



REPORT 2021

Challenges to consumers in choosing cleaning products

Six findings of the NordQual project



A cooperation between Nordic consumer organisations

KULUTTAJA

**SK SVERIGES
KONSUMENTER**

**Forbrugerrådet
Tænk**

KULUTTAJALIITTO
KONSUMENTFÖRBUNDET

TABLE OF CONTENTS

Abstract	3
About the project	4
Challenge 1: Dual quality	6
Challenge 2: Poor performance	10
Challenge 3: Problematic chemicals	11
Challenge 4: Inaccessible ingredient information	15
Challenge 5: Greenwashing and misleading claims	17
Challenge 6: Hazard information and warnings	19
Conclusions and recommendations	21



ABSTRACT

The NordQual project, financed by the EU Consumer Programme, is a one-year cooperation between consumer organizations in Denmark, Finland, and Sweden to evaluate household cleaners and identify potentially misleading marketing strategies.

Based on product testing and desk research on 166 household cleaning products, the project identified the following challenges to consumers in choosing effective products that minimize impacts to health and the environment:

1. **Dual quality and market quality** – product quality, contents, and availability can vary between Denmark, Finland, and Sweden
2. **Poor performance** – some products do not do the cleaning job consumers expect
3. **Problematic chemicals** – some ingredients can be harmful to health or the environment
4. **Inaccessible ingredient information** – consumers can have difficulty accessing ingredients information due to many companies out of compliance with EU detergent regulation
5. **Greenwashing and misleading claims** – unsubstantiated claims can mislead consumers
6. **Hazard information and warnings** – important consumer information is sometimes missing or hard to read

The purpose of this report is to:

- Help **consumers** by informing **consumer organizations, environmental organizations**, and other **advocacy groups** how consumers can avoid potential risks where legislation is lagging and companies are not taking responsibility (e.g., by buying products with credible labels, and not being tricked by empty greenwashing), and opportunities for strengthening **labeling schemes**.
- Provide **industry** recommendations for what they should improve (ingredients, labeling, packaging, offering healthier and better-quality products in all markets)
- Inform **enforcement agencies** about where there is a lack of compliance in protecting consumers (e.g., ingredient lists on websites, illegible labels, misleading claims)
- **Inform policymakers** (EU and country level) where the legislation is not adequately protecting consumers (e.g., problematic chemicals, illegible labels, misleading claims)

ABOUT THE NORDQUAL PROJECT



Background

Nordic Consumer Testing of Dual Quality and Misleading Branding Strategies, also called the NordQual project, runs September 2020 to August 2021. This project was initiated in response to the European Commission's "Call for proposals for action grants for limiting dual quality and strengthening consumer organisations in the EU." Dual quality, a practice where companies sell identical-looking products with different contents and quality in different countries, was documented in a European Commission study in 2019.¹

Monitoring dual quality creates an opportunity for collaboration between consumer organizations. Therefore, developing test methods and best practices to strengthen consumer organizations' ability to cooperate to identify and counteract dual quality and other misleading branding strategies was central to the call for proposals.

The following is a brief description of the NordQual project's goals, team, methods, and results.

Goals

- Test and compare products bought in Finland, Sweden and Denmark. Test three different categories of cleaning products to see how well they work.
- Examine marketing strategies on the packaging to identify possible misleading information.
- Spread information on the test results. The more information consumers have about the products in the stores, the better choices can be made.
- Facilitate the exchange of ideas and strengthen consumer organisations through the collaboration.
- Inform agencies, politicians and other relevant stakeholders in all three countries of the project's results and recommendations.

Team

The project partners are the **Danish Consumer Council**, **Kulutajja-magazine** in Finland, the **Consumers Union of Finland**, and the **Swedish Consumers' Association**. The project team consists of a project leader, test manager, and a communicator from the Swedish Consumers' Association, test managers from the Danish Consumer Council and Kulutajja-magazine, and a policy specialist at the Consumers Union of Finland. The project received financing from the **EU Consumer Programme**.

Method

The NordQual team discussed different household product categories that could be interesting to test under this project. In selection of the product types, relevance to consumers, likelihood of dual quality or misleading marketing, and likelihood of exposure to problematic chemicals went into consideration. Dual quality was suspected in laundry detergents, so the team was interested to test those. Toilet cleaners and hand dishwashing detergents are other broad categories with overlapping products in the market where the team could test for dual quality.

The test managers started each testing cycle by doing market research on the product category in their own country. The project team then had joint meetings to discuss and agree on which products to test. In selecting the products for the test in each market, the team preferentially selected overlapping products where there was the possibility to investigate for dual quality. Other major products for each country were also selected to ensure that the test represented the market well.

For each product category, the team contacted the test lab to find out which tests were relevant and agreed on a test program. The test managers in each country bought the products from local stores and shipped them to the lab. Buying from local stores ensures that the test products are the same products available to consumers in those countries.

The test managers also shipped products to the project leader who used the information from the packages to do desk research on ingredients, environmental claims, hazard warnings, and package recycled content and recyclability. Each ingredient was searched on the European Chemicals Agency (ECHA) database, and other databases such as Cosmetics Ingredients & Substances (Cosing), to document hazards and regulations relevant to each chemical.

The team used the results from the lab and the desk research to develop an evaluation scheme to rate the products. The results were published in each country's consumer magazine, communicated to media outlets, and disseminated via their websites and social media channels. The product evaluations were also used to draw conclusions on dual quality and other policy-related issues discussed in this report.

Results

In total, the team evaluated 166 household products: toilet cleaners, hand dishwashing detergents, and color laundry detergents from Denmark, Finland, and Sweden. The results of each test can be found on the NordQual homepage: <https://www.sverigeskonsumenter.se/vara-projekt/nordqual/>

The results that stood out were related to market differences between what products are available in the three countries, ineffective products, potentially harmful chemicals, and information deficiencies.

In particular, the project uncovered the following challenges to consumers in choosing cleaning products to be discussed in this report:

1. Dual quality and market quality
2. Poor performance
3. Problematic chemicals
4. Inaccessible ingredient information
5. Greenwashing and misleading claims
6. Hazard information and warnings

These challenges are presented in the following sections or “factsheets,” which outline the problems and proposed solutions based on the evaluation of household cleaners during the NordQual project. The project’s recommendations for various stakeholders are summarized in the conclusion of the report.

1. DUAL QUALITY AND MARKET QUALITY

The problem

In seven out of thirty cases where similar products were found in more than one country, companies chose to offer a different lower quality product in some markets than the higher quality product they sold in other markets. For other products, the perfume-free or ecolabeled version of a product was not available in some countries. While not as misleading as dual quality, i.e., quality variations in identical-looking products, these intentional marketing choices by companies can have similar negative impacts on consumers’ ability to buy better products.

Furthermore, the project found market-level differences in the availability of environmentally labeled products, nonallergenic products, and accessibility to ingredients information that could adversely impact consumers in some markets.

However, the results showed little or no evidence of dual quality between identical-looking products in the tests of products sold in the major supermarket chains in Denmark, Finland, and Sweden.

Proposed solution

Companies should maintain the same quality of branded products regardless of where and under what name they are sold. Differences in content should be based on objective reasons such as local legislation, sourcing of local ingredients, documented consumer preferences, and local conditions (e.g., a relevant adaption to water hardness).

However, the formulas should not contain more problematic chemicals in some countries than in others – only the best formula should be sold in all markets. If a product meets ecolabel or allergy label criteria in one market, it should meet the same criteria in other markets (regardless of whether the fee to use the label is paid in all markets).

Why that can work

Many manufacturers show they can produce effective and safe products. Twelve of thirty products that are sold in more than one country in the test were found to be identical with no dual quality. If products in the three markets can be identical, the most effective and safest products can be offered in all markets.

Who can act

- **Companies** should maintain the same quality of branded products regardless of where they are sold. Exceptions should be based on objective reasons such as local legislation, sourcing of local ingredients, documented consumer preferences, local conditions (e.g., water hardness).
- **Companies** that offer products that meet ecolabel or allergy label criteria in some markets should offer the same formula in all the markets where they sell those types of products.
- While dual quality was not found in the products tested, **the EU** could support future dual quality tests that include parallel and direct importing and/or countries beyond the Nordic region where dual quality is more suspected.

The details

Of the 166 products tested, thirty products were found in more than one country. The lab test results, ingredients and marketing information was compared between these products to investigate for dual quality. The following scale was used to classify the similarities or differences between products:

Brand Integrity Scale – Relationship between product pairs between countries

Level	Description	Explanation	Occurrence
4	Identical or nearly identical	Identical packaging + identical ingredients, identical or minor differences in performance.	12
3	Production variance	Identical packaging + identical ingredients, differences in performance.	6
2	Different versions	Same brand/name, different packaging, different ingredients, possible performance differences. Can be a temporary phenomenon due to a new product release or an intentional adjustment to local needs (e.g., water hardness.	5
1	Quality differences on equivalent products	Same retailer or manufacturer serving same market segment (e.g, low cost or premium) in different countries with different products that have quality differences.	7
0	Dual quality	Identical packaging + different ingredients and/or major difference in performance that can be misleading.	0

The team found no products that would be considered “dual quality” in a strict sense (brand integrity level 0).

However, in seven cases, manufactures sold different products in different countries that had quality variances in performance or problematic chemicals instead of just selling the higher quality product in all markets (level 1).

For example, Lidl’s W5 Maxx Power and W5 Eco Lemon toilet cleaners had different formulas, packaging and EAN numbers in Sweden than in those sold in Denmark and Finland. The Swedish versions had poorer cleaning performance. A representative from Lidl explained: “We have partly different products in different countries and at present none of the products are planned to be replaced or replaced by others.”

In another example, Unilever sells laundry detergents with similar packaging but different names in the three countries. The project tested Via from Sweden, Omo and Bioluvil from Finland, and Biotex from Denmark. Of these, Via was the only one of these four products that does not contain environmentally problematic LAS surfactants and has an EU Ecolabel. Furthermore, Via had the best performance in removing stains in both soft and hard water, whereas Biotex performed worse on all but make-up stains. Even though the Danish and Finnish products contained LAS, only Danish Biotex had an environmental warning on the package. Despite that these are different products, should there be such a quality difference in what one company sells in the three countries?

Five products had different versions in different countries (level 2). For example, Coop Ånglamark toilet cleaners in Sweden and Denmark had different ingredients and performance results. The Coop Sweden product cleaned urine-stain better while Denmark’s product removed limescale better. The product formulas seem to be addressing the differences in water hardness and cleaning needs in the two markets.

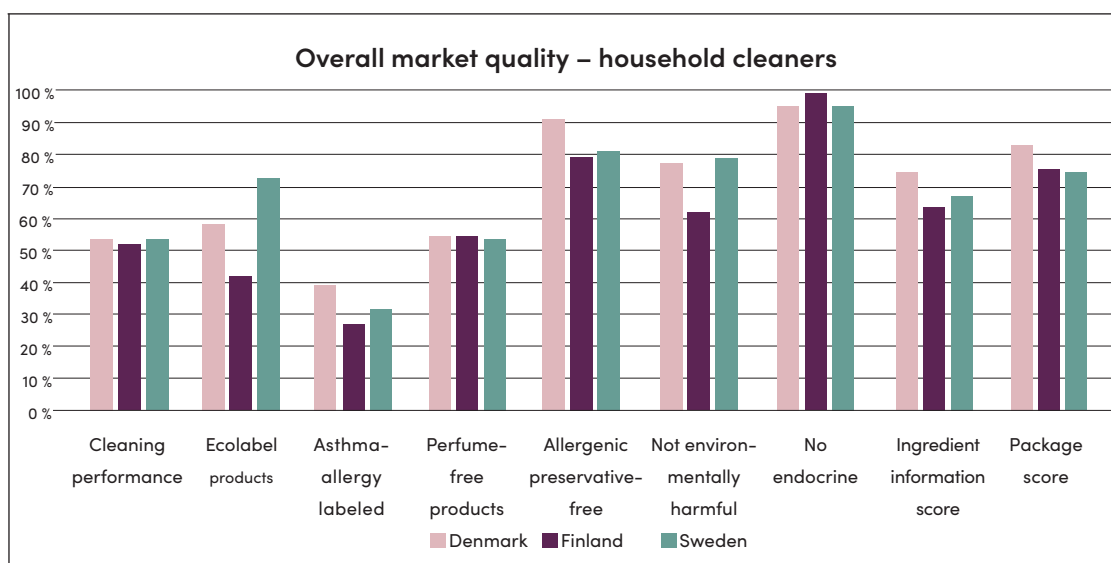
In addition, six products appeared the same and listed the same ingredients but showed differences in the test results suggesting production variations between countries (level 3). How products are transported, stored, and how old they are can also affect cleaning performance of identical products. However, another possibility is the ingredients list online was outdated or incorrect, so that the products actually had different formulas (and the products have therefore “different versions”/level 2 or even “dual quality”/level 0).

Finally, twelve products looked identical, had the same ingredients, and performed equally well (level 4). These products have highest brand integrity across the countries and are clearly not examples of dual quality.

The team also noticed the occurrence of six “similar” products that had similar ingredients and performance but different names in the different countries. One example is the Lumme in Finland and Grumme in Sweden lines of cleaning products (laundry detergents were tested in this project), in which case the names seem to work better with the local

languages. Another example is hand dishwashing detergents Vel in Denmark versus Ajax in Sweden, which are both established brand names that the manufacturer, Colgate-Palmolive, has used in the respective markets for decades. These examples were not considered problematic since the companies sell the same quality products in each market.

Apart from specific product-to-product comparisons, the project investigated overall market differences between product availability and characteristics on the country level. The "overall market quality" table summarizes country level differences across the 166 products tested.



As shown in the first bar graph, the products' average cleaning performance was similar in Denmark, Finland, and Sweden. However, one can see other differences between the markets. The Danish products had fewest products with allergens and provided best access to ingredient information. Danish product packaging also received highest scores for recycled content and recyclability. Finnish products had more environmentally problematic chemicals and, correspondingly, fewer ecolabels, but also had fewest suspected endocrine disruptors. The Swedish products had the most ecolabels (i.e., Nordic Swan, EU Ecolabel, or Bra Miljöval).

In some cases, the absence of a product contributes to market differences and impacts consumers' choice. For example, S-Group stores in Finland, which are similar to Coop stores in Sweden and Denmark, lack an equivalent to Änglamark, which is Coop Sweden and Denmark's green range of products that showed higher quality in the tests than other Coop products.

Finally, products imported from other countries by stores or customers (parallel or direct imports) can bypass local laws and may be a source of dual quality that has not been investigated in this project.

2. POOR PERFORMANCE

The problem

Laboratory test results showed that some products do not work. For example, washing with water was as effective for removing stains as two of the laundry products tested. Several of the toilet cleaners removed so little stain from the bowl that you could skip them altogether and just use the toilet brush.

Apart from fooling customers, these products carry an environmental burden from their packaging, contents, and transport that is completely avoidable. Environmentally marketed poor performers can also contribute to a general reputation of “green” products being of inferior quality and therefore avoided by some consumers.

Proposed solution

Products that trick consumers out of money without performing should be significantly improved or removed from the market.

Why that can work

Most products tested in this project were effective for daily cleaning tasks. Nordic Swan and EU Ecolabel have cleaning performance criteria to ensure products work “as well as or better than a comparable reference product”² and meet the ecolabel’s environmental criteria. Meeting or exceeding minimum performance standards is important because products that do not work cause avoidable environmental damage.

Who can act

- **Consumers and consumer organizations** can question companies that have poor performing products on the market. Consumer organizations can provide information and launch campaigns to raise consumer awareness of ineffective products.
- **Companies** should test cleaning performance of their products by a professional laboratory if they do not have that capacity within the company.
- **Ecolabels** should review and improve their performance criteria. For example, Nordic Swan and EU Ecolabel toilet cleaners in the project often underperformed standard toilet cleaners on removing limescale.
- **The EU** could update the detergents regulation with performance criteria so that companies could be held accountable for product performance.

The details

The most blatant examples of poor performance came from the laundry test. The laboratory ran some laundry tests with only water and no detergent. Two “green” alternative laundry products, EcoEgg and Care by Nature soapberries, performed no better than water. A third product, Mulieres, cleaned just a little better than water.

These products were marketed as environmentally friendly according to their own claims on the package but lacked credible ecolabels. In light of the products’ poor performance, their

claims are misleading. Furthermore, detergents that do not remove stains can reduce the useful life of clothes. Increasing the need to replace clothes is environmentally damaging.

For toilet cleaners, seventeen of forty-nine products got the bottom score for cleaning urine-based stain. And only twelve of the forty-nine products were effective against limescale, which is a problem associated with hard water. The poor performing products were literally money (and chemicals) flushed down the toilet!

Hard water in Denmark can lead to stubborn limescale deposits. Of the nine ecolabeled products tested from Denmark only two removed limescale compared to four of the eight products without ecolabels. If limescale removal performance criteria for Nordic Swan and EU Ecolabel were improved, the ecolabel products could provide additional value to consumers.

Hand dishwashing detergents varied significantly in foaming based on recommended dosage, but much less in degreasing. While foaming can be a sign that the product is working, some products intentionally use low-foaming surfactants and still clean well. Some consumers prefer foam or use foam as guidance on when to add more soap, while other consumers prefer less foam.

While all products tested degreased satisfactorily, the recommended dosage for some products, like Finland's Perfekt+ Astianpesuaine Pirteä Omena, was three to four times higher than other products' dosage to do the same dishwashing job.

3. PROBLEMATIC CHEMICALS

The problem

Despite that problematic chemicals are not needed to achieve good cleaning results, many products contain chemicals that can be problematic to health (e.g., allergenic, suspected endocrine disrupting) or to the environment (e.g., toxic to aquatic organisms). Many of these ingredients have substitutes which are less harmful to health or the environment. Other chemicals are unnecessary to cleaning such as perfumes and colorants.

Proposed solution

Companies can choose good quality ingredients that are less harmful to health and the environment. To achieve this companies can follow the criteria for the Nordic Swan and Asthma Allergy Nordic labels and in general avoid problematic chemicals.

Furthermore, information should be easily available to consumers to alert them to problematic chemicals in products, including listing all the ingredients on the package label. Increased transparency and consumer awareness could motivate companies to phase out harmful chemicals more rapidly.

Finally, stricter legislation to regulate use of problematic chemicals is of ultimate importance in protectioning consumers and the environment.

Why that can work

In the tests, 45 products meeting the Nordic Swan or EU Ecolabel label criteria achieved good cleaning results (i.e., over average in that category) and have formulas that are less harmful to health and the environment. Furthermore, these products do not need to cost more as demonstrated by some of the test winners.

While consumers should have access to the full ingredients list, most consumers do not know which ingredients are problematic. Increased consumer awareness of unwanted ingredients, whether through consumer campaigns or information in a usable format, provides incentive for companies to use less problematic ingredients.

Who can act

- **EU** can more strictly regulate problematic chemicals in household cleaners including banning “Substances of Very High Concern” and other problematic chemicals as described in the EU’s new Chemical Strategy. In addition, the EU should introduce or reinforce provisions to take combination effects of exposure into account. This should be addressed in the upcoming revision of the detergents regulation.
- **AISE’s voluntary programs** should include a phasing out of problematic chemicals.
- **Retailers and manufacturers** should phase out problematic chemicals, require that products meet the Nordic Swan or EU Ecolabel criteria, and the Asthma Allergy label criteria.
- **The EU Ecolabel** should join Nordic Swan in making a full restriction on the allergenic preservative methylisothiazolione due to health and environmental impacts. Given that other isothiazolinones have similar properties, all environmental labels and allergy labels should fully ban isothiazolinones.
- **Consumer organizations** should help consumers avoid problematic chemicals in their household products through awareness raising information and campaigns.

The details

The European Chemicals Agency (ECHA) database³ and other online sources were searched to determine hazards associated with every ingredient in the 166 products. In total, the hazards and regulatory status of 221 chemicals were documented. Special attention was paid to harmonized classifications, where the hazards have been agreed by EU.

To get a broader perspective on the chemicals, the team consulted information from the European Commission’s Scientific Committee on Consumer Safety (SCCS) and Scientific Committee on Health, Environmental and Emerging Risks (SCHEER), the Danish Environmental Protection Agency (EPA), Danish and Swedish Chemical Agencies, EU Ecolabel, Nordic Swan, Asthma Allergy Nordic, Bra Miljöval, BEUC and other consumer organizations, AISE/Cleanright, and company websites.

Based on this research of the 221 chemicals, the team focused the chemical evaluation of the products on 36 suspected or known allergens; 10 chemicals that are problematic to health as suspected or known endocrine disruptors, toxic to reproduction, or other health risks; and 18 chemicals that are problematic to the environment usually due to toxicity to aquatic life with long-term effects. Several of the chemicals appear in more than one category.

While the exposure to chemicals when using cleaning products according to the instructions is not generally problematic alone, it contributes to the body's total exposure to a combination of problematic chemicals – the cocktail effect – which can aggravate risk for health impacts such as allergies or hormonal interference.⁴ Secondly, there can be a risk that some chemicals end up in the environment depending on how the wastewater is handled.

The team also took into consideration how chemicals are used in products and what alternatives exist. Many problematic chemicals highlighted in this project are avoidable, having little to no effect on the cleaning performance of the product (e.g., perfumes and colorants). Other ingredients, like the allergenic preservatives or nonbiodegradable surfactants, can be replaced with less harmful alternatives.

While voluntary measures like ecolabeling can help, the ultimate importance of legislation to regulate problematic chemicals is typified by Lidl's response when asked why they have allergenic preservatives, suspected endocrine disruptors, and a substance of very high concern (SVHC) in their Formil Color laundry detergent: "the tested product complies with all rules and guidelines in Denmark."

The following is a list of ingredients categorized as allergens, harmful to health, problematic in the environment, and generally avoidable.

Allergens (known and suspected)

- **Allergenic preservatives** – preservatives are used to extend the life of the product. Some preservatives can cause a skin allergy, including DMDM hydantoin and isothiazolinones⁵ such as methylisothiazolinone, whereas other preservatives are considered safer. The allergenic preservatives can be avoided by choosing a product with the Asthma Allergy Nordic label. They are also either banned or restricted to low concentrations in Nordic Swan and EU Ecolabel products.
- **Perfumes** – can cause a skin allergy. Limonene, geraniol, and linalool are just some of the sensitizing fragrances that can cause skin allergy.⁶ For those who wish to avoid perfumes, there are many perfume-free products available including all those with the Asthma Allergy Nordic label.

Harmful to Health

- **Suspected Endocrine Disruptors** – these chemicals have shown potential to disrupt the hormone system and are under further investigation in the EU.⁷ Some suspected endocrine disruptors - benzyl salicylate and butylphenyl methylpropional – were found in some hand dishwashing and laundry detergents. Butylphenyl methylpropional is also suspected of damaging fertility and the unborn child. Suspected endocrine disruptors are forbidden in Nordic Swan and EU Ecolabel products.
- **Boron compounds** – boric acid is identified by the EU as a substance of very high concern (SVHC) and is toxic for reproduction. Other borates form boric acid in contact with water.⁸ Therefore, the following ingredients found in some laundry detergents are considered problematic: 2-aminoethanol, monoester with boric acid; boric acid; sodium borate (also called borax); and sodium metaborate, anhydrous.

Problematic in the environment

- **Environmentally problematic substances** can be harmful to aquatic life with long-lasting effects if they are released into the environment. Nordic Swan and EU Ecolabels forbid or restrict many environmentally problematic substances including EDTA, sulfamidic acid, limonene, methylisothiazolinone, and others listed below.
- **Sodium hypochlorite** – is on the Danish EPA's List of Unwanted Substances.⁹ Sodium hypochlorite is problematic to the environment and has a potential to form toxic compounds in contact with organic material. Furthermore, if sodium hypochlorite is mixed with acid (for example an acidic cleaner) a toxic chlorine gas can form, raising concern for accidents and health risks.
- **Linear alkylbenzene sulfonic acids (LAS)** are anionic surfactants that are not readily degradable in anaerobic conditions leading to high concentrations in sewage sludge. LAS is also toxic to aquatic organisms. The Danish EPA included LAS on its List of Undesirable Substances in 2004.¹⁰ In 2020, SCHEER also expressed environmental concerns in their opinion on LAS.¹¹ LAS found in some laundry detergents include: sodium dodecylbenzenesulfonate, dodecylbenzene sulfonic acid, MEA dodecylbenzenesulfonate and TEA dodecylbenzenesulfonate.

Generally avoidable chemicals

- **Optical brighteners/whiteners** – the only optical brightener found in the laundry detergent test was disodium distyrylbiphenyl disulfonate, which is under assessment as persistent, bioaccumulative and toxic.
- **Colorants** – are often added to products to make the detergent in the bottle a certain color but serve no purpose in cleaning. Some colorants can be harmful in the environment.

4. INACCESSIBLE INGREDIENT INFORMATION

The problem

Customers lack access to ingredient information that can affect purchasing decisions. Current EU detergents legislation requires that certain ingredients be listed on the package.¹² Other ingredients, if not listed on the package, must be provided in a complete ingredients list online.

However, companies were out of compliance with this legislation or the information was not easy to find online. Based on the project, one could assume that the online information is unlikely to be accessible to a consumer trying to make a purchasing decision in about 35 percent of cases.

A further problem is that the EU regulation stipulating which ingredients be listed on the package does not include many problematic chemicals. For instance, several detergents contained borates, which are not required to be listed on the package despite that the EU classifies them as substances of very high concern (SVHC).

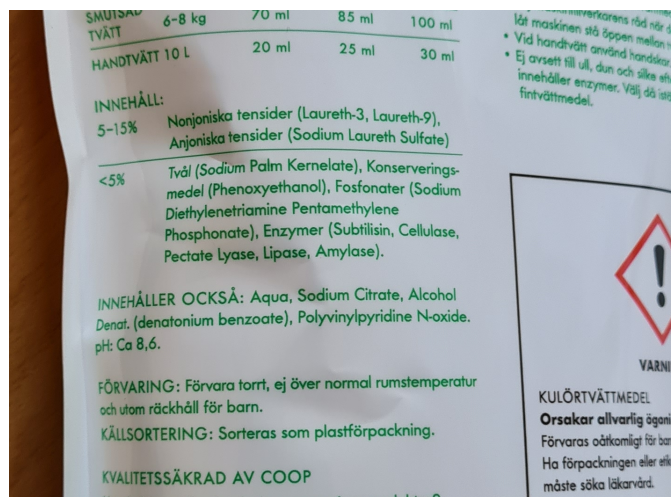
Proposed solution

Companies should provide the full ingredients list on the package. Furthermore, companies should provide the ingredients list online website given the increasing prevalence of online shopping.

Furthermore, the EU could develop a website for all detergent ingredients lists that companies would be responsible for updating or develop a simple way for consumers to access the ingredients lists linked to products' UFI code. In either case, the advantage for consumers would be that ingredients lists would be more easily accessible. Having the digital infrastructure in place might also help companies comply with the law.

Why that can work

Sixteen of the 166 products in the tests, about 10 percent of the total, provided the full ingredients list on the package and online.



Good example: Äglamark with all ingredients listed on the package.

Who can act

- **Enforcement agencies** should enforce the current legislation, EU regulation 648/2004, that requires companies to provide the full ingredient list on their website.
- **EU** should change the detergents legislation to require all ingredients to be listed on the package.
- **EU** should develop a website for all detergent ingredients lists to be kept updated by companies or develop a simple way for consumers to access the ingredients lists linked to products' UFI code.
- **Nordic Swan, EU Ecolabel, Bra Miljöval, Asthma Allergy Nordic, AISE's voluntary programs and others** should require all ingredients to be listed on the package.
- **Retailers** should require that all ingredients be listed on their own private label products.
- **Companies** should provide all the ingredients on their packages.

The details

EU regulation 648/2004 on detergents (Annex VII D) declares: "Manufacturers shall make available on a website the ingredient data sheet... Access to the website shall not be subject to any restriction or condition and the content of the website shall be kept up to date." ¹³

However, companies were out of compliance with this legislation for 27 of 166 products in the tests – meaning that the full ingredients list was not on the package, and that it was inaccessible, incomplete, or outdated online. In an additional 33 cases it was somewhat difficult to find online (hard to navigate to right page, hard to find the right product, database that doesn't work on certain browsers, etc.). Therefore, the online information is unlikely to be accessible to a consumer in 60 of 166 or about 35 percent of cases.

Additionally, when the team could not find the ingredients lists online and requested them from customer service, it often required more than one email to get the right thing – instead the company often sent the product safety sheet (also called Material Safety Data Sheet) or a copy of what is already printed on the label (which is incomplete). Occasionally it took a few weeks to get the ingredients list from the producer. For five products the companies never replied to repeated requests.

This result is relevant as the European Commission is working on introducing such digital labelling in more product sectors. Therefore, they need to be aware of these compliance problems.

On the positive side, some companies do provide all the ingredients both on the product label and online. This "best practice" was found in 16 cases (10 percent) and is often associated with having the Asthma Allergy Nordic label (but not always).

Several companies or brands including A+, Unilever, Colgate, Lidl and Coop list all the ingredients on the bottle and website for only some their brands and product versions, but not others (e.g., Vel Pure & Clear 0% dish liquid but not Vel Garden Fruits). If they can list the ingredients for one product, why not list them for all?

In addition, the current legislation should be enforced. Article 18 of the detergents regulation addresses penalties: “Member States shall lay down the rules on penalties applicable to infringements of this Regulation and shall take all measures necessary to ensure that they are implemented. This may also include appropriate measures allowing the competent authorities of the Member States to prevent the making available on the market of detergents or surfactants for detergents that fail to comply with this Regulation. The penalties provided for must be effective, proportionate and dissuasive...”¹⁴

Given the lack of compliance with the regulation in the test countries (Denmark, Finland and Sweden), the enforcement does not seem to be functioning well.

5. GREENWASHING AND MISLEADING CLAIMS

The problem

Misleading or unsubstantiated claims about products’ environmental impact confuse and distract customers from making well-informed choices. Some products link to their own schemes, green factories, etc. – and it can be difficult for the consumers to assess the validity of the claims.

Other products are marketed as “green” but perform so poorly that consumers and the environment would be better off not using them at all, as previously described under the “Poor Performance” section.



Proposed solutions

Independently substantiated ecolabels such as Nordic Swan, EU Ecolabel and Bra Miljöval have transparent criteria for cleaning products’ ingredients, performance, and packaging. Consumers would benefit from understanding the overall value of these labels versus brands’ self-made claims on the packaging.

Furthermore, companies should avoid misleading consumers by:

- **Removing words** like “natural,” “environmentally-friendly,” and “green” on the package if not precisely substantiated
- **Adding another disclaimer** that fragrances can be allergenic and harmful to the environment regardless of how they are produced, as long as claiming “natural” fragrances is allowed
- **Deleting claims** that are already required under the law, for example, regarding biodegradability or the absence of phosphates
- **Providing the source of raw material** if claiming the ingredients or the package are bio-based or “of botanical origin”, and state which certification scheme if the raw material is certified sustainably produced
- **Specifying what percent is recycled** if claiming the package is made from recycled materials

Why that can work

Consumers do not need to choose between effective cleaners or more healthy cleaners. They also do not need to shop in specialty shops or pay high premiums for “green” products. Indeed, 95 of 166 products in the tests had a credible ecolabel (i.e, Nordic Swan, EU Ecolabel, or Bra Miljöval), and 54 products had an Asthma Allergy Nordic label.

Who can act

- **Companies** should remove unsubstantiated environmental or health claims from their packages and instead communicate these qualities through credible eco- and allergy labels.
- **Companies** that want to provide more environmentally friendly products should ensure that the products work well.
- **EU** can consider better regulation of misleading or unsubstantiated marketing claims and packaging designs that give the impression of a healthier or environmentally friendly product.
- **Consumer organizations** should inform consumers about the difference between credible labeling schemes versus empty greenwashing and marketing claims.

The details

While the Nordic Swan¹⁵, EU Ecolabel¹⁶, Bra Miljöval¹⁷, and Asthma Allergy Nordic¹⁸ labels have clear criteria for certification, other labels are somewhat less transparent and can confuse consumers.¹⁹

For example, the AISE Voluntary Sustainability Initiative²⁰ is a company-level membership and does not ensure the environmental attributes of the individual products with those labels. While AISE has a product-level label, none of the products tested in this project have that label. Furthermore, the criteria for that label were not accessible online.

The EcoCert label²¹ certifies “natural” ingredients and promotes organic ingredients but lacks robust performance and environmental protection criteria for cleaning products compared to Nordic Swan and EU Ecolabel.

For packaging, some bottles claimed to have recycled content but not how much, which could mean it is a rather small percentage. Some bottles are made of bio-based plastic which does not necessarily make them more environmentally friendly. To address this, ecolabels have policies regarding bio-based materials. For example, Bra Miljöval does not accept plastic made from palm oil or soybeans, and other bio-based feedstocks must have a credible sustainability certification.

Furthermore, statements on some products such as “Powered by plants” and “Made in our clean green factory” are quite vague and seem to be more about marketing than environmental attributes.

Regarding health aspects, a common phrase on the bottles is “dermatologist tested.” However, it is a meaningless marketing statement as there are no strict requirements for that phrase.

Another example, Vel Ultra Ekstra Drøj claimed to be “mild on hands” but contained a known allergenic perfume and warned to “rinse with plenty of water” on contact with skin.

Instead, consumers can look for Asthma Allergy Nordic labels which are perfume free and restrict other potential allergens.

6. HAZARD INFORMATION AND WARNINGS

The problem

The hazard information and warnings that can prevent accidents, health impacts and environmental damage are often hidden in small text or missing altogether on household product packaging. Packages with three or more languages were often difficult to read.

Proposed solution

Limit the number of languages on the package if the text will become too small, cramped, or hard to find. Ensure safety messages that can prevent accidents (e.g., to not mix products containing chlorine, to wear gloves for corrosive or allergenic products, etc.) are on the package and easily visible.

Why that can work

Important warnings, dosage information, ingredients, and other necessary consumer information were legible on the majority of products with one or two languages on the package. Clear pictograms and symbols can also draw attention to hazards.

Who can act

- **Enforcement agencies** should ensure that companies follow EU legislation requiring important safety warnings and symbols to be printed legibly and prominently on the package.
- **Retailers and brands** should ensure their customers are properly informed about proper use and potential risks of their products.
- **Companies** should ensure that warnings and other important information is legible, for example, by limiting the number of languages on the label.

The details

Despite allergenic or hazardous ingredients, hazard labels and protection recommendations on the bottle were not always present or sufficiently prominent to avoid risks or accidents.

Chlorine bleach (sodium hypochlorite) mixed with acid forms toxic chlorine gas. Therefore, chlorine products require a warning, for example “Warning! Do not use with other products. May release dangerous gases (chlorine).” On all the chlorine-based products in the toilet cleaner test, these warnings should be more visible. The text was particularly small and nearly illegible on the Domestos thick bleach toilet cleaners.

A warning on the non-chlorine products can help prevent accidents as well: “Do not use with chlorine-based products.” However, this type of warning was missing from more than half of the acidic toilet cleaners in the project.

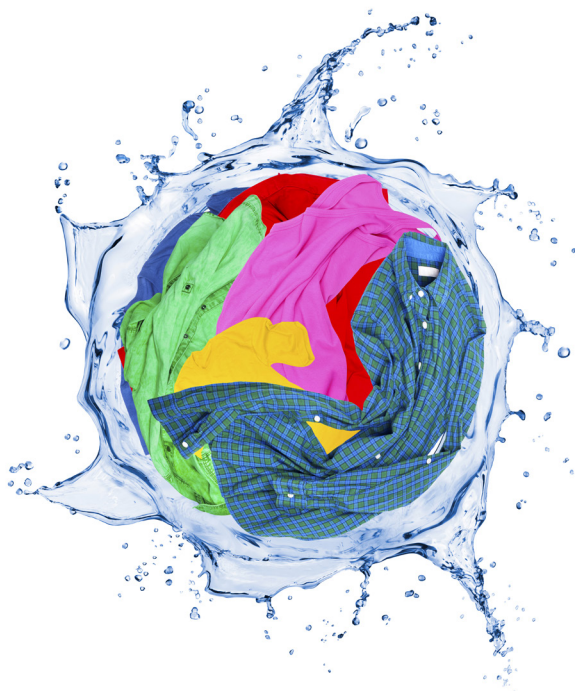
Some toilet cleaners are very acidic ($\text{pH} < 2$) or very basic ($\text{pH} > 11.5$). The very acidic products often contained hydrochloric acid, while the very basic ones contained chlorine bleach (sodium hypochlorite). In all cases, these products were correctly marked with the “corrosive” hazard icon, indicating risk for injury. Products that are less acidic or basic (pH between 2 and 11.5) often had the “warning” hazard icon, indicating risk for irritation.

Many products recommended wearing gloves and eye protection. How well consumers understand that certain products pose higher risks than others and take recommended protective measures is an open question.

Recommendations for protective measures were also not representative of the level of risk from the ingredients. For example, Coop Sweden recommended gloves, eye and face protection while using their X-tra hand dishwashing detergent with pH 5.5. However, there was no protection recommendation for their Coop toilet cleaner with pH 2.1.

Fifteen of fifty-seven hand dishwashing products recommended gloves and/or to wash hands thoroughly after using the product, but many other products with allergenic perfumes and preservatives like Yes Original and Fairy Original did not have those warnings.

The EU ecolabel criteria states that “The product shall be accompanied by instructions for proper use so as to maximize product performance and minimize waste, and reduce water pollution and use of resources. These instructions shall be legible or include graphical representation or icons...”²² In summary, there are all sorts of variants of this, and rather few providing the desired level of information and legibility.






CONCLUSIONS AND RECOMMENDATIONS






The collaboration between consumer organizations for the purpose of testing household cleaners led to many unexpected insights on the similarities and differences between products in Denmark, Finland and Sweden.




To enable consumers to choose effective household cleaners with least impacts to health and the environment, the following summarizes the project's most important recommendations:

Recommendations for consumer organizations



-  Question companies that have poor performing products on the market. Consumer organizations can provide information and launch campaigns to raise consumer awareness of ineffective products.
-  Help consumers avoid problematic chemicals in their household products through awareness raising information and campaigns.
-  Inform consumers about the difference between credible labeling schemes versus empty greenwashing and marketing claims.

Recommendations for industry (manufacturers, brands, and retailers)

-  Maintain the same quality of branded products regardless of where they are sold. Differences in formulas should be based on objective reasons such as local legislation, sourcing of local ingredients, documented consumer preferences, local conditions (e.g., water hardness).
-  If companies sell products that meet ecolabel or allergy label criteria in some markets, sell the same formula in all markets.
-  Use a professional laboratory to test cleaning performance of products if the company does not have that capacity internally.
-  Provide all the ingredients on the packages. Ensure online information is accessible and updated.
-  Phase out problematic chemicals, for example, by requiring that products meet the Nordic Swan or EU Ecolabel criteria, and meet the Asthma Allergy Nordic label criteria.

-  Ensure customers are properly informed about proper use and potential risks of products.
-  Limit the number of languages on the label so that the print is legible.
-  Remove unsubstantiated environmental or health claims from packages and instead communicate these qualities through credible ecolabels and allergy labels.

Recommendations for enforcement agencies

-  Enforce the current legislation, EU regulation 648/2004, that requires companies to provide the full ingredient list on their website.
-  Ensure that companies follow EU legislation requiring important safety warnings and symbols be printed legibly and prominently on the package.

Recommendations for policymakers

-  While dual quality was not found in the products tested, the EU could support future dual quality tests that include parallel and direct importing and/or countries beyond the Nordic region where dual quality is more suspected.
-  Update the detergents regulation with performance criteria so that companies could be held accountable for product performance.
-  Change the detergents legislation to require all ingredients to be listed on the package.
-  Develop a website for all detergent ingredients lists to be kept updated by companies or develop a simple way for consumers to access the ingredients lists linked to products' UFI code.
-  More strictly regulate problematic chemicals in household cleaners including banning "Substances of Very High Concern" and other harmful chemicals. Take combination effects of exposure into account.
-  Consider better regulation of misleading or unsubstantiated marketing claims and packaging designs that give the impression of a healthier or environmentally friendly product.
-  Use the opportunities in the upcoming revision of the detergent regulation and the Chemicals Strategy to implement these initiatives.

Recommendations for eco- and allergy labelling schemes



Review and improve the product's cleaning performance criteria.



Require all ingredients to be listed on the package.



Fully ban the group of allergenic preservatives called isothiazoliones due to health and environmental impacts.

FOOTNOTES

¹ European Parliament Think Tank, 2019. Dual quality of products – State of play. [https://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS_BRI\(2019\)644192](https://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS_BRI(2019)644192)

² EU Ecolabel, 2018. Framework for testing performance for hard surface cleaning products. https://ec.europa.eu/environment/ecolabel/documents/performance_test_cleaners.pdf

³ European Chemicals Agency, accessed 2020 and 2021. <https://echa.europa.eu/>

⁴ European Commission, 2020. Chemicals Strategy for Sustainability. https://ec.europa.eu/environment/strategy/chemicals-strategy_en

⁵ SCCS, 2012. Opinion on Benzisothiazolinone. https://ec.europa.eu/health/sites/default/files/scientific_committees/consumer_safety/docs/sccs_o_099.pdf

⁶ SCCS, 2012. Opinion on Fragrance allergens in cosmetic products. https://ec.europa.eu/health/sites/default/files/scientific_committees/consumer_safety/docs/sccs_o_102.pdf

⁷ Danish Environmental Protection Agency, updated 2021. Endocrine Disruptor List, List II. <https://edlists.org/the-ed-lists/list-ii-substances-under-eu-investigation-endocrine-disruption>

⁸ SCCS, 2010. Opinion on Boron compounds. https://ec.europa.eu/health/sites/default/files/scientific_committees/consumer_safety/docs/sccs_o_027.pdf

⁹ Danish Environmental Protection Agency, 2009. List of Undesirable Substances 2009. <https://www2.mst.dk/udgiv/publications/2011/05/978-87-92708-95-3.pdf>

¹⁰ Danish Environmental Protection Agency, 2004. List of Undesirable Substances 2004. <https://eng.mst.dk/chemicals/chemicals-in-products/assessment-of-chemicals/list-of-effects/list-of-undesirable-substances-2004/>

¹¹ SCHEER, 2020. Opinion on the potential for anaerobic

biodegradability in marine and freshwater of Linear Alkylbenzene Sulphonates (LAS)

https://ec.europa.eu/health/sites/default/files/scientific_committees/scheer/docs/scheer_o_016.pdf

¹² EU regulation 648/2004 on detergents, updated 2015. <https://eur-lex.europa.eu/eli/reg/2004/648>

¹³ EU regulation 648/2004 on detergents, updated 2015. <https://eur-lex.europa.eu/eli/reg/2004/648>

¹⁴ EU regulation 648/2004 on detergents, updated 2015. <https://eur-lex.europa.eu/eli/reg/2004/648>

¹⁵ Nordic Swan Ecolabel, accessed 2021. Product groups. <https://www.nordic-ecolabel.org/product-groups/>

¹⁶ Commission Decision (EU) 2017/1217 establishing the EU Ecolabel criteria for hard surface cleaning products, 2017. <https://eur-lex.europa.eu/eli/dec/2017/1217>

¹⁷ Bra Miljöval, accessed 2021. Kemiska produkter. <https://www.naturskyddsforeningen.se/bra-miljoval/omraden/kemiska-produkter/>

¹⁸ Asthma Allergy Nordic, accessed 2021. <https://www.asthmaallergynordic.com/about>

¹⁹ BEUC, 2020. Green labels: which ones can you trust? <https://www.beuc.eu/blog/green-labels-which-ones-can-you-trust/>

²⁰ AISE, accessed 2021. The AISE Charter for Sustainable Cleaning. <https://www.sustainable-cleaning2020.com/home/what-is-the-charter>

²¹ EcoCert, accessed 2021. Ecological cleaning products. <https://www.ecocert.com/en/certification-detail/ecological-household-products-natdet>

²² Commission Decision (EU) 2017/1217 establishing the EU Ecolabel criteria for hard surface cleaning products, 2017. <https://eur-lex.europa.eu/eli/dec/2017/1217>

Report of the NordQual project by the Swedish Consumers' Association,
Danish Consumer Council, Kulutajja-magazine, and Consumers Union of
Finland. Financed by the EU Consumer Programme.

July 2021

