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Consumer understanding of the safety label and pictograms on household detergent products

Consumer Research Report

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Abstract

To evaluate elements of safety labelling on household detergent products, A.I.S.E. (the International Association for Detergents and Maintenance Products) commissioned a quantitative on-line consumer research study with 1800 respondents in four countries across Europe (Poland, Sweden, France, Spain), conducted in March 2017. Building on earlier qualitative research, the understanding of pictograms and icons was assessed, and consumers' label reading habits were investigated. The effectiveness, i.e. whether the safety message is noticed and understood - was compared for three label executions of a notional/virtual laundry detergent, and respondents indicated their preference.

Using the stringent United Nations GHS (Globally Harmonised System of Classification and Labelling of Chemicals) methodology for comprehension testing (with open-ended questions), the study confirmed that several A.I.S.E. safe use icons are well understood - on average better than the tested GHS pictograms used in the CLP (Classification, Labelling and Packaging) Regulation. Especially for the "Keep away from children" icon the result was remarkably good. Of the GHS/CLP pictograms evaluated in the study, the environmental and corrosive pictograms were relatively well understood, while the exclamation mark was very poorly understood (as also shown in previous research). Importantly, the eye hazard was neither recognized from the corrosive pictogram - while this is by far the primary reason for use of this pictogram on household detergent products - nor from the exclamation mark pictogram. As a consequence, the GHS/CLP pictograms used for eye hazard were found to be ineffective at conveying this message. On the other hand, most respondents did correctly judge the hazard level of corrosive to be higher than the exclamation mark, mainly based on pre-existing knowledge.

Three label executions were compared in a monadic study: (1) the current approach, that meets all regulatory requirements (CLP and Detergent Regulation); (2) a more graphical alternative with icons replacing precautionary phrases and with an international (INCI) ingredient list; and (3) a highly simplified alternative, independent of the current regulatory framework, with prominent safe use icons to convey the safety advice judged most essential by safety experts. Most respondents claimed to read and understand the safety information on labels when they first buy or use a product. However, these claims need to be interpreted with caution, as was also confirmed in the findings of A.I.S.E.'s earlier qualitative study. In fact, even when respondents were invited to focus their attention to the labels, in practice, they spent insufficient time studying the labels to read all the content, especially for the more information-rich executions.

No major differences between the three label designs were observed in how well the safe use information was conveyed: 'stickiness' of specific safety instructions on the label was always rather poor. For all designs, a large majority agreed that the product has to be stored away from children, and without looking at the label again to find specific information, a large majority of the respondents replied with the correct action in case of eye exposure (i.e. rinse with water). In fact, nearly no respondents said they would consult the label in case of an accident. Ingredients information was neither well understood nor remembered from any of the three design executions. Only half of the people who had indicated a general concern related to allergy or sensitive skin found the allergen information useful, independent of the label. In accordance with previous research, the findings with the different label executions indicate that consumers rely more on prior knowledge, experience and hazard perception to determine how to safely use a product, than on the back label.

Respondents preferred the simpler and more graphical alternative labels versus the current CLP/Detergents Regulation label. This is in line with the earlier qualitative observations that consumers dislike crowded labels with a lot of text. The alternative with multiple safety icons was most preferred, with the argument that this provided a lot of information while still being easy to understand.

Introduction

In 2015, the EU Commission has launched the Better Regulation initiative. This is about designing and evaluating EU policies and laws transparently, with evidence, and backed up by the views of citizens and stakeholders. It covers all policy areas and aims for targeted regulation that goes no further than required, in order to achieve objectives and bring benefits at minimum cost (European Commission, 2015).

In this context, A.I.S.E. has assessed the understanding and relevance of detergents' back-of-pack labels mandated by several EU Regulations, including the understanding of pictograms and icons.

As a first step, in addition to the industry perspective, insights were obtained from qualitative consumer research and from exchanges with medical experts (A.I.S.E., 2016). This showed that consumers judge regulatory labels are overloaded with information that is in itself poorly understood and sometimes comes across as counter-intuitive. Medical professionals reported they do not find the labels very useful in case of an emergency, and prefer to rely on other information sources. Finally, as also pointed out in the Commission's Cumulative Cost Assessment (European Commission, 2016), the regulatory costs for this industry sector are comparatively high when compared with other sectors. These costs are to a significant extent driven by the high complexity of the labelling requirements.

A.I.S.E. believes there is an opportunity to improve the effectiveness of safety communication to consumers, by focusing the labels on the most relevant content, and by doing this in a way that is easy to understand. To further assess this hypothesis, A.I.S.E. has commissioned additional quantitative research about the consumer understanding of pictograms, consumer habits regarding use of the back-of-pack label, and - as a proof of concept - the effectiveness of alternative labelling options.

Research objectives

The research consisted of three legs, each with specific objectives.

1. The assessment of the consumer understanding of A.I.S.E. safe-use icons, as well as three GHS/CLP pictograms. Visual elements such as safe-use icons and precautionary pictograms may be key enablers to reducing and better focusing the label content. As such, an adequate consumer understanding of these elements needed to be demonstrated in a robust way. To ensure robustness, this assessment followed the stringent UN GHS Comprehensibility Testing Methodology (United Nations, 2015).
2. A quantitative assessment of consumer habits with regard to reading and reliance on three different safety labels of a household laundry detergent. This included the extent to which consumers claim to read the back labels, and for what purpose they use this information. The quantitative findings were compared to earlier qualitative findings, and were also interpreted in the context of the study's findings with the reading of actual labels (point 3).
3. A comparative assessment of label effectiveness, by means of two exploratory (less complex) labelling options, compared to the current labelling approach in a quantitative consumer study.
 - a. This focused on the overall effectiveness of the labels to convey the safe use message and to drive correct actions. This was assessed by determining how well consumers notice and understand - and are able to reproduce - the safe use, hazard and precautionary information as presented on the different labelling options. This holistic approach focused on the overall message conveyed by the label as a whole. It did not assess the exact understanding of specific individual phrases, icons, etc.
 - b. In addition, in this leg of the research the subjective consumer preference for the different options was determined.

Methodology

1. Research Method

1.1. On-line

The study was conducted on-line. To ensure good readability of the labels, only computers and tablet devices (excluding smartphones) were allowed. The web pages were programmed such that an equivalent visual effect (size of the label) was aimed for, independent of the panellist's screen size. Zooming of the images was allowed.

To keep focus by the respondents, aiming to maximize the reliability of the results, the length of the survey was limited to 20 minutes.

The on-line fieldwork was done from 8 March 2017 until 13 March 2017.

1.2. Countries

Four countries were included, to cover the different regions in the EU: France (representative of Western Europe), Poland (representative of Central Europe), Sweden (representative of Northern Europe), and Spain (representative of Southern / Mediterranean Europe). In these selected countries, multilingual packaging is common, so consumers are accustomed to seeing several languages on a label. The survey was conducted in local language.

1.3. Panellists

The respondents were selected among people who are (mainly or jointly) responsible for the purchase and use of laundry detergents, and for doing the laundry. This is because the focus of this research was on common household detergent products, with a liquid laundry detergent as case study. Hence, familiarity with the category was important to obtain relevant results. People with vision problems (e.g. colour blindness, visual acuity issues) were excluded.

1.4. Study design

GHS Methodology

To determine consumer understanding of different icons and pictograms, the GHS Comprehensibility Testing Methodology was applied (United Nations, 2015). The respondents were shown the pictograms one by one, and were asked to say, via free text, what is the meaning of each pictogram. The answers were coded into different categories of correctness, based on a pre-defined overview of potential answers. Answers may be rated as "correct", "partly correct", "incorrect", or "opposite meaning". "Correct" means that the level of understanding leads to appropriate safe use behaviour, whereas "Opposite meaning" may drive a behaviour that goes against the safe use guidance.

Monadic

For the study leg that determines the effectiveness of different labelling options, a monadic study design was applied. This means each panellist only saw one label execution, and addressed questions about this single execution. Testing an execution alone offers many advantages. Interaction between executions (which occurs in paired-comparison tests) is eliminated. The monadic test simulates real life: that is the way we usually use products—one at a time. By focusing the respondent's attention upon one product, the monadic test provides the most accurate and actionable diagnostic information.

However, for the assessment of subjective consumer preference, subsequent to the monadic survey about one specific label, the panellists were shown all three executions, and were asked to indicate their preference.

Open and closed questions

To determine the effectiveness of different labelling options, after viewing the label, the respondents were asked open questions about what they remembered from the label. First in general, and next for specific aspects such as health hazards or storage guidance. The responses were individually assessed and grouped

into clusters of equivalent answers. Subsequently, several statements were provided where the respondent had to indicate either their level of agreement, or their perception of the danger, using a scale. All these questions were to be addressed without having the label on the screen.

For the pictogram understanding, only open questions were used (cf. above: GHS methodology).

To assess consumer habits regarding the reading and use of back labels, several statements were provided where the respondent had to indicate their level of agreement using a scale.

1.5. Sample size

The total sample size was n=1800, spread over the 4 countries. In each country, the sample size was n=450. Within each country quota were applied to aim for a gender distribution representative for this product category (30% male, 70% female) and a nationally representative spread for age per country (nested within gender). After the fieldwork was closed, a weighting was applied to the results, to correct for any deviations from the target gender and age distribution.

For the consumer habits survey, as well as to assess the understanding of the A.I.S.E. safe use icon “Keep away from children”, the full panel (n=1800) was consulted. For the understanding of other A.I.S.E. safe use icons and of CLP pictograms, subsets of the panel were used, with always well above 300 participants. For the comparative study of label effectiveness, the full panel was used, with one-third assigned to each of the three label options (n=600 per label option). This is because it was a monadic study (where each panellist only worked with one of the three options). Finally, to determine consumer preference among the three label options (not monadic), a subset of 500 panellists was used.

2. Case study for label effectiveness

The case study was developed on the basis of a typical liquid laundry detergent artwork.

The product is considered hazardous under Regulation EC N. 1272/2008 (hereinafter CLP) for Serious Eye Irritation (Cat.2) and contains one allergen that requires labelling according to CLP with the European hazard phrase EUH208 “Contains <name of sensitising substance>. May produce an allergic reaction.” - in addition to other allergens that require inclusion into the Detergent Regulation ingredient list. The classification for Serious Eye Irritation requires labelling of the GHS hazard phrase H319 “Causes serious eye irritation.” and the pictogram GHS07 (exclamation mark) with the signal word “Warning”. Further it triggers the following precautionary phrases: P102 “Keep out of reach of children.”, P305/351/338 “IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.”, P337/313 “If eye irritation persists: Get medical advice/attention.”, P301/312 “IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.” and P101 “If medical advice is needed, have product container or label at hand.”

Three label executions were evaluated (Annex I):

1. “**Current label**” is used as a benchmark. It is based on an existing product label (according to the current regulatory labelling approach: CLP and Detergents Regulation), but has an optimised graphical design and layout, fully in line with the alternative label options.
2. “**Alternative label 1**” is based on a simplified interpretation of the existing legal requirements (i.e. the EU CLP Regulation and the EU Detergent Regulation). Specifically, in this option, A.I.S.E. safe-use icons replace the regulatory precautionary phrases whenever deemed possible. In practice, the icons “Keep away from children”, “Eye hazard” and “Ingestion hazard” are used - in addition to a modified icon indicating the need to seek medical help in case of eye exposure. The P-phrase about keeping the pack at hand when seeking medical help was retained, because no suitable icon could be found to replace it. The CLP pictogram (exclamation mark) and hazard statement were also maintained. Finally, this execution has an international ingredient list (with standardised nomenclature, inspired by INCI, as currently used for cosmetics) instead of the multilingual ingredient label from the detergent regulation.

3. **“Alternative label 2”**, which is not built around the current regulatory framework, but aims to most effectively convey the safe use messages that were considered by the authors to be the most relevant for the consumer. Except for the allergen phrase EUH208, no CLP text or visuals are used. Instead, the A.I.S.E. safe use icons “Keep away from children” and “Eye hazard” are used with a prominent size (about 4x larger than on the current label execution). This option has no full ingredient label but only lists the names of allergens, next to a prominent visual cue saying “ALLERG”.

To be representative of reality, the labels were multilingual, covering a cluster of four countries. For each country in the study, a different country cluster was used, in line with common practice. This way the panellists would not be confused by seeing languages they are not used to have on product labels. In every execution, the test country’s language was listed as the first language. The different clusters were:

- Poland (Polish, Czech, Slovakian, German);
- Sweden (Swedish, Danish, Finnish, Norwegian);
- France (French, Italian, Spanish, Portuguese);
- Spain (Spanish, Portuguese, French, Italian).

Consumer understanding of icons and pictograms

For the assessment of consumer understanding of icons and pictograms, the GHS Comprehensibility Testing Methodology (United Nations, 2015) was used. Respondents were shown the visual elements and were asked, in an open question, what - according to them - is the meaning. No pre-defined suggestions or multiple-choice answers were provided. In other words, the response is equivalent to what a consumer would think in a real-life situation, where the icons or pictograms are also provided without further background or possible explanations.

1. CLP Pictograms GHS09, GHS05, GHS07

1.1. A.I.S.E. Qualitative Study

As part of this study (SynapsesQuali, 2016) (see also below), 30 panellists were asked, during face-to-face interviews, to interpret the same three CLP pictograms (GHS09, GHS05, GHS07). The findings were very similar to the quantitative results of the current study.

The CLP “exclamation mark” pictogram GHS07 was not understood by consumers to be associated with the concept of eye irritancy, but rather, it was seen as a general warning symbol.

Whereas the concept of the “corrosive” pictogram GHS05 was better understood (two-thirds of the consumers associated this with corrosive, burning, damaging), consumers were not able to capture the difference between products that are corrosive to skin versus products that are Category 1 eye irritants - also not when reading the text.

The “environmental hazard” pictogram GHS09 was best understood, although it tended to be interpreted beyond its meaning: i.e. that the product “kills everything” and as such is also dangerous for humans, should not be used for food contact materials, etc.

1.2. Eurobarometer

In both of these very large surveys (European Commission, 2011 and 2017) (respectively, n=26574 in 2010 and n=27929 in 2016), the level of understanding by EU citizens of amongst other, the “exclamation mark” (GHS07) and the “environmental hazard” (GHS09) pictograms was assessed.

Note that the methodology was substantially different from the current study: respondents were not asked to provide free text answers about the meaning of the pictograms, but were given the choice between 7 possible meanings (skin irritant, flammable, corrosive to metal, environmental hazard, carcinogenic, causes asthma or other respiratory hypersensitivity reaction, or unknown). As such the approach was less stringent than the GHS methodology. Further, in the 2016 study, respondents were allowed to select multiple meanings, as opposed to a single meaning in the 2010 study.

The GHS07 pictogram was correctly associated with skin irritation by 17% of the respondents in 2016 and by 11% in 2010. In the current (A.I.S.E. 2017) quantitative study this was by only 3%. The better scores from 2016 versus 2010, and overall compared to the current study, may be explained by the methodological differences. Despite the numerical differences, the overall conclusion is very similar across all studies - i.e. there is a very poor understanding of the pictogram among the general population.

The GHS09 pictogram was correctly identified as indicating an environmental hazard by 83% of the respondents in 2016 and by 76% in 2010. In the current (A.I.S.E. 2017) quantitative study there was a correct understanding by 62%. Again the numerical differences can be explained by the strictness of the methodologies - and the overall conclusion is consistent that this pictogram is understood fairly well by EU citizens.

Considering these different studies, it can be assumed that the level of understanding by EU citizens of the two mentioned CLP pictograms did not significantly improve, despite the implementation of CLP labelling as of June 2015 for mixtures. Additional awareness raising activities are probably still needed.

1.3. Quantitative study results

Three CLP pictograms that may appear on hazardous household products were evaluated: GHS09 (environmental), GHS05 (corrosive) and GHS07 (exclamation mark) (Figure 1). These pictograms were tested with a subset of panellists, equally distributed across the four countries for each pictogram, respectively n=431, n=434 and n=435 for GHS09, GHS05 and GHS07. The rules applied for coding are provided in Annex II. The results are shown in Table 1.



Figure 1. GHS09, GHS05 and GHS07 pictograms.

| | Current (A.I.S.E. 2017) Quantitative Study | | | | | EB 2010 | EB 2016 |
|---|--|----------------|-----------|------------------|---------|-------------|-------------|
| | Correct | Partly Correct | Incorrect | Opposite Meaning | No Idea | Correct | Correct |
| GHS09 (environmental)  | 62% | 5% | 15% | 1% | 17% | 76% | 83% |
| GHS05 (corrosive)  | 54% | 23% | 12% | 0% | 12% | <i>n.a.</i> | <i>n.a.</i> |
| GHS07 (exclamation)  | 3% | 7% | 77% | <1% | 13% | 11% | 17% |

Table 1. Consumer understanding of CLP pictograms, compared with Eurobarometer (EB) studies.

None of the panellists were able to provide an interpretation of these GHS pictograms that covers exactly the intended meaning. However, in line with the GHS methodology, answers that form a sufficient basis to recognize the hazard and lead to a correct precautionary behaviour, were judged to be sufficiently correct.

The GHS09 pictogram for “environmental hazard” was found to be the best understood among the three tested CLP pictograms. 62% of the panellists had a sufficient knowledge (i.e. mentioning that the pictogram designates a hazard for aquatic life, the environment, nature, etc.). An additional 5% provided a partly correct answer (but with an interpretation that is either too soft or too harsh).

The GHS05 pictogram (“corrosive”) was quite well understood, with 54% of the answers sufficiently correct (indicating the corrosive properties, the risk of chemical burns, or the need to wear gloves and safety glasses). Another 23% were partly correct (insufficient to drive adequate safe use, e.g. mentioning irritating chemicals, but not to the extent of causing severe damage, or the need for gloves but not glasses).

Importantly, however, for the GHS05 pictogram, eye hazard was nearly never mentioned. Never by itself, and in combination with skin irritation by only <1% of the respondents. This indicates clearly that EU consumers do not understand that the “corrosive” pictogram is also used to indicate the risk for serious eye damage. However, in practice, classification for severe eye damage (Cat. 1) is by far the primary reason for the use of this pictogram on household products.

Finally the GHS07 pictogram “exclamation mark” was very poorly understood. None of the panellists mentioned both irritation and allergy risk (which are the two primary meanings of this pictogram on household chemical products), and only 3% mentioned irritation or ‘harsh chemicals’ (judged to be sufficiently correct). A negligible proportion of respondents (0.2%) mentioned allergy. 7% provided a partly correct answer, mostly

referring to a general indication of “danger”. But overall, nine out of ten (90%) of the panellists provided a wrong answer or did not have any idea.

Next, a subgroup of panellists (n=1300) was shown the “corrosive” pictogram (GHS05) and the “exclamation mark” pictogram (GHS09) side by side, combined with the appropriate signal words (“Danger” and “Warning”, in local language). They were asked which of the two pictograms (plus the wording) indicates the highest risk.

Over two-thirds (68%) of the respondents correctly recognized that the “corrosive” pictogram indicates a higher health risk than the “exclamation mark” pictogram. 27% had an incorrect judgment about the hazard ranking, either thinking that the exclamation mark points to a higher risk (15%), or that both are equivalent in terms of risk (12%). 5% of the respondents did not know.

2. A.I.S.E. Safe Use Icons

2.1. Existing A.I.S.E. studies

The A.I.S.E. safe use icons were first tested in 2004 (GfK, 2006). This was a quantitative study (apx. n=1200) based on the ISO 9186:2001 methodology. In the comprehensibility test leg, respondents estimate what percentage of the general population they think would understand the icon. All icons scored on average 60% or higher (except the “Eyes” icon which was marginally lower at a mean of 57%). Next, in the actual comprehension test leg, respondents were asked about the meaning and about actions to be taken. The “Eyes” icon scored 64%, “Sensitive skin” interestingly scored a high 68%, and “Do not change the container” reached 71%. The other icons were not evaluated in this test leg.

In a large-scale quantitative study (n=4600) (InSites Consulting, 2008), 4 safe use icons were evaluated. It was found that 75% of the respondents were aware of the “Keep away from children” safe use icon. For the “Eyes” icon this was 61%, followed by 48% awareness for the “Ingestion” icon. The “Sensitive skin” icon had a poor awareness, reaching only 14%. Note that awareness means people recognise the icon and claim to know it. It does not mean they understand the meaning. On the other hand, not being “aware” of an icon does not mean the icon is not understood. Overall, 84% of the respondents found these safe use icons useful.

2.2. Quantitative study results (2017)

The understanding of the “Keep away from children” safe use icon was evaluated with all panellists (n=1800). Seven other A.I.S.E. safe use icons were tested among subsets of panellists, who each saw a random selection of 3 additional safe use icons. The panel size was minimum n=366 for each icon (Figure 2). The rules applied for coding are provided in Annex II. The results are shown in Table 2.

93% of the 1800 panellists correctly understood the meaning of the “Keep away from children” icon. 86% of them provided an exact interpretation, mentioning the intended handling / storage behaviour. An additional 7% provided a correct answer mentioning the hazard for children but not explicitly the need for safe storage. An opposite meaning of the icon was understood by 0.7% (13 out of 1800) of the panellists. Most of these (9) misunderstood that the product should not be stored in a high place. A negligible 0.2% (4 people out of 1800) had an interpretation conflicting with the child hazard message. Hence, the occurrence of critical confusion, leading to wrong behaviour or to ignoring the child hazard, was limited to below 1% of the panellists.

Over 4 out of 5 panellists (82%) correctly interpreted the “Eyes” icon as an indication of eye hazard. 59% had a sufficient understanding that this icon indicates an eye hazard and/or the requirement to rinse the eyes with water in case of exposure. A smaller group (of 23%) had actually understood the complete combined meaning of the icon, i.e. both to avoid exposure and to rinse with water in case of exposure. An opposite meaning was reported only rarely (1.4%), usually that you should not rinse.

The “Hands” icon had a correct interpretation by nearly three quarters (74%) of the panellists. Critical confusion was rare (<1%), with e.g. the view that the icon shows the product is a hand wash soap.

The “Ingestion” icon was also correctly understood by nearly three quarters (73%) of the respondents. 34% mentioned the ingestion hazard or to avoid ingestion or to seek medical help if ingested. 39% of the respondents provided the full combined meaning, i.e. both to avoid ingestion and to seek medical help in case

it does occur. There was only one isolated occurrence of a critical confusion, with a panellist indicating you should not call the doctor.

Of the other tested A.I.S.E. safe use icons, “Do not change the container” and “Ventilate the room” were fairly well understood with a score around 60% and negligible critical confusion. “Do not mix with other products” was somewhat more difficult to understand (44%), and the icon about “Sensitive skin” was rather poorly understood (33%). Despite these lower scores, the reporting of opposite meanings was negligible.

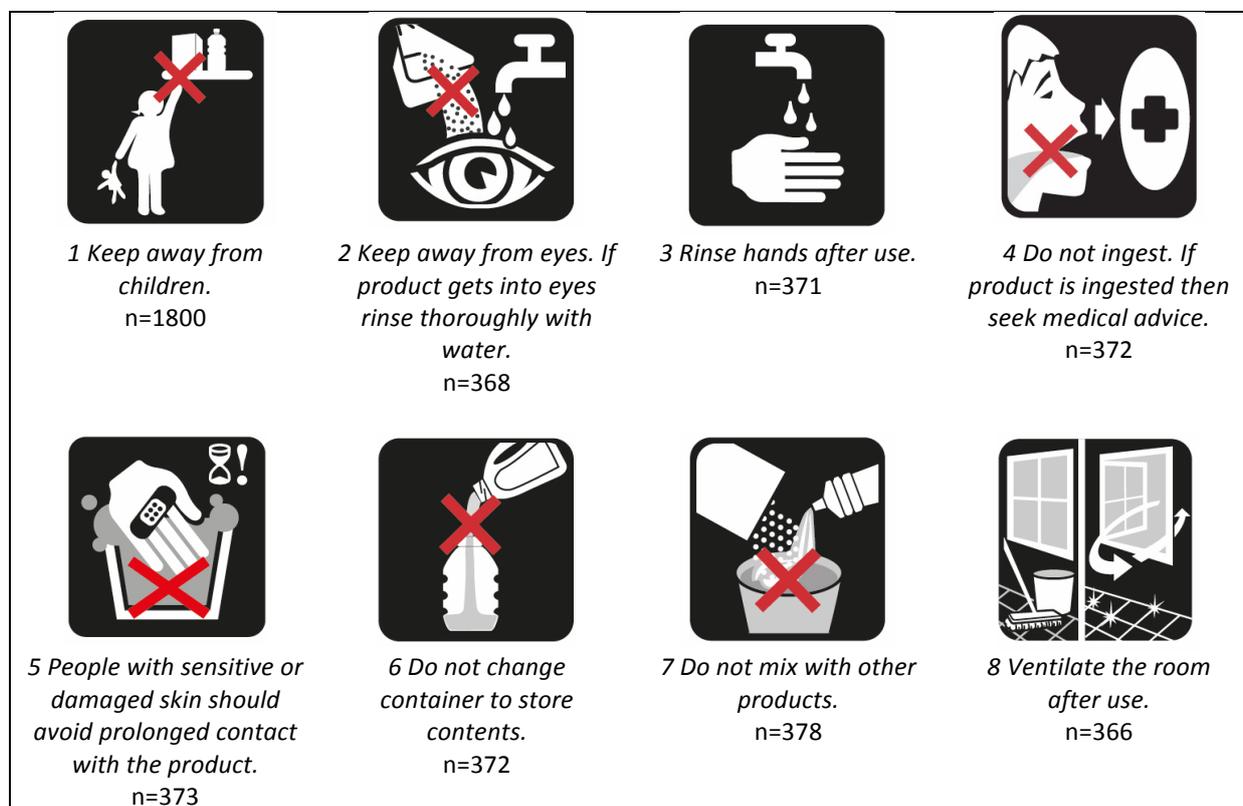


Figure 2. A.I.S.E. safe use icons.

| | Correct | Partly Correct | Incorrect | Opposite Meaning | No Idea |
|-------------------------|---------|----------------|-----------|------------------|---------|
| 1 Children | 93% | 0% | 3% | 0.7% | 3% |
| 2 Eyes | 82% | 0% | 8% | 1.4% | 8% |
| 3 Hands | 74% | 1% | 17% | 0.8% | 7% |
| 4 Ingestion | 73% | 0% | 8% | <0.1% | 19% |
| 5 Sensitive skin | 33% | 25% | 17% | 0% | 25% |
| 6 Container | 57% | 17% | 11% | <0.1% | 15% |
| 7 Do not mix | 44% | 25% | 9% | <0.1% | 22% |
| 8 Ventilate | 61% | 8% | 12% | 0% | 19% |

Table 2. Consumer understanding of CLP pictograms.

3. Discussion

The “Keep away from children” icon was exceptionally well understood by EU citizens - substantially better than any of the other tested icons and pictograms, including the GHS/CLP pictograms.

The other most relevant A.I.S.E. icons (about eye hazard, ingestion hazard, skin hazard) were also understood quite well. Whereas the safe use icons with a combined message (i.e. to avoid exposure and what to do in case

of exposure) struggled to convey the full level of complexity included in the icon, they nevertheless did convey the hazard in an appropriate way, which is their main purpose.

Some A.I.S.E. icons do have room for improvement, specifically the icon about sensitive skin proved to be complicated.

Note that the previous A.I.S.E. comprehension study with open-ended questions (GfK, 2006) showed comparable results, although overall a better comprehension was found in the current (A.I.S.E. 2017) quantitative study. This may be the result of an increased familiarity with the safe-use icons (they are in use in Europe since 2004 and it has been estimated that in 2016 about 6 billion products carried them), but may also be related to methodological differences (the current study focusing more on a practical relevance to convey the hazard and drive the right behaviour). Van den Heuvel (2014) observed a similar understanding of the “Keep away from children” icon, but overall a poorer understanding of the other safe use icons. However, she applied a rather strict coding that required a fairly complete reproduction of the accompanying safe use messages for an answer to be judged correct, even “in the broad sense”. This is different from the more pragmatic GHS approach that considers answers leading to the appropriate safe behaviour as sufficiently correct.

The GHS/CLP pictogram “environmental hazard” was quite well understood. This was also the case for the GHS/CLP pictogram “corrosive”, but with the important limitation that this was not at all understood to signify an eye hazard - which is its most common purpose on household products. The “exclamation” pictogram used in CLP to identify e.g. severe eye irritation and allergy hazards, was poorly understood - with 9 out of 10 panellists not even seeing it as a generic indication of hazard. Consequently, CLP pictograms did not adequately convey the eye hazard.

Consumer habits regarding use of the safety label

1. Eurobarometer

In the Eurobarometer study of 2010 (European Commission, 2011), two-thirds of respondents claimed to read the safety instructions before using a “chemical product” for the first time. It has to be taken into account that one-third of respondents did not identify everyday household detergent products as “chemical” - and as such, for this subgroup of respondents the statement about reading the labels may not apply. Attention to the instructions was reported to be much higher for specific types of products, such as pesticides, oven cleaners and drain cleaners - compared to daily used products such as detergents. 70% of the respondents judged that these specific types of products require safety instructions. On the other hand, 50% replied this is also needed for everyday detergents.

About one-quarter of the respondents said that they always read the instructions that come with everyday detergents, while another one-quarter said they never do. For drain and oven cleaners, on the other hand, nearly all respondents said they follow the instructions (mostly fully, or at least partially). In general, women seemed to be more inclined to read the instructions, whereas young people were reported to most likely disregard them. Higher educated people tended to consult the instructions more frequently.

In the recent Eurobarometer study of 2016 (European Commission, 2017), respondents were asked what they usually do when they see a hazard pictogram on an unfamiliar product that they are about to use. Over three quarters of the panellists (76%) indicated that they would read the safety instructions. This consists of 57% who would read the safety instructions only on the product label, and 19% who said that in addition they would look for further information from other sources. One in ten respondents said that they would just use the product as they would any other product, whereas 9% said spontaneously that they would not use the product if it has a hazard pictogram on the label.

2. A.I.S.E. Quantitative Washing Habits Study (2014)

Almost half of the European consumers interviewed in this study (n=4740) (InSites Consulting, 2014) believe that household products are safe for consumers. On the other hand, only one out of four are convinced the products are safe for the environment. In terms of relative perception of risk, consumers believe that insecticides, drain cleaners and bleach products are the most dangerous products in case of misuse. Manual dishwashing detergents and liquid laundry detergent capsules¹ were perceived as the least risky to use.

49% of the respondents claimed that before purchase, they have read the information on the pack of laundry, cleaning or maintenance products. 57% said that they read the label information before use. This is a higher proportion than reported in the Eurobarometer study, but it does not explicitly refer to the safety information. Indeed it was not specified in the question whether consumers have read everything including the full back label, or e.g. only the front panel claims, or basic dosage instructions. Over one-third of the people claimed to look for information about the ingredients when shopping for detergent products - mostly to compare products, while 30% of these people (i.e. about one out of ten in total across all respondents) said they want to avoid certain ingredients e.g. due to allergy.

3. A.I.S.E. Qualitative Study (2016)

In this study (SynapsesQuali, 2016) 30 face-to-face interviews were conducted, in June 2016, in three countries (Belgium, Spain and Poland). The interviews took 1h45 each. All 30 panellists were buyers and users of household cleaning products, and were recruited from a mix of consumer profiles. The study included a deep dive discussion on back labels of detergent products, focusing on safety perception, ranking of hazards, and what to do in crisis scenarios.

¹ It should be noted that this study was prior to the targeted “Keep Caps From Kids” campaign by A.I.S.E., which has contributed to changing the safety perception and safe use habits for the laundry capsules product category.

3.1. Product hazard perception

This study indicates that consumers generally do not rely on the back label to determine the safety profile of a product, because they think they are adequately aware of products' hazardous properties. *While this appears to contradict what respondents claimed in the 2017 quantitative study, it is confirmed by the time respondents spent studying the labels and by the quality of the answers they gave to specific questions about label content.* Instead of reading safety information on the label, consumers mentioned they use other signals and points of reference to evaluate the potential risks. Products like drain cleaners or bleaches were deemed to be harmful to health and to require appropriate safe use precautions. On the other hand, daily used products, especially those that normally come into contact with the hands or with textiles, were judged to be of no specific concern.

Consumers said their intuitive perception of risk and safety is based on personal and family experience with these products, reinforced by the use frequency. The basic functional characteristics of the product (level of "power" or "aggressiveness" of the product or of key ingredients required to deliver its goal) are the most important drivers for this perception. This is in alignment with Eurobarometer studies. In addition, pack design elements (e.g. colour, opening system, pack shape, label lay-out) help convey the signals of power/danger or, on the contrary, mildness/safety. The overall safety perception of an individual consumer is also influenced by their degree of trust in the sector.

3.2. Label reading habits

Consumers said they focus mostly (if not exclusively) on the front label when evaluating a product. This is because they mainly seek information about the type and purpose of the product, the performance, and the quantity. In general they look at the back label only in specific circumstances (e.g. first use of a product with a high hazard perception), or when suffering from specific conditions such as allergies.

Consumers justified this lack of interest mainly by their experiencing the label as "unpleasant reading", unattractive, boring. There are too much text and other elements to integrate. This makes the label unpleasant and difficult to read, and makes it difficult to see a clear structure or find specific information. Panellists also mentioned it is difficult to find one's own language on a multi-lingual label. Many aspects were judged hard to understand. Especially the list of ingredients is considered as irrelevant by most consumers - because they do not know these chemical substances nor their properties.

Even in crisis situations (as simulated during interviews), back labels were found to be rarely read. The exception is to look for ingredients that may be involved in an allergic reaction. With acute incidents (e.g. ingestion or a splash into the eyes), people said they are not in the right state of mind to start reading a label. This is especially due to the perception that the information will anyhow be difficult to find. And even if found, people are unsure whether the information will enable them to better manage this situation.

In very stressful situations (e.g. product ingestion), the consumers' spontaneous reaction is driven by their perception of the product hazard (based on the product's function, as outlined above), and by the extent of the symptoms. Especially with young children, panic is also a factor, as people are not willing to take any risks. In cases that are judged to be serious, the reaction is to seek medical help immediately (call a doctor, call the PCC, or go directly to an emergency facility). Consumers think they would lose time by trying to find the safety information on the label, and trying to interpret this information.

With incidents like spraying into the eyes or on the skin, most consumers would first rinse with water and only seek medical help if there continues to be a problem. The back label would typically not be consulted.

In case of allergy, a majority of consumers said they would consult the label and search for ingredients of concern or clear phrases related to allergic reactions. However, when asked to do this in practice, most consumers found it to be too complex. They were lost in the multitude of information provided on pack. They saw insufficient structure or titles indicating where is the list of ingredients (only continuous text), no clear indication that it may cause allergy. Note that some consumers said they would search the Internet for further information regarding allergens.

3.3. Label understanding

As a next step in the qualitative research interviews, the panellists had to interpret the actual safety labels of household products.

After studying these labels in detail, panellists were unable to correctly distinguish different levels of hazard. The CLP content was found to be quite similar for all product types. Contrary to their intuition, panellists believed that the labels tell them all products are equally hazardous. Consumers felt misled due to this discrepancy between their experience and what is on the label. This is also because consumers did not pick up the more subtle differences in the label that differentiate among different hazard classification levels.

The ingredient label was difficult to find, due to the different placement on packs and the absence of a harmonised presentation of this information. Most consumers said they were not able to interpret the ingredient label, due to lack of chemical knowledge. It was however judged as potentially relevant information for people with specific allergies.

4. Quantitative Study (2017)

4.1. Label Reading Habits

The panellists (n=1800) were asked if and when they read the safety instructions and - separately - the use instructions on household products. As a benchmark they were also asked the same question for nutritional information on foods, and ingredients of personal hygiene products. The results are shown in Table 3. To note, multiple answers were allowed for this question, hence, the totals may exceed 100%.

Two-thirds (66%) of the respondents claimed to always read the safety instructions of a new product, either the first time they purchase it (32%), or prior to the first use (27%), or at both occasions (7%). This is in alignment with Eurobarometer studies. Another quarter (25%) of the respondents said they sometimes read the safety instructions, when they need specific information. Only 7% of the respondents said that they never read the safety instructions. To note, the numbers in Table 3 are different because as mentioned above, they contain combined responses, i.e. there is an overlap between the percentages reported.

The reading of usage instructions is similar to safety instructions, although a slightly higher proportion of consumers systematically read these before first use or purchase, and less consumers never look at them.

These observations are similar for nutritional information or cosmetic ingredients.

| | Always before first purchase | Always before first use | Some-times | Never |
|--|------------------------------|-------------------------|------------|-------|
| Household product safety label | 39% | 34% | 30% | 7% |
| Household product usage instructions | 42% | 45% | 24% | 3% |
| Nutritional information on food products | 44% | 25% | 34% | 8% |
| Ingredients of personal hygiene products | 38% | 27% | 34% | 10% |

Table 3. Label reading habits by consumers.

4.2. Reading and understanding of the back label

The panellists (n=1800) were presented with several statements about when the safety information on a detergent product's label is read, and about how well this information is understood. They were asked to indicate their extent of agreement with these statements (Figure 3). To note, these questions were asked after the panellists had studied and had been questioned about different label options (see below). The responses were confirmed to not be biased by which label option the panellists had been presented with before.

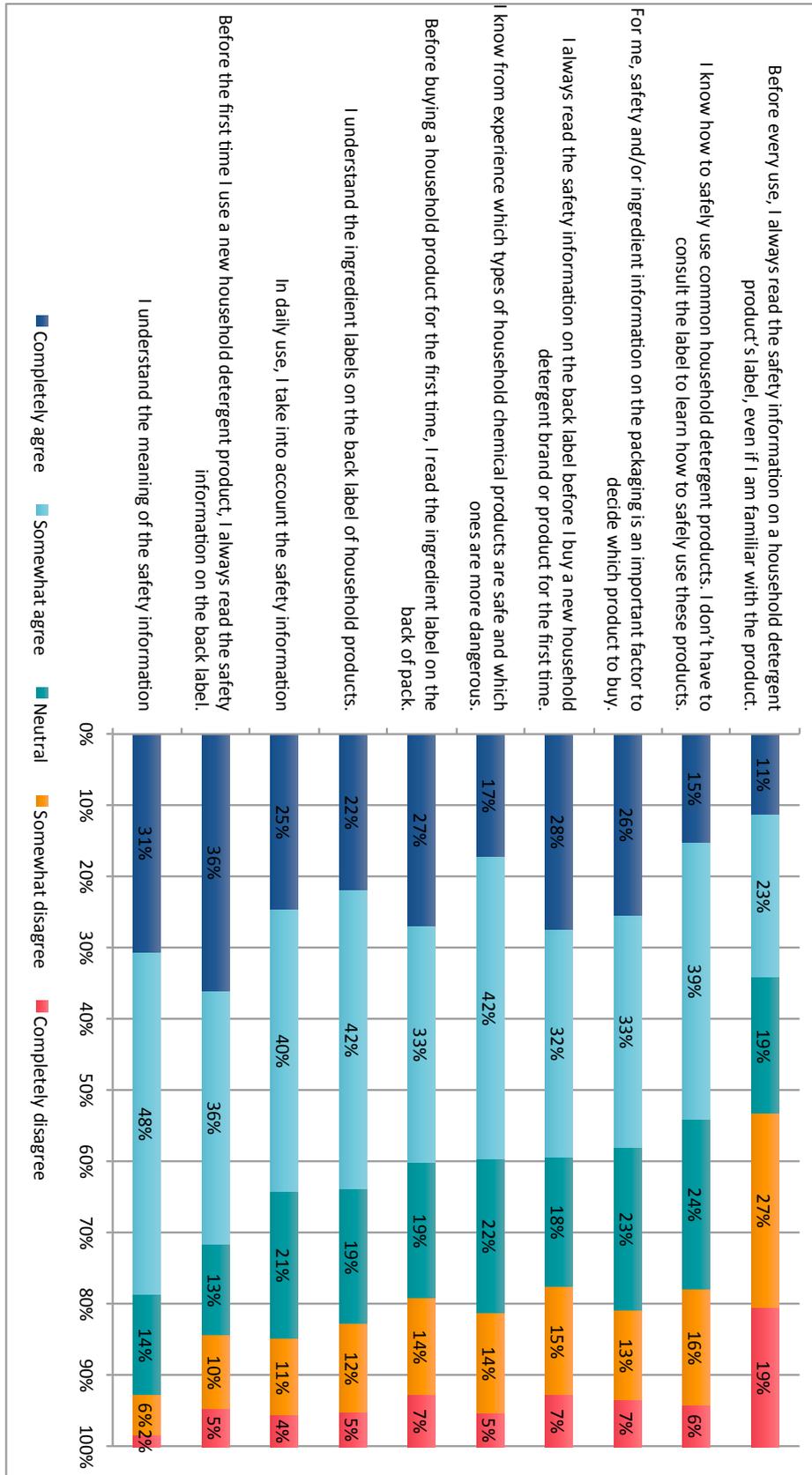


Figure 3. Panellist agreement with statements about label reading and understanding.

Before use

72% of the respondents claimed to always read the safety instructions before first using a new household detergent product. 34% claimed they do this before every use. 64% said they take the information into account in daily use. Contrary to these statements, 60% of the panellists said they know from experience what products are safe or more dangerous, and 54% said they do not need to consult the label to know how to safely use common household detergent products.

Before purchase

59% claimed to read the safety information before they buy a new detergent product for the first time, and 60% claimed to consult the ingredient information. In line with this response, 58% said they find safety and ingredient information an important factor to decide which product to buy.

Label understanding

79% of the panellists said they understand the meaning of the safety information and 64% claimed to understand the ingredient lists.

5. Discussion: comparison of quantitative and qualitative findings

It should be mentioned that there is an apparent contradiction between the A.I.S.E. 2016 qualitative study (SynapsesQuali, 2016) and the current quantitative research as well as earlier on-line quantitative work such as Eurobarometer and the A.I.S.E. washing habits study. The qualitative study had indicated that consumers are quite critical about back labels, struggle to understand this information, and find it confusing. The quantitative studies, on the other hand, indicate that consumers claim to read the back labels and find them valuable.

One has to keep in mind that the qualitative study's panel size was rather small (n=30) and hence, its outcome may not be representative and is inconclusive. Nevertheless, the findings are not per se contradictory with the qualitative research:

- In the quantitative studies, the question about reading the label focused on products described as 'unfamiliar', 'chemical products' (Eurobarometer), or 'products purchased or used for the first time' (current study). In the qualitative study, on the contrary, the question focused on the specific familiar household detergents that the panellists physically had in their hands.
- In the A.I.S.E. qualitative study, consumers were specifically asked and urged by the interviewer to study the back label in full detail. It is likely that most of them had never read such labels in full before. During the quantitative studies, on the other hand, panellists were not forced to go into this level of detail, and may have been more optimistic about how easy to understand the labels may be based on their perception rather than on an actual analysis of label content. The time that respondents had spent looking at the back labels in the current quantitative study, indeed suggests that they only read these labels superficially.

Anecdotally, an indication that back labels are rarely read was given in the "Label Lottery", an awareness campaign by the Dutch authorities (ECHA, 2013). Next to the safety instructions of several household chemical products on the shelf, the information had been added that the reader had just won 1000 EUR. However, after four weeks, not a single 'winner' had reacted.

Comparative assessment of label effectiveness

In this assessment, three label options for a common liquid laundry detergent product were compared (see Annex I):

- (1) the **Current labelling approach** (CLP + Detergent Regulation);
- (2) an **Alternative label 1**, based on the requirements of the Detergent Regulation and CLP but replacing precautionary phrases with icons whenever deemed possible, and using an ingredient label with international nomenclature (INCI) instead of the multilingual Detergent Regulation ingredient label;
- (3) an **Alternative label 2**, with strongly reduced CLP and Detergent Regulation content, but instead with prominent focus on the “Keep away from children” and “Eyes” safe use icons, as well as prominent allergen information.

1. Setup and flow of the study

First, panellists were shown one of the three label executions on the screen. The front label (shared by all executions) was shown first. Upon clicking ‘next’, the back label with the regulatory and safety label was shown, until the panellist again clicks ‘next’. It was possible to use the zoom functionality to get a better view of the details. The time spent looking at the front label and at the back label was tracked.

Next, after the view of the label had disappeared, panellists were asked a number of open questions about what they remembered from the label, followed by a ranking exercise about relative hazards and storage requirements. This way the spontaneous ‘stickiness’ of label elements was determined.

Finally, the panellists were asked (in an open question) what they would do in case of an accidental exposure. Next they were shown the label again and were asked to look for relevant guidance (with time tracking). Then they reported their level of agreement with several statements about the hazard and first aid actions.

Those respondents who had been identified as concerned with allergies, were presented with specific allergy-related questions.

Finally, a subgroup of respondents was shown all three labels and was asked to indicate their preference.

2. Overall label preference

A subgroup of 500 panellists was (at the end of this part of the survey) shown the three back label options in parallel, and was asked to select their preferred option. They also had to select the applicable reasons for their preference.

Respondents clearly preferred the Alternative label 1 (44%) followed by the Alternative label 2 (36%) (Figure 4). The Current label was chosen by only 17% of respondents. There was a slight bias towards preferring respectively the Current label and the Alternative label 2 if this had been the label used during the survey. This was limited, however, and did not affect the overall outcome.

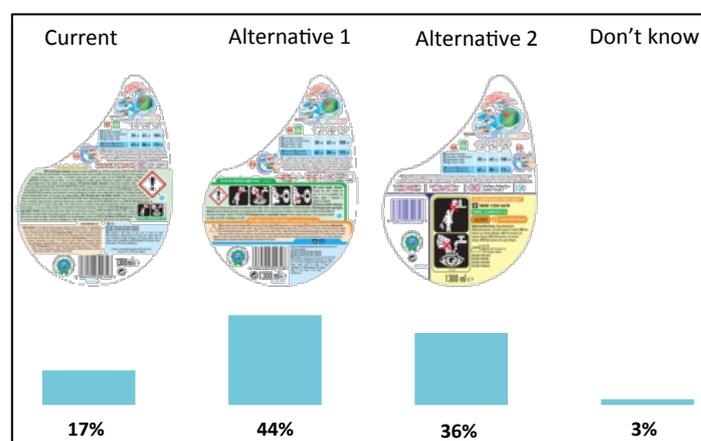


Figure 4. Label preference.

When asked why respondents preferred the selected label (Figure 5), for Alternative label 1 this was mainly because it provides the most information (64%) while it is easy to understand or to read (61%, 55%). For Alternative label 2 it is mainly because of its easiness to understand or read (60%, 56%). Those who preferred the Current label made this choice because this label provides the most information (88%) or because the other labels are judged to contain not enough information (42%).

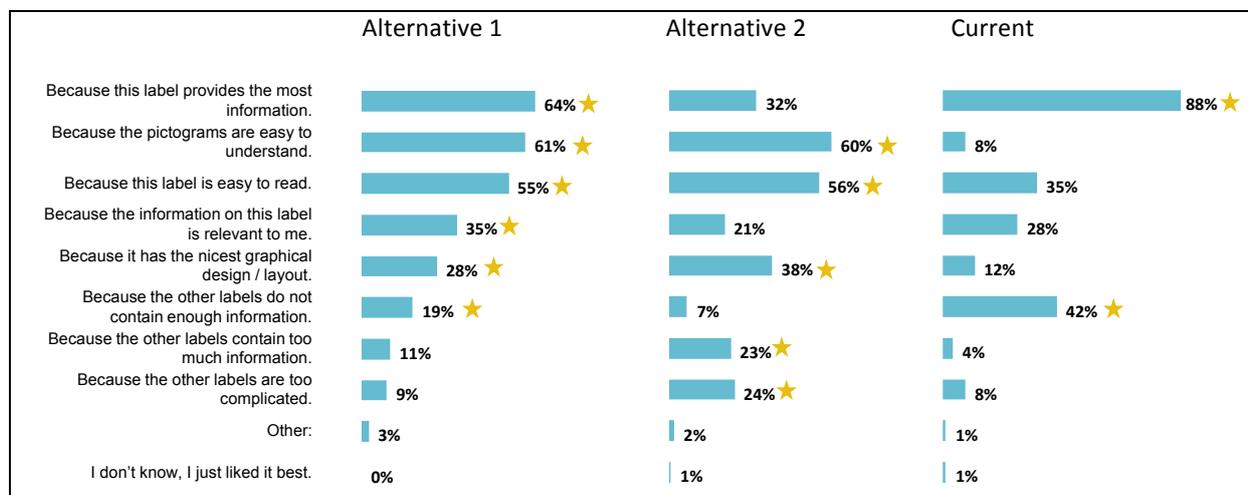


Figure 5. Reasons for label preference.

These findings support the findings of the SynapsesQuali (2016) study that consumers do not prefer crowded labels. On the other hand, consumers still want to have available sufficient information (even though they may not actually read or use it very much in practice).

3. Stickiness of label elements

3.1. Time looked at the label

The panellists were asked to have a look at the label as if they would buy the product or use it for the first time - taking into account their personal situation (own preferences, concerns, family situation, etc.)

Respondents took on average about 11 seconds to look at the front label of the product. This amount of time appears to be sufficient to study the limited amount of information (brand name, graphical design, 'number of loads' icon).

For the back label, on average 22-23 seconds were used by the respondents. The time spent was not affected by the amount of information on the 3 different label executions. Surprisingly, the overall reading time was comparable between all three labels, irrespective of the complexity and amount of text.

For the Alternative label 2, the 23.1 seconds spent can be judged as just sufficient (although the very minimum) to be able to see most of the information. For the Current label and Alternative label 1, there is substantially more information to be processed. It is not reasonably possible to read everything on these labels in less than 23 seconds that were used by the panellists on average. It has been estimated that reading the entire label content - without further reflecting on the meaning - normally takes about 90 seconds.

Consequently, it can be concluded that the panellists only paid (barely) sufficient attention to the Alternative label 2, but spent clearly not enough time to read the content of the other two labels.

3.2. Label elements spontaneously reported by respondents

The respondents were asked to spontaneously describe what they had seen on the label, as an open question. The answers were coded into categories of equivalent meaning (Figure 6).

Across the three labels, the most remembered was the fact that dosage instructions are present on the label (between 25% and 29%). Related to this, the presence of washing instructions was reported by 17%-19% of the panellists.

The presence of safe use instructions, as a generic concept, was reported more often for the Current and Alternative 1 labels (17% for each) compared to Alternative label 2 (11%). However, this trend was not seen in a consistent way for specific individual safety instructions. The message “Keep away from children” was remembered twice as much from the Alternative 2 label (19%) than from the current label (9%) or Alternative 1 (10%) label. The allergic reaction warning was significantly more noticed on the Alternative 1 (12%) and Alternative 2 (10%) labels compared to the current label (3%). Presence of an eyes hazard warning was, on the contrary, significantly more mentioned for the Current label (20% in total), than for the Alternative labels 1 and 2 (respectively 13% and 11% in total). This was observed despite the prominence of the A.I.S.E. “eyes” icon on Alternative label 2.

It should be mentioned that the presence of an ingredient list was noticed only by 10%, 7% and 6% for respectively the Current, Alternative 1 and Alternative 2 labels. In this context it is worth noting that the Alternative label 2 contains only a limited list of allergens.

Overall, there was no single label element that panellists systematically remembered very well. This observation was similar for the three label executions. One notable difference is that the Alternative label 2 appeared to convey the “Keep away from children” message twice as effectively as the other labels.

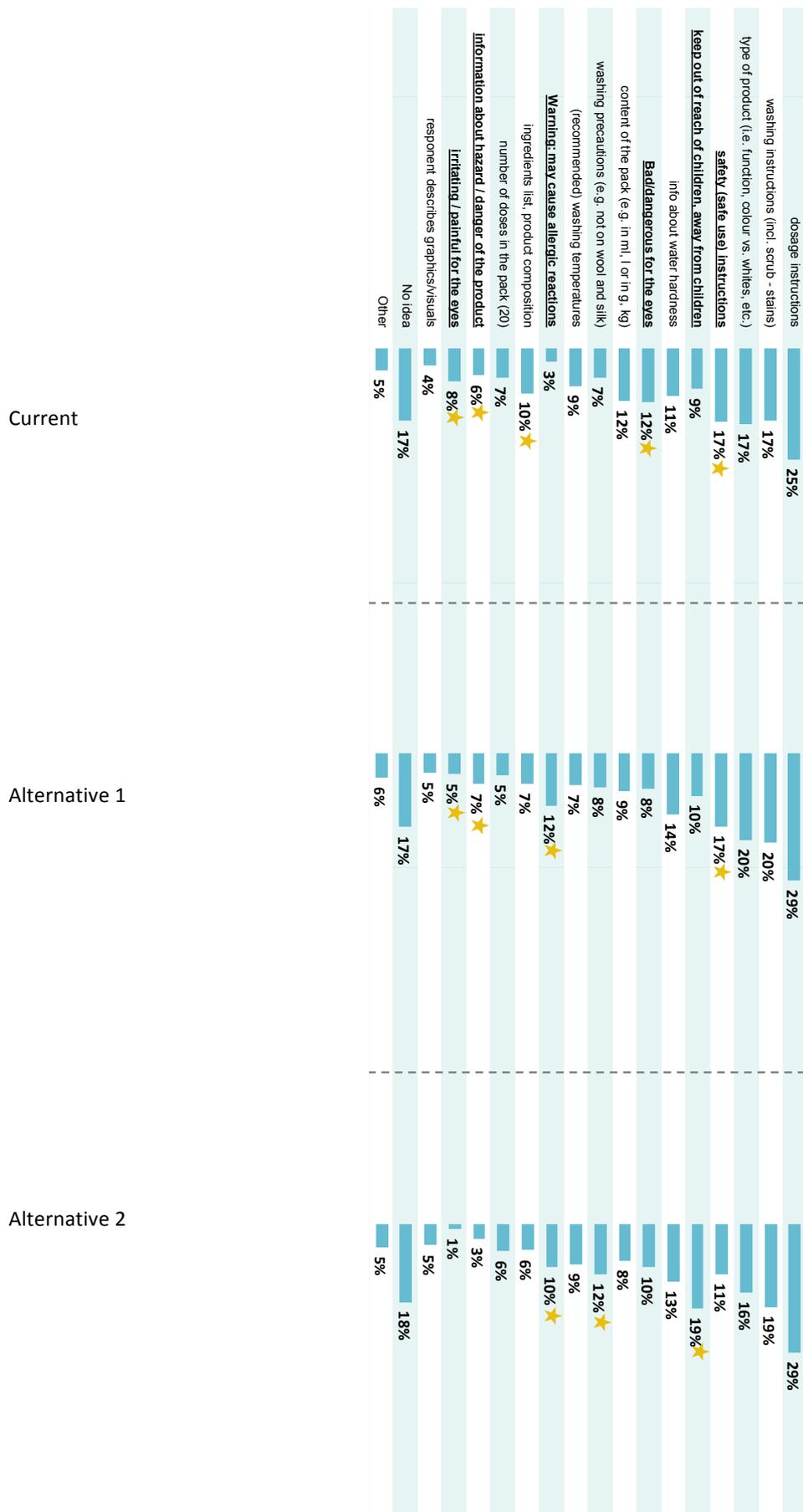


Figure 6. Label elements reported by respondents.

3.3. Ingredient information

A large majority of the respondents (83-89%) had no idea about what was on the label regarding the composition or ingredients of the product (Figure 7). The Detergent Regulation ingredient list (as used on the Current label) performed somewhat less poorly. Still, 83% had no idea, and the most prominent ingredient group (surfactants) was only reported by 4%. The Cosmetics-style label (as used for Alternative label 1) with its full ingredient list did not perform better than the Alternative label 2, which had no ingredient list at all with the exception of a short list of allergens. Allergens were noticed only sporadically on any of the labels (reported by 1-2%).

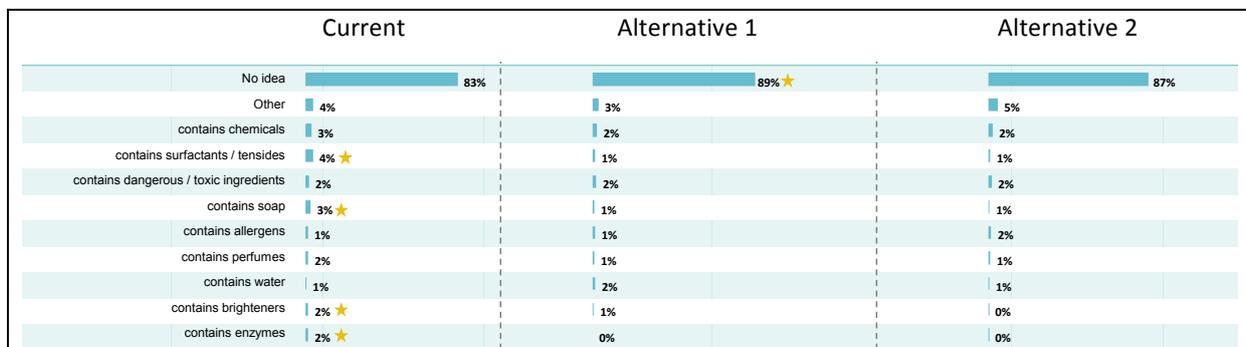


Figure 7. Ingredients information retained from the label by the respondents.

Overall these findings indicate that none of the ingredient list options had been adequately studied and been well understood by the panellists.

3.4. Appropriate storage as reported by respondents

Respondents were probed (through an open question) where, according to them, they have to store the product. Note that this question does not specifically refer to the label content.

Over half of them reported that they should keep this product out of the reach of children. This was mentioned either explicitly, or implicitly by mentioning the product is to be stored on a high shelf or inside a locked cabinet. The Alternative labels were slightly more effective (60% and 61%) than the Current label (55%) to convey this message (Figure 8).

In the previous question (about elements spontaneously remembered from the label), on the contrary, at best one out of five (for Alternative label 2) or otherwise only one out of ten respondents had spontaneously mentioned that they had seen such guidance on the label. Hence, it could be argued that this basic safe use practice is probably driven more by priori knowledge and experience than based on what they had actually seen on the label.

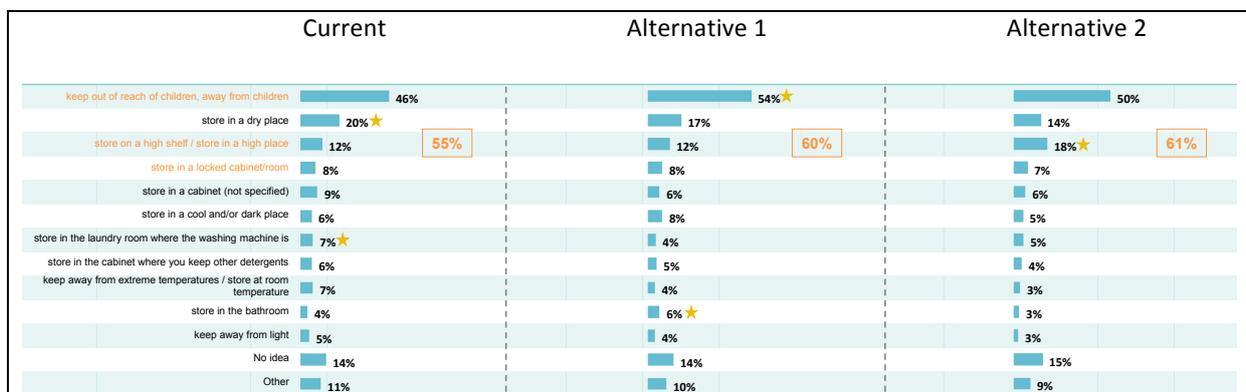


Figure 8. Safe storage guidance as reported by respondents.

When shown the statement that “this product should be stored out of children’s reach”, 90% of the respondents agreed with it (completely agreed: 80%; somewhat agreed: 10%), with no difference between the labels.

3.5. Health hazards as reported by respondents

Next, the respondents were asked what, according to them, are the dangers of this product related to health (Figure 9). As with the question about storage, it does not specifically refer to the label.

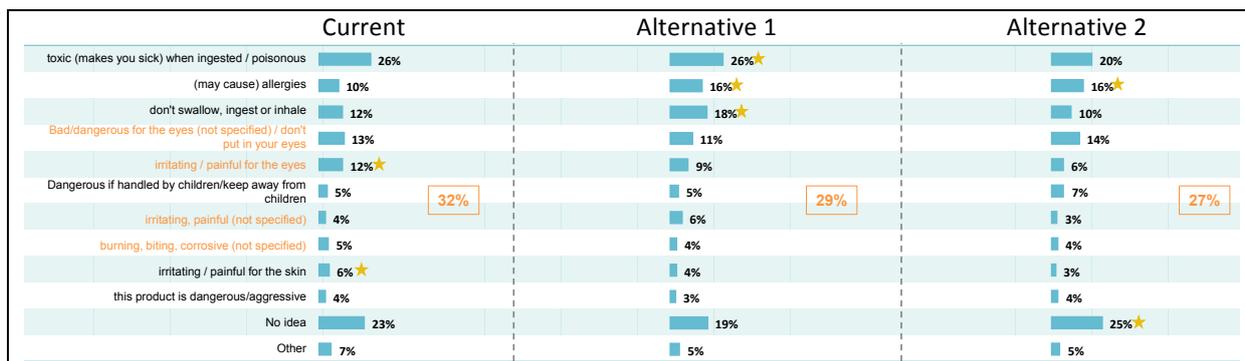


Figure 9. Health hazards as reported by respondents.

Oral toxicity was reported most prominently for all labels: by 44% of the respondents who had studied Alternative label 1, by 38% of the respondents who had seen the Current label, and by 30% of those who had seen the Alternative label 2. This hazard was reported either explicitly or via the statement ‘do not swallow, ingest, or inhale’.

The eye hazard (either specifically, or more in general as ‘irritation’) was reported second most often. This was mentioned slightly more frequently by respondents who had seen the Current label (32%) than by those who had studied the Alternative labels 1 or 2 (resp. 29% and 27%).

The allergy hazard was reported more often by respondents who saw the Alternative labels (16% in both cases) than for the Current label (10%). Skin irritation was mentioned, on average, by <5% of the respondents (more so by those who had studied the Current label, at 6%).

Overall, none of the labels were highly effective in communicating that the product has hazardous properties and may be harmful. Keeping this overall limitation in mind, Alternative label 1 conveyed the hazards most strongly. Alternative label 2 led to a lower reporting of the ingestion hazard. This was intentional in the label’s design, which does not cover the oral toxicity because it was deemed not very relevant for the specific product. The Current label was slightly better at conveying the eyes hazard but performed more poorly concerning the allergy warning.

3.6. Respondents’ opinion about specific health aspects

After having provided spontaneous feedback about the product’s health hazards, the respondents were asked for their opinion about specific statements, related to the relevant hazards.

90% of the respondents agreed that “you should avoid contact of this product with your eyes”. There was no difference between the labels. When shown the statement that “this product may cause an allergic reaction”, about 70% of the respondents agreed, with no significant difference between the labels. Over 50% of the respondents agreed that “you should avoid contact of this product with your skin” (51% for the Alternative label 2; 56-57% for the other labels).

This showed that, subconsciously, consumers are much more aware of the potential hazards than what had appeared from their initial spontaneous reactions. Differences between the groups who had seen the different labels were minimal, which suggests that the hazard awareness is based on intuition and a priori knowledge about the product category, much more than on an interpretation of the back label (if at all).

As a matter of provocation, the statement “you might die if you drink this product” was shown to the respondents. Surprisingly, but in line with the high spontaneous response rate regarding oral toxicity to the earlier question, two-thirds agreed with this statement. There was no significant difference between the labels, though Alternative label 1 trended slightly higher (69% agreement). This indicates that consumers over-

estimate the oral toxicity of common laundry detergent products (note that in case of ingestion, the applicable CLP phrase only says to contact a PCC or doctor if feeling unwell).

3.7. Hazard perception relative to other products

Respondents were asked to describe the level of health hazard (as they perceive it) for the product of the label under study, and as a benchmark, also for two other household and personal care products - a drain cleaner and a shampoo (Figure 10). The drain cleaner was considered the most dangerous product (84% judging it to be quite dangerous or very dangerous). It was followed by the laundry detergent under study (43% judging it to be quite dangerous or very dangerous), and then the shampoo (17% saying it is quite or very dangerous).

More consumers judged the detergent with Alternative label 1 to be dangerous (47%) than with the Current label (39%), the Alternative label 2 being in the middle (42%).

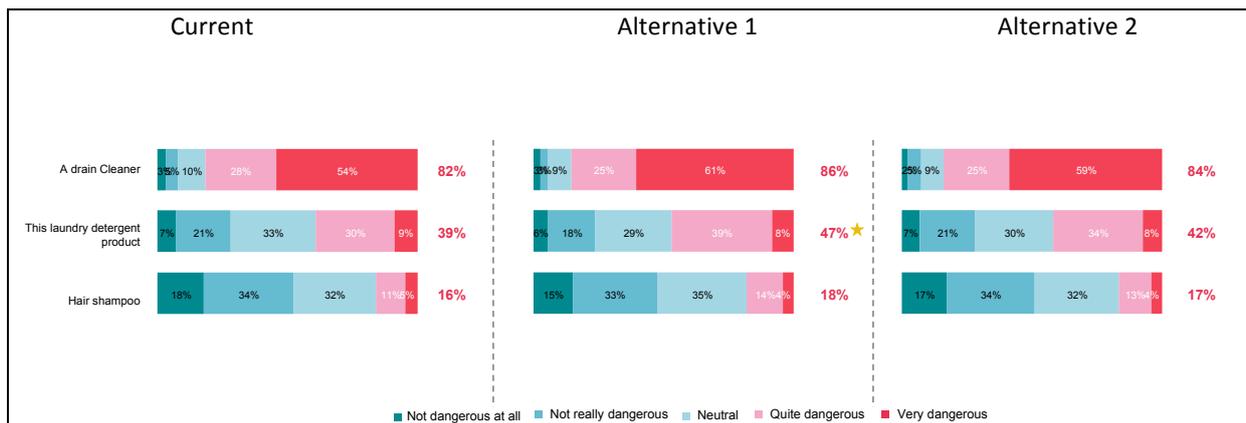


Figure 10. Hazard perception of different household products.

Respondents were also asked to judge the hazard of the detergent product under study to children and to the environment (Figure 11). The replies were similar for all three label executions. If anything, in line with the above hazard ranking assessment's outcome, with the Alternative labels somewhat more respondents (79%) judged the product to be dangerous for children than with the current label (75%). For the environmental hazard this was 51%/52% for the Alternative labels versus 48% for the Current label.

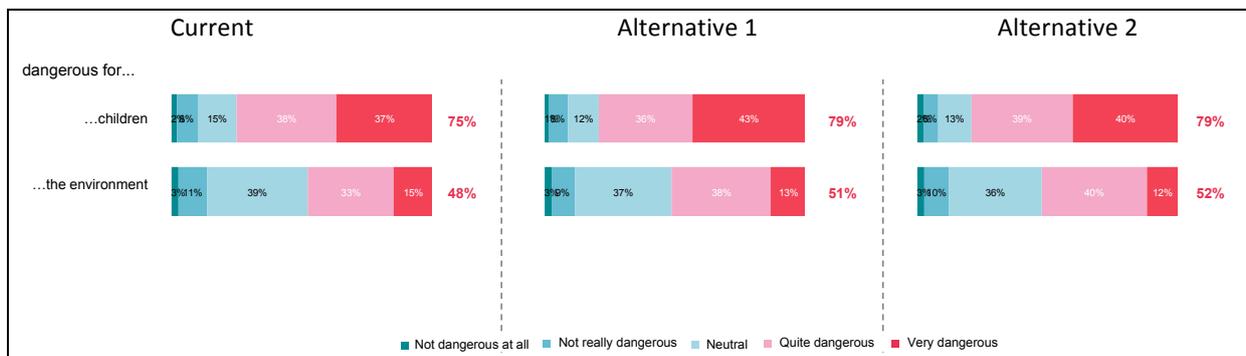


Figure 11. Hazard perception for children and for the environment.

The hazard ranking assessment provides an important confirmation that, despite their apparent over-estimation of the oral toxicity hazard of detergent products as seen above, consumers do have a good pre-existing understanding of the relative potential hazards of different categories of household chemical products. Within the tested label options, it indicates that the text-heavy Current label was less effective to convey the hazard message than the icon-based Alternative label 1. It also suggests that the very prominent use of just a few safety icons in Alternative label 2 was at least equally if not more effective than the Current label. Another observation is that across the three labels, the product is deemed hazardous for children substantially more often than that it is judged dangerous for health in general.

3.8. Actions in case of an accidental exposure

Spontaneous action

The following situation was presented to the respondents: “Please imagine this laundry detergent accidentally splashed into the eyes of someone in your household. This person says it’s quite painful.” Without being shown the label again, and without referring to the label, the respondents were asked what they would do, via an open question (free text). The responses were coded and equivalent answers were grouped (Figure 12).

Most panellists (about 80% for all label executions) said that they would rinse the eyes with water - which is indeed the correct first measure to be taken.

A large proportion (45% on average) of respondents mentioned that they would immediately seek a direct medical intervention (either call the doctor, or go to hospital, call an ambulance, etc.). This was seen for all labels, but most prominently for Alternative label 1 (49%). Whereas only 15% of the respondents more appropriately stated that they would seek medical help if the problem persists. Only a small percentage (3% on average) reported they would contact the Poison Control Centre.

It is important to highlight that only a very limited percentage of the respondents indicated that they would consult the label in case of an accident. This was similar for all tested labels (2% for the current label; 3% for Alternatives 1 and 2).

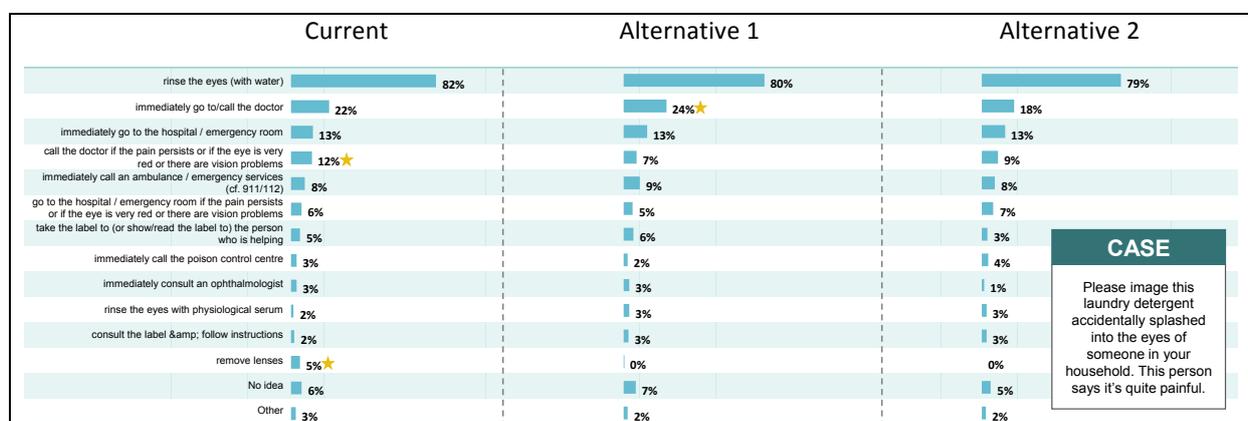


Figure 12. Actions in case of an accidental exposure, as reported by respondents.

The very limited number of respondents who said that they would consult the label confirms that past experience and emotional behaviour take priority over safety instructions provided via the label - and that that consumer attention can be diverted by too much information on a label regarding all potential hazards. This finding is aligned with EU Commission and ECHA findings (European Commission, 2012).

Actions based on consultation of the label

Respondents were asked to look at the label again, to try and find helpful information about what to do when the product has been splashed into the eyes. They were asked to do this quickly, just like if an accident had really happened.

The panellists spent respectively 24.3 and 24.1 seconds with the Current label and Alternative label 1, and slightly less (20.7 seconds) with the Alternative label 2.

When asked about their agreement with predefined statements (Figure 13), the majority would still rinse the eyes with water. This was slightly more for the Current label and the Alternative label 2 (95% and 93%) than for Alternative 1 (87%).

A much larger proportion of the panellists (in the order of 65% - 75%) would now seek medical help after some time, when the problems persist. This is in line with the CLP P-phrase. Still, a substantial proportion (ranging from 41% to 65%) would immediately seek medical help. The highest percentage (65%) was reported for the Alternative label 1.

About one out of four panellists judged that there is no need for medical help. This was most prominent with the Alternative label 2 (30%) and least with the Alternative label 1 (17%).

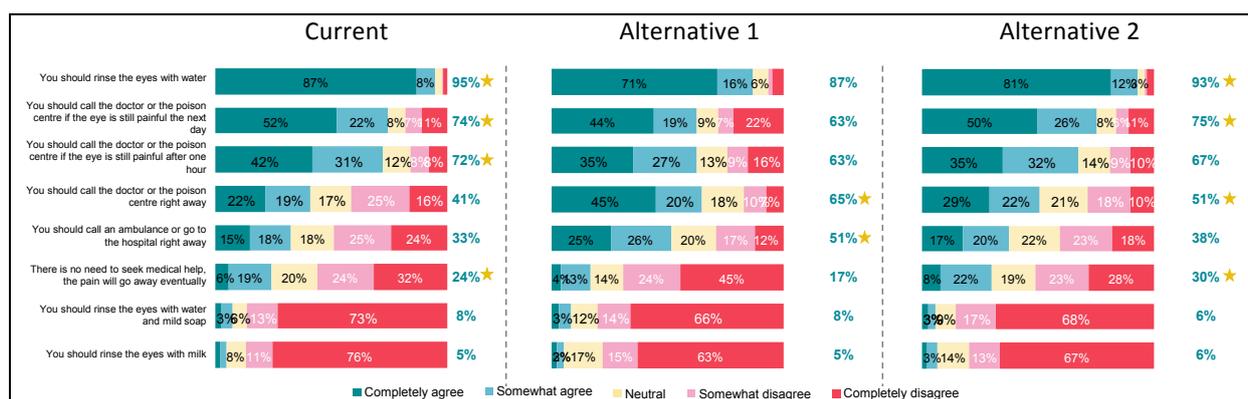


Figure 13. Actions in case of an accident, after consulting the label.

When asked about the usefulness of the label information in case of an accident, contrary to the findings of the qualitative study (SynapsesQuali, 2016), this was considered useful for all labels by most respondents (on average 87%). This was mostly so for the Current label (93%). About 85% said the relevant information was easy to find irrespective of the label execution, which is also contradictory to the qualitative study's results. (Figure 14).

This response seems to conflict with the finding that <3% of the panellists had indicated they would consult the label in case of an accident. A potential interpretation is that respondents welcome the idea that useful information on first emergency measures is contained on the label; however, when a real emergency happens they rely more on general experience (e.g. wash your eyes, consult a doctor etc.) and do not actually consult the label for the information mentioned above.

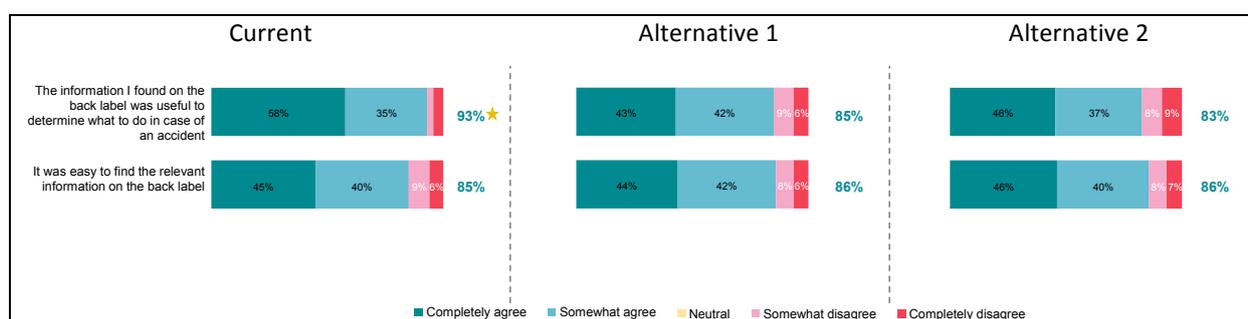


Figure 14. Usefulness of label information in case of an accident.

4. Comparative assessment of label effectiveness for allergy information

As part of the comparative label effectiveness assessment, a specific section was included that was limited to panellists who had indicated at the start of the study (as part of the demographics data) that they, or anyone in their household, have allergies, asthma or sensitive skin. 42% of the respondents had answered “yes” to this question. Note that this is substantially more than the proportion of the population expected to actually have a medically confirmed or suspected allergy problem (about 25% in total). Also note that allergic reactions caused by detergents are extremely rare.

This section of the review was conducted just before the part about the accidental exposure, but after the general questions about the label.

4.1. Time looked at the label

The respondents with allergy concerns were asked whether they had looked for allergy-related information when they first looked at the label.

Less than 40% of the respondents with these concerns had considered allergy information during the initial viewing of the label (in which they had nevertheless been asked to read the label as if they were going to

purchase or use the product for the first time). This was the least for the Current label (34%), followed by the Alternative label 1 (41%) and Alternative label 2 (44%).

Those respondents who had already looked for allergy information the first time, not always spent more time with the back label than the general population. For the Current label, on average the viewing time was the same (22.3 seconds for allergy concerns, versus 22.6 seconds overall). For the Alternative labels, people with allergy concerns had spent somewhat more time (27 seconds versus 22.7 for Alternative 1; and 25 seconds versus 23.1 for Alternative 2).

The respondents who had not yet looked for this information were shown the back label a second time, with the question to specifically look for information on allergies. Contrary to what was found with the initial label viewing, it took respondents substantially longer to evaluate the labels containing more text: on average 43.1 seconds on the Current label, a little less for the Alternative label 1 (38.4 seconds) and less again (33.4 seconds) for the Alternative label 2.

4.2. Effectiveness to convey allergy information

The respondents with potential allergy concerns were asked about their agreement with several statements regarding this topic (Figure 15). As mentioned above, about 40% of these respondents said that they had already studied the allergy information when first seeing the label; whereas about 60% of them was first shown the label a second time to specifically look for allergy information.

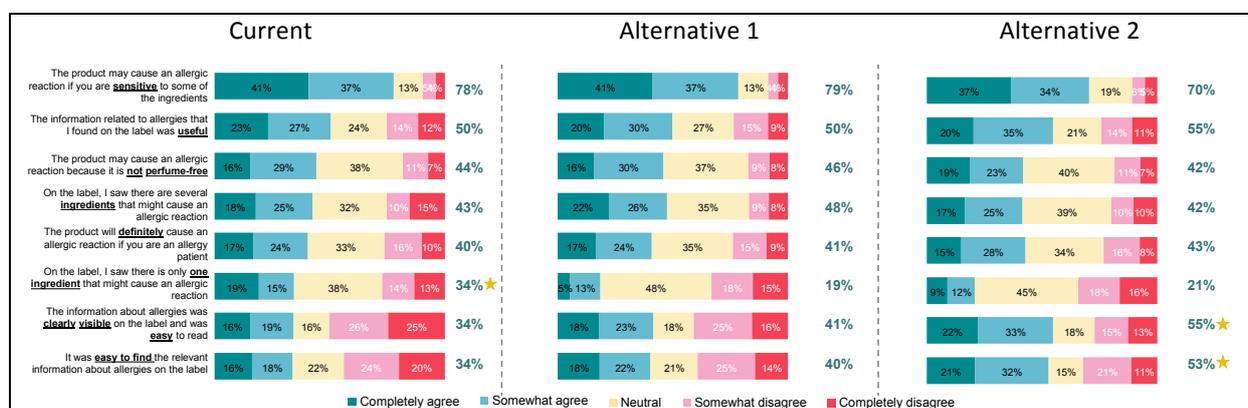


Figure 15. Effectiveness of allergy related information.

About half of the respondents with allergy concerns found the label information about allergies useful - similar across the three labels. More specifically this was 50% for the Current label and for Alternative label 1, and slightly more (55%) for Alternative label 2.

A majority of respondents (over three out of four) correctly interpreted that the product may cause an allergic reaction in people sensitive to at least one of the ingredients. The Alternative label 2 performed somewhat less well (70% versus 78% and 79% for the others). On the other hand, over 40% wrongly reported that the product will definitely cause a reaction if you are an allergy patient. And over 40% wrongly associated the allergenicity with the presence of perfume in general rather than with specific allergenic perfume ingredients.

The Alternative label 2 was clearly better when it comes to good visibility and easiness to read (55% agree) and easiness to find (53% agree). On the current label, only 34% indicated that the allergy information was clearly visible and easy to read and easy to find. 40/41% agreed to this for Alternative label 1.

Especially this last finding confirms the assumption already obtained via the qualitative study (SynapsesQuali, 2016), that limited and targeted information is preferable and more effective for consumers. Especially the current approach, with the allergens list split into two separate sections, was confusing. Nevertheless, even with the easiest to read label (Alternative 2) up to half of the concerned population is not convinced about the usefulness of this information. Also, the many incorrect perceptions about the allergy hazard of the product indicate that the understanding of the information is not optimal. Overall, the findings indicate that there may be a need to consider different, more relevant ways to convey allergy information than explored in the current study.

Conclusions

1. Consumer understanding of pictograms and icons

The CLP environmental and corrosive pictograms were relatively well understood. However, the corrosive pictogram was not associated with its primary meaning for most of household products, i.e. the severe eye damage hazard. The meaning of the exclamation mark icon was almost not understood, though most respondents did correctly judge the hazard level of corrosive to be higher than the exclamation mark.

Importantly, eye hazard was not recognized from the corrosive pictogram - while this is by far the primary reason for use of this pictogram on household detergent products. Eye hazard was also not at all recognized from the exclamation mark pictogram. As a consequence, the CLP pictograms used for eye hazard were found to be ineffective at conveying this message.

The A.I.S.E. safe use icon “Keep away from children” was remarkably well understood. The “eyes” and “ingestion” icons were adequately understood in terms of overall hazard, but the combined messages (to avoid exposures, and also what to do in case of exposure) seemed more difficult to recognise. Other A.I.S.E. icons were understood relatively well. On average, the understanding of the A.I.S.E safe use icons was better than the tested CLP pictograms. This is despite the fact that the strict GHS methodology (based on open questions) was applied in this research.

2. Label reading habits

Even when respondents were invited to focus their attention to the labels, in practice, they spent insufficient time (in the order of 20 to 25 seconds) studying the labels to be able to read all the content, especially for the Current label and Alternative 1 label.

Nevertheless, most respondents claimed to read and understand the safety information on the labels when they buy or use a product for the first time. Other observations indicate that these claims need to be interpreted with caution. This also appeared in the findings of A.I.S.E.’s earlier qualitative study - which concluded that back labels are rarely consulted and - when studied in detail - they are generally disliked because of their complexity and the high amount of information. The very limited consultation of the label also confirms EU Commission (2012) findings that past experience and emotional behaviour take priority over safety instructions provided via the label - and that that consumer attention can be diverted by too much information on a label.

3. Label effectiveness and consumer preference

Respondents preferred the simpler and more graphical alternatives versus the current CLP label. More specifically the Alternative label 1 (with multiple safety icons) had the highest preference. The main argument for selecting it was that this provided a lot of information while being easy to understand. It should however be noted that respondents had the most severe hazard perception for Alternative label 1, overestimating the actual hazard, which was also apparent from the more frequent mentioning of the need for urgent medical help in case of an accident. The Current label was by far the least preferred. This finding confirms the observation in the earlier qualitative study that consumers do not prefer crowded labels with a lot of text.

Overall, no notable differences between the three label designs were observed in how well the safe use information was conveyed and retained.

‘Stickiness’ of specific safety instructions on the label was quite poor, for each of the three evaluated label executions. In other words, after having looked (quite briefly) at the label in the same way as they would do when first buying or using the product, respondents generally remembered quite poorly the safety instructions that were on the label. Nevertheless, for all designs, a large majority agreed that the product has to be stored away from children. And without looking at the label again to find specific information, a large majority of the respondents replied with the correct action in case of eye exposure (i.e. rinse with water). Nearly no respondents said they would consult the label in case of an accident, even though when probed about this information, most people judged it to be useful.

Respondents correctly judged the hazard level of the tested product relative to benchmark products. This ranking did not depend on the label shown, and confirms that consumers have an adequate pre-existing understanding of the potential hazard of different categories of household chemical products. Among the three tested labels, the Alternative label 1 with multiple safe use icons led to a somewhat higher perceived hazard than the other two.

Ingredients information was not well studied, understood nor remembered from any of the three design executions. Interestingly, the label with only the allergens listed did not lead to a poorer understanding of the ingredients in general than the Detergent Regulation or INCI-style labels.

Only half of the people who claimed to have concerns related to allergy² or sensitive skin found the allergen information useful, independent of the label. This finding indicates that there may be a need to consider different and more relevant ways to convey allergy information than explored in the current study.

Overall, the findings with the different label executions indicate that consumers appear to rely more on prior knowledge, experience and hazard perception to determine how to safely use a product, than on the back label.

² To note: it can be assumed that only a small minority of these people may actually suffer from a specific allergy attributed to detergents.

References

- A.I.S.E. (2014). Pan-European consumer survey on sustainability and washing habits.
- A.I.S.E. (2016). Better Regulation & Safe Use – A.I.S.E. “BRE&S” Project, Task 2 - “Define the problem and build the case.” 27 November 2016.
- ECHA (2013). European Chemicals Agency newsletter, February 2013. Dutch CLP awareness raising campaign “Label Lottery” wins 2012 Silver Epica Award.
- European Commission (2012). Report from the Commission to the European Parliament and the Council on communication on the safe use of chemicals. Ref. COM(2012) 630 final.
- European Commission (2015). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - Better regulation for better results - An EU agenda. Ref. COM(2015) 215 final.
- European Commission (2016). Cumulative Cost Assessment for the EU Chemical Industry. Ref. Ares(2016)3304226 - 11/07/2016.
- European Commission (2011). Special Eurobarometer 360. Consumer understanding of labels and the safe use of chemicals. Report. Fieldwork: November – December 2010. Publication: May 2011.
- European Commission (2017). Special Eurobarometer 456. Chemical safety. Report. Fieldwork: November-December 2016. Publication: June 2017.
- GfK Marktforschung (2006). Consumer research on safe use icons. Report prepared for A.I.S.E., April 2006.
- InSites Consulting (2008). A.I.S.E. – Laundry Detergent Study. Report prepared for A.I.S.E. October 27, 2008.
- InSites Consulting (2014). Washing habits 2014. Report prepared for A.I.S.E.
- SynapsesQuali (2016). Safety information on household products. Better Regulation & Safe Use Project. Research conducted in Belgium, Poland & Spain. Report prepared for A.I.S.E.
- United Nations (2015). Global Harmonised System for the classification and labelling of substances and mixtures (GHS), Annex VI.
- Van Den Heuvel, C. (2014). Comprehensibility and learnability of A.I.S.E. Safe Use Icons. MSc thesis, KU Leuven, promoter: Filip Germeys.

Annex I - Labels for liquid detergent case study

The label executions in this Annex cover the language cluster Polish / Czech / Slovakian / German and were used for the test in Poland.

Front Label (shared among all three test legs)



OPTIONAL FOR TOUGH STAINS

Scrub

Spread

20°C 30°C 40°C 60°C 95°C

4.5 kg

| | | | |
|---|-------|-------|--------|
| (PL) miękka i średnio twarda woda (CZ) měkká a středně tvrdé vody (SK) mäkká a stredne tvrdé vody (DE) weiches und mittelhartes Wasser | 50 ml | 65 ml | 100 ml |
| (PL) twarda woda (CZ) tvrdá voda (SK) tvrdá voda (DE) hartes Wasser | 65 ml | 80 ml | 115 ml |

(PL) *Dozuj prawidłowo. Zamów specjalną nakretkę na: (CZ) *Dávkujte správně. Objednejte si aplikáciu uzáver na: (SK) *Dávkujte správně. Objednejte si aplikáciu uzáver na: (DE) *Dosier richtig. Bestellen Sie das entsprechende Dosiergerät bei: www.superlaundry.info

~~Pranie wstępne~~ • ~~Wielna/ledvob~~ • ~~Suszarka~~

~~Przedpírka~~ • ~~Prédpiranie~~ • ~~Vlna/Hedvábí~~ • ~~Vlna/Hodváb~~ • ~~Sušička~~

~~Vorwäsche~~ • ~~Wolle/Seide~~ • ~~Trucker~~

UFI KMTT-DSP3-7FD7-6RWY

(PL) Płyn do prania. Uwaga. Działa drażniąco na oczy. Chronić przed dziećmi. W PRZYPADKU DOSTANIA SIĘ DO OCZU: Ostrożnie płukać wodą przez kilka minut. Wyjąć soczewki kontaktowe, jeżeli są i można je łatwo usunąć. Nadal płukać. W przypadku utrzymywania się działania drażniącego na oczy: Zasięgnąć porady/zgłosić się pod opiekę lekarza. W PRZYPADKU POEKNIĘCIA: W przypadku złego samopoczucia skontaktować się z OŚRODKIEM ZATRUCI/lekarzem. W razie konieczności zasięgnięcia porady lekarza należy pokazać pojemnik lub etykietę. Zawiera Alpha-isomethyl ionone. Może powodować wystąpienie reakcji alergicznej. **(CZ) Tekutý prací prostředek. Varování.** Způsobuje vážné podráždění očí. Uchovávejte mimo dosah dětí. PRI ZASAŽENÍ OČÍ: Několik minut opatrně vyplachujte vodou. Vyjměte kontaktní čočky, jsou-li nasazeny a pokud je lze vyjmout snadno. Pokračujte ve vyplachování. Přetrvává-li podráždění očí: Vyhledejte lékařskou pomoc/oseřeni. PRI POŽITÍ: Nečítěte-li se dobře, volejte TOXIKOLOGICKÉ INFORMAČNÍ STŘEDISKO/lekaře. Je-li nutná lékařská pomoc, mějte po ruce obal nebo štítek výrobku. Obsahuje Alpha-isomethyl ionone. Může vyvolat alergickou reakci. **(SK) Tekutý prací prostriedok. Pozor.** Spôsobuje vážne podráždenie očí. Uchovávajte mimo dosahu detí. PO ZASIAHNUTÍ OČÍ: Niekoľko minút ich opatrne vyplachujte vodou. Ak používate kontaktné šošovky a ak je to možné, odstráňte ich. Pokračujte vo vyplachovaní. Ak podráždenie očí pretrváva: vyhľadajte lekársku pomoc/starostlivosť. PO POŽITÍ: Pri zdravotných problémoch volajte TOXIKOLOGICKÉ INFORMAČNÉ CENTRUM/lekára. Ak je potrebná lekárska pomoc, majte k dispozícii obal alebo etiketu výrobku. Obsahuje Alpha-isomethyl ionone. Môže vyvolať alergickú reakciu. **(DE) Flüssiges Waschmittel. Achtung.** Verursacht schwere Augenreizung. Darf nicht in die Hände von Kindern gelangen. BEI KONTAKT MIT DEN AUGEN: Einige Minuten lang behutsam mit Wasser spülen. Eventuell vorhandene Kontaktlinsen nach Möglichkeit entfernen. Weiter spülen. Bei anhaltender Augenreizung: Ärztlichen Rat einholen / ärztliche Hilfe hinzuziehen. Bei Verschlucken: Bei Unwohlsein GIFTINFORMATIONSZENTRUM oder Arzt anrufen. Ist ärztlicher Rat erforderlich, Verpackung oder Kennzeichnungsetikett bereithalten. Enthält Alpha-isomethyl ionone. Kann allergische Reaktionen hervorrufen.

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(PL) Składniki: 5-15% Anionowe środki powierzchniowo czynne, Niejonowe środki powierzchniowo czynne; <5% Fosfoniany, Mydła; Enzymy, Rozjaśniacze optyczne, Benzisotiazolinone, Metylisotiazolinone, Kompozycje zapachowe, Alpha-isomethyl ionone, Citronellol, Geraniol, Linalool. **(CZ) Složení:** 5-15% Anionové povrchově aktivní látky, Neiontové povrchově aktivní látky; <5% Fosfonáty, Mydla; Enzymy, Optické zjasňovače, Benzisotiazolinone, Metylisotiazolinone, Parfémy, Alpha-isomethyl ionone, Citronellol, Geraniol, Linalool. **(SK) Zloženie:** 5-15% Aniónové povrchovo aktívne látky, Neiónové povrchovo aktívne látky; <5% Fosfonáty, Mydla; Enzymy, Optické zosvetľovače, Benzisotiazolinone, Metylisotiazolinone, Parfúmy, Alpha-isomethyl ionone, Citronellol, Geraniol, Linalool. **(DE) Inhaltsstoffe:** 5-15% anionische Tenside, nichtionische Tenside; <5% Phosphonate, Seife; Enzyme, optische Aufheller, Benzisotiazolinone, Metylisotiazolinone, Duftstoffe, Alpha-isomethyl ionone, Citronellol, Geraniol, Linalool.

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(SK) 800 5647 3829 (DE) 800 1928 3645
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12345678 A123

1300mle

Back Label - Alternative 1

OPTIONAL FOR TOUGH STAINS

Scrub

Spread

20°C 30°C 40°C 60°C 95°C

1

4-5 kg

| | | | |
|---|-------|-------|--------|
| (PL) miękka i średnio twarda woda (CZ) měkké a středně tvrdé vody (SK) mäkké a stredne tvrdé vody (DE) weiches und mittelhartes Wasser | 50 ml | 65 ml | 100 ml |
| (PL) twarda woda (CZ) tvrdá voda (SK) tvrdá voda (DE) hartes Wasser | 65 ml | 80 ml | 115 ml |

2

(PL) * Dozuj prawidłowo. Zamów specjalną nakretkę na: (CZ) * Dávkujte správně. Objednejte si aplikační uzávek na: (SK) * Dávkujte správně. Objednajtie si aplikačný uzáver na: (DE) * Dosier richtig. Bestellen Sie das entsprechende Dosiergerät bei: www.superlaundry.info

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Suszarka • Suszówka • Trockner

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(PL) Płyn do prania. Uwaga. Działa drażniąco na oczy. W razie konieczności zasięgnięcia porady lekarza należy pokazać pojemnik lub etykiętę. (CZ) Tekutý prací prostředek. Varování. Způsobuje vážné podráždění očí. Je-li nutná lékařská pomoc, mějte po ruce obal nebo štítek výrobku. (SK) Tekutý prací prostriedok. Pozor. Spôsobuje vážne podráždenie očí. Ak je potrebná lekárska pomoc, majte k dispozícii obal alebo etiketu výrobku. (DE) Flüssiges Waschmittel. Achtung. Verursacht schwere Augenreizung. Ist ärztlicher Rat erforderlich, Verpackung oder Kennzeichnungsetikett bereithalten.

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(PL) Może powodować wystąpienie reakcji alergicznej; (CZ) Může vyvolat alergickou reakci; (SK) Môže vyvolať alergickú reakciu; (DE) Kann allergische Reaktionen hervorrufen: Alpha-Isomethyl lanone, Geraniol, Protease, Citronello, Linalool, Aqua, Sodium C10-13 Alkyl Benzenesulfonate, Sodium Citrate C12-14 Pareth-7, C14-15 Pareth-n, Sodium Palm Kernelate, Propylene Glycol, MEA Dodecylbenzenesulfonate, Co-polymer of PEG / Vinyl Acetate, Alcohol, Parfum, Sulfated Ethoxylated Hexamethylenediamine Quaternized, Sodium C12-15 Pareth Sulfate, Sodium Laureth Sulfate, Sodium Comenesulfonate, Sodium Diethylenetriamine Pentamethylene Phosphonate, Hydrogenated Castor Oil, PEG/PPG-10/2 Propylheptyl Ether, Fluorescent Brightener 9, Sorbitol, Sodium Hydroxide, Tripropylene Glycol, Sodium Formate, Calcium Chloride, Sodium Chloride, Ethanolamine, Amylase, Benzisothiazolinone, Lysose, Colorant, Dimethicone, Methylisothiazolinone, Mannanase, Hydroxyethylcellulose, Dimethiconol, PEG-2 Stearate.

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Back Label - Alternative 2

OPTIONAL FOR TOUGH STAINS

Scrub

Spread

20°C | 30°C | 40°C | 60°C | 95°C

1

4-5 kg

2

| | | | |
|---|-------|-------|--------|
| (PL) miękka i średnio twarda woda (CZ) měkké a středně tvrdé vody (SK) mäkké a stredne tvrdé vody (DE) weiches und mittelhartes Wasser | 50 ml | 65 ml | 100 ml |
| (PL) twarda woda (CZ) tvrdá voda (SK) tvrdá voda (DE) hartes Wasser | 65 ml | 80 ml | 115 ml |

(PL) * Dozuj prawidłowo. Zamów specjalną naklejkę na: (CZ) * Dávkujte správně. Objednejte si aplikační uzáver na: (SK) * Dávkujte správně. Objednajte si aplikačný uzáver na: (DE) * Dosier richtig. Bestellen Sie das entsprechende Dosiergerät bei: www.superlaundry.info

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Alpha-isomethyl ionone, Benzisothiazolinone,
 Methylisothiazolinone, Citronellol, Geraniol, Linalool. (PL) Może powodować wystąpienie reakcji alergicznej. (CZ) Může vyvolat alergickou reakci. (SK) Môže vyvolať alergickú reakciu. (DE) Kann allergische Reaktionen hervorrufen.

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1300 ml e

Annex II - Coding of CLP Pictograms and A.I.S.E. Safe Use Icons

GHS09 - Environmental

| | |
|--|--|
| 1A = Correct (strictly) | Both of the two following aspects must be explicitly mentioned: <ul style="list-style-type: none"> toxic (or very toxic, or dangerous, or hazardous) to aquatic life (or to fish, or to the environment, or to nature, or to the planet, etc.) with long lasting effects (or with chronic effect, or with long term effects) |
| 1B = Correct (sufficient as basis for safety action or precaution) | <ul style="list-style-type: none"> toxic (or very toxic, or dangerous, or hazardous, or harmful) to aquatic life (or to fish, or to the environment, or to nature, or to the planet) without mentioning the long term or long lasting aspect bad for the environment, for nature,... |
| 2 = Partly correct | <ul style="list-style-type: none"> not environmentally friendly kills the environment, destroys the environment/planet, kills everything [<i>not judged "correct" because it over-estimates the hazard</i>] |
| 3 = Incorrect | Anything that does not refer to environmental hazard. |
| 4 = Opposite meaning | Suggesting that the product is environmentally friendly. |

GHS05 - Corrosive

| | |
|--|--|
| 1A = Correct (strictly) | Both of the following two meanings must be explicitly mentioned: <ul style="list-style-type: none"> severe skin burns (or skin corrosion) eye damage (or eye corrosion) <p>In addition the third meaning may be added but not mandatory:</p> <ul style="list-style-type: none"> May be corrosive to metals |
| 1B = Correct (sufficient as basis for safety action or precaution) | Mentioning of either of the following: <ul style="list-style-type: none"> 'corrosive' in general (but not specific for metals), 'chemical burns', 'aggressive product/chemicals', 'biting product/chemicals', 'harsh product/chemicals' need to wear safety glasses / goggles and gloves to handle this product |
| 2 = Partly correct | Any of the following statements: <ul style="list-style-type: none"> irritating, severely/seriously irritating / to skin, to eyes, or not specified. Will hurt/harm your skin need to wear gloves need to wear safety glasses/goggles will dissolve metals; will etch metals; corrosive specifically to metals |
| 3 = Incorrect | Anything that does not refer to irritation, chemical burns, or corrosion. |
| 4 = Opposite meaning | Suggesting that the product is mild to skin or to eyes, that it can be used with bare hands (without gloves) |

GHS07 - Exclamation mark

| | |
|---|---|
| <p>1A = Correct (strictly)</p> | <p>This is based on the most common meaning of the pictogram in the context of household detergent products.</p> <p>The three following meanings must be mentioned explicitly:</p> <ul style="list-style-type: none"> • allergic skin reaction • serious eye irritation • skin irritation <p>In addition the other meanings of the pictogram may be added but not mandatory:</p> <ul style="list-style-type: none"> • Respiratory irritation • Drowsiness or dizziness • Harmful (if swallowed, in contact with skin, if inhaled) • Destroying the ozone layer |
| <p>1B = Correct (sufficient as basis for safety action or precaution)</p> | <p>Any of the following statements:</p> <ul style="list-style-type: none"> • Irritation, irritating (to skin, eyes, or in general) • Painful when it gets into the eyes • Causes a skin rash • Harsh / aggressive chemicals; biting product |
| <p>2 = Partly correct</p> | <p>Any of the following statements:</p> <ul style="list-style-type: none"> • general statement that care is needed when handling the product • general statement that the product is hazardous / dangerous for health • product causes severe skin burns; eye damage [<i>not judged "correct" because it over-estimates the hazard</i>] |
| <p>3 = Incorrect</p> | <p>Anything that does not refer to irritation or allergy or the other listed health effects or the ozone layer.</p> |
| <p>4 = Opposite meaning</p> | <p>Suggesting that the product is mild to skin or to eyes, or that the product is hypo-allergenic, or that it is ozone friendly.</p> |

A.I.S.E. Safe Use Icon - Keep away from children

| | |
|----------------------|---|
| 1 = Correct | Either of the following: <ul style="list-style-type: none">• Keep away from children, keep/store out of reach of children, keep/store out of reach and sight of children• do not allow children to access the product• store on a high shelf, store in a locked cabinet• Not suitable for children, do not give this to children, do not let children play with it• Dangerous for children, not safe for children |
| 2 = Partly correct | N.A. |
| 3 = Incorrect | Anything that does not refer to storage away from children or to safety for children |
| 4 = Opposite meaning | Suggesting that the product is safe for children, or can be given to children, can be used by children. |

A.I.S.E. Safe Use Icon - Eyes

| | |
|----------------------|---|
| 1 = Correct | Either of the following have to be mentioned: <ul style="list-style-type: none">• Keep away from eyes, avoid contact with eyes, do not splash into the eyes, do not put into the eyes• Irritating to the eyes, painful when in the eyes, dangerous when it gets into your eyes, eye damage, bad for the eyes...• If in eyes: rinse the eyes, rinse the eyes with water, wash the eyes |
| 2 = Partly correct | N.A. |
| 3 = Incorrect | Anything that does not relate to accidental eye exposure or eye irritation. |
| 4 = Opposite meaning | Suggesting that the product is mild for the eyes, or that the product can be used to wash the eyes area (e.g. eye makeup remover). |

A.I.S.E. Safe Use Icon - Wash hands

| | |
|----------------------|--|
| 1 = Correct | Either of the following: <ul style="list-style-type: none">• Rinse/wash hands/skin after use of the product.• Rinse/wash hands/skin after contact of the product with hands/skin.• Wash hands. |
| 2 = Partly correct | <ul style="list-style-type: none">• Irritating to the skin or to hands, painful when on the skin, can cause skin burns, product is harmful when left on the skin• Avoid skin contact |
| 3 = Incorrect | Anything that does not refer to washing hands after use. Instruction to wash hands before using the product. |
| 4 = Opposite meaning | Use the product as a hand wash soap. |

A.I.S.E. Safe Use Icon - Ingestion

| | |
|----------------------|---|
| 1 = Correct | Both of the following have to be mentioned: <ul style="list-style-type: none">• do not ingest/swallow/drink/eat/put in the mouth• if ingested/swallowed, seek medical advice/call the doctor/go to hospital/call the poison centre• Toxic/dangerous/harmful/poisonous when ingested/swallowed |
| 2 = Partly correct | N.A. |
| 3 = Incorrect | Anything not related to accidental ingestion. E.g. exposure to the face / cheeks. |
| 4 = Opposite meaning | Try to vomit/throw up when you have ingested the product. |

A.I.S.E. Safe Use Icon - Sensitive skin

| | |
|----------------------|---|
| 1 = Correct | Either of the two statements below: <ul style="list-style-type: none"> • People with sensitive skin (or damaged skin, or skin wounds) should avoid contact / prolonged contact with the product. • Use gloves if you have sensitive skin, damaged skin, skin wounds |
| 2 = Partly correct | <ul style="list-style-type: none"> • You should avoid all skin contact with the product. • Irritating to skin. • Use gloves. |
| 3 = Incorrect | Anything not related to skin exposure. |
| 4 = Opposite meaning | Put on a plaster if you have a skin wound, then it is okay to use the product with bare hands. |

A.I.S.E. Safe Use Icon - Do not change container

| | |
|----------------------|---|
| 1 = Correct | Either of the following: <ul style="list-style-type: none"> • Do not change the container • keep the product in the original container • do not put/pour/transfer the product in(to) a different container/pack/bottle |
| 2 = Partly correct | N.A. |
| 3 = Incorrect | Anything not related to keeping the product in its original container. E.g. do not mix with another product. |
| 4 = Opposite meaning | Suggestion that the product must be transferred into a different bottle e.g. to dilute it before use; do not put into a different bottle without a funnel. |

A.I.S.E. Safe Use Icon - Do not mix

| | |
|----------------------|--|
| 1 = Correct | Either of the following: <ul style="list-style-type: none"> • do not mix/combine this product with other products • do not mix with other chemicals • do not use together with another product/chemical |
| 2 = Partly correct | N.A. |
| 3 = Incorrect | Anything not related to mixing the product with other products. Do not dilute the product. |
| 4 = Opposite meaning | The product can be / has to be mixed with other products; if you mix the product with something else you must use a bucket; if you mix the product with something else do not use a bucket |

A.I.S.E. Safe Use Icon - Ventilate

| | |
|----------------------|--|
| 1 = Correct | Either of the following: <ul style="list-style-type: none"> • Ventilate the room after use • Ventilate the room during use / when using • Open the windows after use / when using • Use only in well-ventilated areas. |
| 2 = Partly correct | Open the windows/ventilate when the product smells too strong / when you feel dizzy / when you feel unwell |
| 3 = Incorrect | Anything not related to ventilating. |
| 4 = Opposite meaning | Close the windows; keep windows closed. |