that the control of imported goods is insufficient and that products imported from abroad have a higher occurrence of non-compliance with EU chemical regulation than products produced in the EU.

Products purchased privately directly from non-EU suppliers fall outside of EU legislation because the consumers themselves are considered to be the importers. It is therefore possible that such products contain chemicals that have been restricted for use in the EU.

The importance of better information about chemicals in consumer products is acknowledged at international level. The global Strategic Approach to International Chemicals Management (SAICM), which has goals set for 2020, cites increased transparency of chemicals in products as one of eight major emerging policy issues. Additionally, Sweden launched the Alliance for High Ambition on chemicals and waste in July 2018 with the aim of reaching global agreement on sustainable chemical management.

FURTHER READING

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Kogg B, Thidell Å. Chemicals in products: An overview of systems for providing information regarding chemicals in products and of stakeholders' needs for such information, 2010.

Goldenman G, Lietzmann J, Meura L, Camboni M, Reihlen A, Bakker J. Study for the strategy for a non-toxic environment of the 7th Environment Action Programme, European Commission, 2017.

BALTIC EYE – BRIDGING THE GAP BETWEEN SCIENCE AND POLICY

This policy brief is produced by Baltic Eye, a part of the Baltic Sea Centre at Stockholm University.

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We analyse and synthesise scientific research on the Baltic Sea and communicate it to stakeholders in the decision-making process.

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