



CHARTER UPDATE 2010: ASP SUBSTANTIATION DOSSIER: HOUSEHOLD LIQUID LAUNDRY DETERGENTS (1ST REVIEW) - VERSION 1 APRIL 2016 -

A.I.S.E. is the voice of the Soaps, Detergents and Maintenance Products Industry in Europe. Its membership comprises of 31 national associations across Europe and beyond. In total, A.I.S.E. represents more than 900 companies that are involved in the household and/or in the professional cleaning & hygiene sector, thus representing the vast majority of the companies in this domain.

1) Introduction

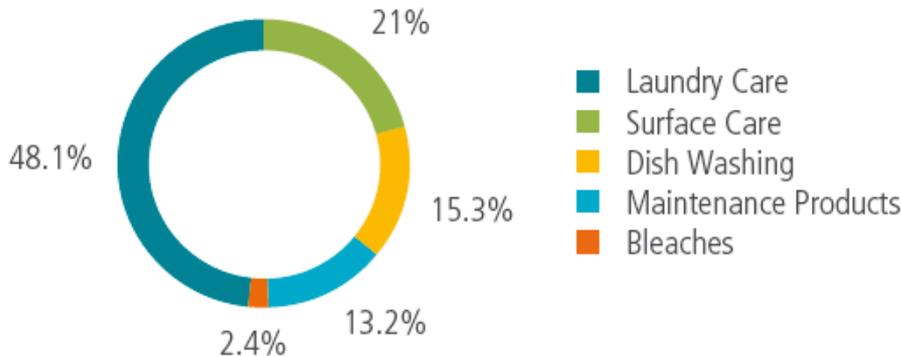
A.I.S.E. strongly believes that it has a key role to play in driving mainstream changes for more sustainable consumption and production patterns. In this spirit, it has developed and implemented over the last 15 years a number of voluntary initiatives aimed at the whole sector. The objective of these various initiatives is to help drive sustainability, incl. environmental improvements for the majority of products in its sector, by steering all players towards more sustainable practices in the industry and helping to deliver substantial savings of resources to society.

Its main horizontal project is the **A.I.S.E. Charter for Sustainable Cleaning**. Launched in 2004, this voluntary initiative is a comprehensive life-cycle-based framework for promoting a common industry approach to sustainability improvement and reporting.

From the outset, the Charter has been seen as a living scheme, with a broad commitment to update it regularly. In October 2010, A.I.S.E. launched the “**Charter Update 2010**”. A key component of the Charter Update 2010 is the addition of a product dimension. The inclusion of a product dimension further strengthens the scheme by enabling it to more completely cover the whole life of a product in terms of sustainability, from manufacturing to end-use. This also signals to consumers and end-users that a product is environmentally compatible, allowing them to make a more informed choice of products. This is achieved by creating “**Advanced Sustainability Profiles**” (ASPs) for each major product group. The ASPs are designed to determine a set of minimum criteria that a product must meet, in order to be considered as an example of a product with a good sustainability profile.

This document provides details on the processes used to revise the ASP for the product group “Liquid laundry detergents for household use”.

2) The market (EU, plus Norway and Switzerland)



Total EU 28+CH+NO

A. Household	100%	million €
Laundry Care	48.1%	13,620
Surface Care	21%	5,944
Dish Washing	15.3%	4,348
Maintenance Products	13.2%	3,748
Bleaches	2.4%	684
Total	100	28,342

Source: A.I.S.E. Activity and Sustainability Report 2014-2015

Fabric Washing:

=> 48.1 % of A.I.S.E. total household market value; the industry's biggest market in Europe.
=> Market Value: 13.6 billion Euros in 2014

Value of liquid laundry detergents: about 4.1 billion Euros.
(Source: Euromonitor International)

3) ASP principles

The principles applied to the setting of the ASP criteria are as follows:

1. The ASP criteria should represent a target that is **aspirational, but reasonably achievable by all using readily available technology**. Our vision is that products within the category should be able to achieve the ASP targets within a reasonable timeframe when companies make the deliberate decision to drive sustainable consumption and production patterns.
2. The ASP criteria reflects as completely as possible the key drivers of reduced environmental impact (hot spots), as identified by Life Cycle Analysis (LCA).
3. The Advanced Sustainability Profile, like the Charter, is a living system, with the implicit intention to periodically review the criteria and thresholds in order to move the category in the direction of continuous improvement of sustainability.
4. The setting of ASP criteria must always follow the established evaluation and consultation process detailed in the next section.

4) Process for the development of an ASP for household liquid laundry detergents

1. Identification of product category and installation of A.I.S.E. ASP Task Force

The A.I.S.E. Sustainability Steering Group (SSG) proposed on 16 March 2015 to revise the ASP for household liquid laundry detergents. The ASP Task Force; which was set up to revise this ASP, met for the first time on 23 April 2015. It was composed of experts from six companies, namely Colgate Palmolive, Henkel, McBride, Luhn, P&G, and Unilever. Work was coordinated by the A.I.S.E. Secretariat.

The ASP for household liquid laundry detergents has been originally developed in relation to the LSP-L initiative, which ran from 2009 and 2011, and it has been successful in eliminating the presence of the very large majority of the diluted “heavy duty” liquid detergents on the markets in Europe. Building on this success, A.I.S.E. is launching a new “Product Resource Efficiency Project” for Laundry Liquid Detergents (PREP-L2) on formulation optimization which sets a maximum recommended dosage of 55 ml per wash (see www.aise.eu/preps). The project will be open for commitment on 1 April 2016 and companies will be allowed to place on the market their “PREP-L2 labeled” products as from 1 April 2017.

In view of the close relation between the ASP and the LSPs/PREPs, it becomes necessary to revise the ASP product formulation criteria in parallel. Given the work carried out on the product formulation criteria it was also decided to revise the overall packaging weight criteria.

2. Development by the Task Force of ASP criteria and thresholds

Based on LCA (see chapter 5) the TF confirmed relevant parameters. In 2015, a data collection on those parameters was organised by the A.I.S.E. secretariat. All six companies represented in the TF provided data on a representative sample of the EU market¹. It is on that basis that the calculations below have been made. The data was collected and aggregated under strict confidentiality by the A.I.S.E. secretariat.

3. Internal A.I.S.E. consultation and endorsement

This recommendation on the ASP and thresholds was presented for approval to the SSG on 12 October 2015, the A.I.S.E. Management Committee on 13 October 2015, the A.I.S.E. Legal Panel in October 2015, and the A.I.S.E. Board for endorsement in October 2015. In addition, this dossier was developed in order to substantiate in a transparent way the processes and the proposed thresholds.

4. Industry consultation and activation

The ASP and the substantiation dossier were subject to consultation with Charter member companies and the industry from 26 October to 7 December 2015. Companies were asked to comment/input on the relevance and technical feasibility of the proposed thresholds.

In consequence and as outcome of this consultation, comments on the dosage threshold per job (originally proposed at 50ml) were considered, and a new threshold of 55ml/wash was finally confirmed, still allowing significant environmental benefits (see chapter 7. Expected benefits, p. 10). Eventually, this ASP was finalised as part of the Charter and made available to industry from 1 April 2016.

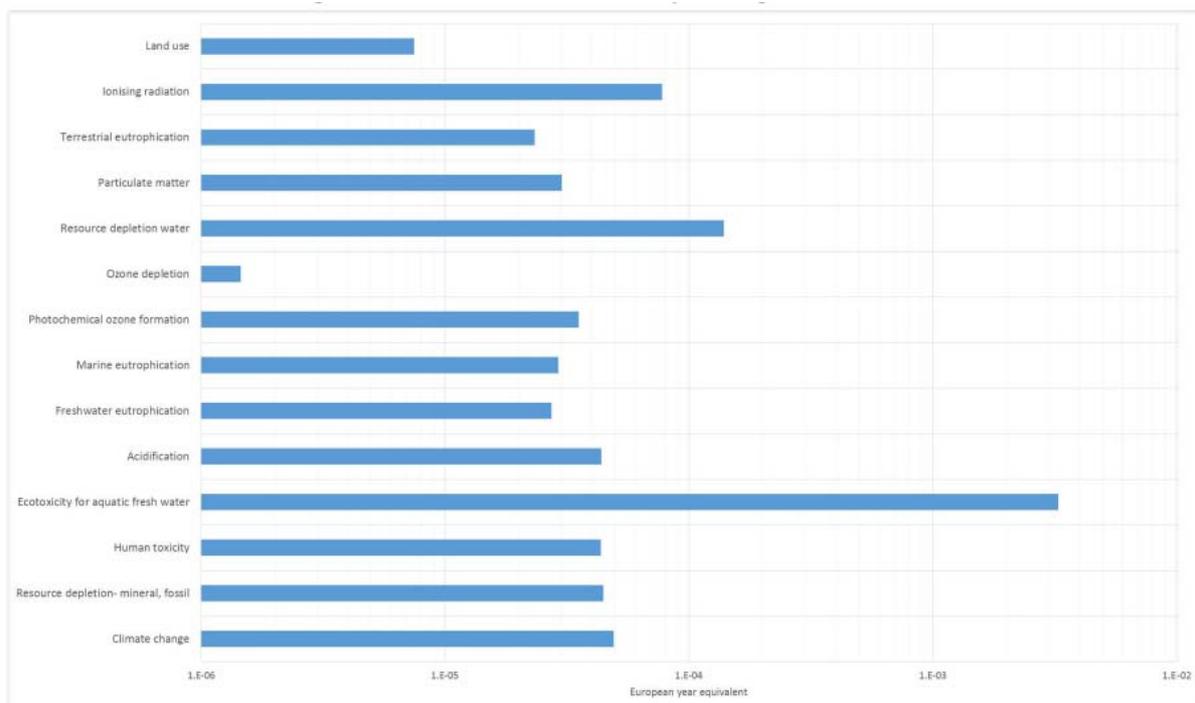
¹ Data available at the A.I.S.E. secretariat.

5) ASP criteria and rationale

Life Cycle Analysis (LCA)

The industry experts represented in the ASP TF agreed to make use of most recent LCA results which have been made available in July 2015 by the A.I.S.E. Product Environmental Footprint (PEF) pilot project on liquid laundry detergent. This pilot is part of a project that is being coordinated by the European Commission on the evaluation of environmental footprints of products and organisations with PEF as a new baseline LCA method to be tested (for further info, please consult www.ause.eu/pef). In the context of this pilot a so called PEF Screening, an assessment on 14 environmental impact categories, was carried out in order to identify the relevant environmental hotspots.

Heavy Duty Liquid Laundry Detergent (representative product for the European market)



Normalised results with PEF as baseline method, based on an European average use stage scenario (wash of 4.5 kg of dry normally soiled fabric with the recommended dosage for a 4.5 kg load with a medium water hardness at 40°C).

General remark on Ecotoxicity and methodological issues observed with the USEtox method:

As required by the PEF methodology, the A.I.S.E. PEF pilot has applied the USEtox method to evaluate the ecotoxicological profile of the A.I.S.E. HDLLD reference product. Due to a number of issues faced with the methodology, and giving the need for delivering accurate information to the consumer, additional evaluations/benchmarks have been made notably with the risk-based 'Environmental Safety Check' tool used in the A.I.S.E. Charter for Sustainable Cleaning (ESC).

All attributable life-cycle stages from cradle to grave were considered:

- the ingredients sourcing and manufacturing,
- the packaging raw material sourcing and manufacturing,
- their transport to the processing plant,
- the detergent manufacturing,
- the distribution to retail,
- the transport and distribution to consumer homes,
- the product use and
- the end-of-life, including waste water treatment (end-of-life of the detergent) process and solid waste treatment (end-of-life of packaging).

List of 14 Environmental Footprint impact categories:

- Climate change
- Ozone depletion
- Human toxicity- cancer effect and non-cancer effect
- Ecotoxicity for aquatic fresh water
- Particulate matter / respiratory inorganics
- Ionizing radiation
- Photochemical ozone formation
- Acidification
- Eutrophication - terrestrial
- Freshwater eutrophication
- Marine eutrophication
- Land use
- Resource depletion water
- Resource depletion mineral, fossil

The analysis confirms that most important factors in Life Cycle Analysis for liquid laundry detergents are as follows:

1. Given that laundry detergents end up as water-borne waste, it is essential that a sustainable product poses no risk for the environment. Therefore, all “down-the-drain” product categories must pass the Environmental Safety Check (ESC).
2. Significant impact on the environment is in the use and disposal phases of the product’s life, due to the significant amounts of energy and water consumed by the washing machine. Therefore any LCA based criteria must take usage into account.
3. It is further relevant to reduce environmental impact through the reduction in resources used to manufacture the product. By compacting laundry detergents, chemical use is reduced and this delivers significant savings in energy (hence CO₂) and waste, as well as delivering substantial savings in freight as more product can be carried on one truck.

ASP criteria

Using the above life-cycle analysis as a starting point, the A.I.S.E. Task Force in charge of revising the ASP criteria for household liquid laundry detergents confirmed the relevance of the following main components, which had been considered when the 1st version of ASP for liquid laundry detergents was developed:

- activities at product level, under the direct control of manufacturers:
 - by all ingredients in a product passing successfully the Charter Environmental Safety Check (ESC)
 - by determining a maximum dosage of ingredients per standard wash
 - by determining a maximum dosage of packaging materials per standard wash
 - by setting a minimum level of recycled content in primary and secondary packaging/recognition of sustainably sourced paper board.
 - by allowing low temperature wash ($\leq 30^{\circ}\text{C}$)
- activities at consumer level given that this represents the highest environmental impact:
 - providing on-pack guidance for the safe and most sustainable product use (e.g. low temperature washing)

Implicit in the ASP criteria is that a product must deliver an acceptable level of performance at low washing temperatures ($\leq 30^{\circ}\text{C}$).

In order for a product to meet the ASP, it must meet the conditions in each and every domain as detailed below:

ASP Criteria for household liquid laundry detergents

The following requirements in each of these domains must be fulfilled in order to reach Advanced Sustainability Profiles (ASP) status.

Product formulation	Pass successfully the Environmental Safety Check (ESC) on all ingredients AND Dosage ml/job: ≤ 55ml
Packaging weight per job	Total (primary + secondary but excluding tertiary) packaging g/job: ≤ 6.5g
Board packaging – recycled content	Minimum requirement: ≥ 70% OR Where 100% of the board used is certified made from fibre sourced from sustainable forests under an endorsed certification standard such as FSC, SFI or PEFC: no minimum.
Materials other than board – recycled content	No minimum, but any recycled plastic content may be excluded from the calculation of total packaging weight per job.
Wash temperature	Ability to wash at ≤ 30° C indicated on pack
End User Information	Safe Use Tips AND Laundry Detergents Cleanright Panel on-pack (see annex)
<i>Performance</i>	<i>Evidence has to be provided (in case of external verification organised by A.I.S.E.) that the product has been performance tested and reached a level acceptable to consumers consistent with claims made.</i>



Clarifications/Definitions:

Job:

following the Detergent Regulation EC 648/2004 the “standard washing machine loads are 4,5 kg dry fabric for heavy-duty detergents and 2,5 kg dry fabric for low-duty detergents”.

Ingredients per job/ heavy-duty detergents:

based on medium water hardness and normally soiled fabric

Ingredients per job/ low-duty detergents:

based on medium water hardness and lightly soiled fabric

Packaging weight:

Total (primary + secondary) packaging (g/job) - based on the volume weighted average for all SKUs of one brand variant with the same formulation per country. Variants of the brand which do not pass all other ASP category tests and/or are not intended to carry the ASP logo must be excluded from the calculation. Dosage devices – apart from closures – are not to be considered as packaging.

Primary/secondary/tertiary packaging: following definitions from the European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste:

- primary packaging, i. e. packaging conceived so as to constitute a sales unit to the final user or consumer at the point of purchase;
- secondary packaging, i. e. packaging conceived so as to constitute at the point of purchase a grouping of a certain number of sales units whether the latter is sold as such to the final user or consumer or whether it serves only as a means to replenish the shelves at the point of sale; it can be removed from the product without affecting its characteristics; SRB (shelf ready box) and AB (American box) are to be considered as secondary packaging.
- tertiary packaging, i. e. packaging conceived so as to facilitate handling and transport of a number of sales units or grouped packaging in order to prevent physical handling and transport damage.

Note: Packaging which functions both as secondary (case) and tertiary (transportation unit) packaging, intended to function as an in-store free-standing floor display unit, is regarded as tertiary packaging for the purpose of this definition.

Packaging re-cycled content: in countries where re-cycled board is not available and a use of it would be a disadvantage for sustainable reasons, the use of re-cycled board is not required.

Recycled content: based on the volume weighted average for all SKUs of one brand variant with the same formulation per country. Variants of the brand which do not pass all other ASP category tests and/or are not intended to carry the ASP logo must be excluded from the calculation.

Recycled: waste recycled after use

FSC: Forest Stewardship Council

SFI: Sustainable Forestry Initiative

PEFC: Programme for the Endorsement of Forest Certification



Product formulation

Based on the outcome of the Life Cycle Analysis, the Industry experts confirmed the compaction of a product as one of the key factors, in order to reduce the environmental impact. Recognising that there is an opportunity to continue to extend the sustainability benefits with regard to the product formulation, the A.I.S.E. Sustainability Steering Group agreed that it would be appropriate to take another step towards. Building on the first Charter ASP for liquid laundry detergents, which had been launched in July 2010 and for which a threshold for dosage had been set at 75 ml, it was the industry experts' opinion, who were represented in the ASP TF, that a dosage of 50ml appears to be as setting a right balance between the aim to reach environmental savings and the possibility to achieve it through conventional technology available to all companies, including SMEs. Though the majority of companies that contributed to the industry consultation were in agreement, some companies were challenging this threshold of 50ml as too demanding. Thus a reconvened expert group discussion was organised, resulting in a proposal of a 55ml threshold. A 2nd consultation round with those companies opposing the 50ml threshold was organised, resulting in a large majority support (>90%) of the 55ml threshold.

Packaging

Packaging is a further key factor, in order to reduce the environmental impact. The possibility to reduce the packaging in proportion to the decreased dosage threshold was discussed, but according to packaging experts, this is not feasible, because the primary packaging will become smaller on average which leads to higher packaging weights per job; in addition, caps and secondary packaging will not decrease proportionally. Taking into account market research, which shows that a threshold of 6.5g for overall packaging per job is achievable using readily available technology, this threshold was proposed by industry experts for consultation and it was confirmed in the consultation.

Packaging recycled / sustainably sourced content

With regard to recycled content in board packaging, an increase of the 60% threshold was discussed and it was proposed to test with industry, whether a new threshold of 70% is achievable by manufacturing companies, using conventional technologies and considering the availability of such recycled material. An additional option was proposed in order to fulfil this ASP criteria – similar to the recently launched ASPs for other product categories –, i.e. the complete amount of packaging virgin board has to come from fibre sourced in a managed way, using certified forest content from an endorsed certification standard such as FSC, SFI or PEFC (FSC: Forest Stewardship Council; SFI: Sustainable Forestry Initiative; PEFC: Programme for the Endorsement of Forest Certification). This was confirmed during the consultation, together with an increased threshold for recycled content in board packaging of 70%.

End user information

Considerable savings, both environmentally and economic, could be reached through better sustainable consumer behaviour. Thus, it is also key to continue providing the consumers with advice about the use of household liquid laundry detergents. Companies are requested to use the 'Laundry Detergent Cleanright Panel' (see annex) and the A.I.S.E. safe use tips. Evidence has to be provided in case of external verification organised by A.I.S.E. that the product has been performance tested and fulfils a level acceptable to consumers consistent with claims made.



6) Value of industry self-regulation

A.I.S.E. has a long tradition of successful voluntary initiatives initiated for the whole industry (e.g. A.I.S.E. Code of Good Environmental Practice, A.I.S.E. Charter for Sustainable Cleaning, Laundry Sustainability Projects, Product Resource Efficiency Projects), which have all achieved significant savings.²

It is A.I.S.E.'s view and experience that in these specific circumstances, industry association-led initiatives are more reliable than “business as usual”/individual company led initiatives for the following reasons:

- Product concentration and packaging: By raising the industry standards to the proposed levels of concentrations, this will help move the whole market to such standards in a self-regulatory way, as successfully as regulation whilst leaving innovation potential for companies.
- Environmental Safety; the ESC tool offers a common set of data that the whole industry can have access to, and against which companies can benchmark their formulation; this offers a common level playing field for all market players in a free, public way that is also transparent to all stakeholders.
- Optimal use of products: Common industry communication to drive sustainable consumption, in line with other A.I.S.E activities make a lot of sense, and also have the value of potentially being further relayed to the public by other stakeholders especially if they are industry led. This is because such an approach can build on and benefit from a coordinated scheme addressing consistent messages that can only be possible in such a context.

² From 2006 to 2014, Charter member companies achieved savings, e.g. 27.5 % on energy consumed and 18.8% of CO₂ emitted, both per tonne of production.

After the 5 years of the “Code” initiative (ending 2001), the industry achieved: energy consumption – 6.4 % reduction per wash; laundry detergent use – 7.9 % reduction per capita, 16.0 % reduction per wash; packaging use – 6.7 % reduction per capita, 14.9 % reduction per wash; poorly biodegradable ingredients – 23.7 % reduction per capita, 30.4 % reduction per wash.



7) Expected benefits

With the implementation of the revised version of the Advanced Sustainability Profile for liquid laundry detergents the following benefits are expected EU wide:

- Reassurance that ingredients in the product formulation have an environmental concentration at or below the predicted no-effect level for aquatic toxicity
- Optimal use of ingredients due to product compaction/concentration:
→ **Expected benefits: 250,000 tonnes of ingredients³**
- Optimal use of packaging due to product compaction/concentration:
→ **Expected benefits: 10,000 tonnes of packaging material.**
- Optimisation on transport
→ **Expected benefits: About 12,000 truck journeys** due to reduction of product volume

³ In the context of the aforementioned A.I.S.E. PREP-L2 project, an Expert Working Group has developed a preliminary evaluation based on the hypothesis of further compacting and concentrating the current liquid laundry detergents to a level that would allow obtaining a performance equivalent to today's products with dosages which are not greater than 55 ml/wash.



8) **Timing**

- From 26 October till 7 December 2015: Industry consultation on revised ASP for household liquid laundry detergents
- By 31 March 2016: Finalisation of revised ASP package
- By 1 April 2016: Availability of revised ASP to the industry
- 1 April 2016 till 31 March 2017: Preparation period for implementation of revised ASP
- As from 1 April 2017: Activation – products complying with revised Charter ASP requirements for household liquid detergents can start to appear on shelves with ASP logo
- In parallel a closing down period of 12 months (1 April 2017 - 31 March 2018) will ensure transition between “old” (issued in July 2010) and “revised” ASP. Within this period companies shall stop producing “old ASP products” and will no longer place “old ASP products” on the market.

ANNEX: END USER INFORMATION

The following options are possible in order to fulfill the ASP criteria on End User Information for household liquid laundry detergents. Professional graphic files and guidelines are available in the artwork library of www.aise.eu.

1. Laundry Cleanright Panel with sentences

Option a)

TIPS FOR SAVING WATER, ENERGY, CO₂ AND MONEY

Avoid underfilling the machine	Use the dosing instructions	Wash at low temperature	Save packaging-recycle or refill

WWW.CLEANRIGHT.EU

A.I.S.E. ©

Option b)

TIPS FOR SAVING WATER, ENERGY, CO₂ AND MONEY

Avoid underfilling the machine	Use the dosing instructions	Wash at low temperature	Save packaging-recycle or refill

WWW.CLEANRIGHT.EU

A.I.S.E. ©

2. 'Silent' Laundry Cleanright Panel

Option a)

TIPS FOR SAVING WATER, ENERGY, CO₂ AND MONEY

Avoid underfilling the machine	Use the dosing instructions	Wash at low temperature	Save packaging-recycle or refill

WWW.CLEANRIGHT.EU

A.I.S.E. ©

Option b)

Avoid underfilling the machine	Use the dosing instructions	Wash at low temperature	Save packaging-recycle or refill

WWW.CLEANRIGHT.EU

A.I.S.E. ©

3. Sentence with tips and reference to Cleanright website (in situations, where space on pack is limited)

Option a)



Option b)



Option c)



Option d)



Option e)



Option f)

