



**CHARTER UPDATE 2010:
ASP SUBSTANTIATION DOSSIER:
DILUTABLE ALL PURPOSE AND FLOOR CLEANERS
- VERSION 1 OCTOBER 2012
(UPDATED 17 JUNE 2013 – FLOOR CLEANERS INCLUDED) -**

A.I.S.E. is the voice of the Soaps, Detergents and Maintenance Products Industry in Europe. Its membership comprises of 34 National Association in 39 countries and 9 companies that are direct members. In total, A.I.S.E. represents more than 900 companies that are involved in the household market and/or in the Industrial & Institutional cleaning domain, thus representing the vast majority of the companies in this domain.

1) Introduction

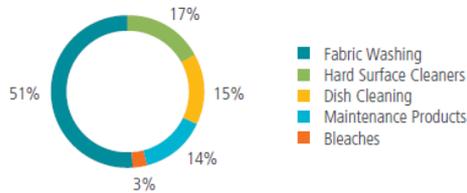
A.I.S.E. strongly believes that it has a key role to play in driving mainstream changes for more sustainable consumption and production patterns. In this spirit, it has developed and implemented over the last 14 years a number of voluntary initiatives aimed at the whole sector. The objective of these various initiatives is to help drive sustainability/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 will also signal to consumers that a product is environmentally compatible, allowing them to make a more informed choice of products. This is achieved by creating “**Advanced Sustainability Profiles**” (ASP) 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 develop the Advanced Sustainability Profile for the product group “Dilutable all purpose cleaners (APC) and floor cleaners”.

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



A. Household	100%	Total EU 27+CH+NO million euros	Growth 2010 vs 2009 %
Fabric Washing	51%	14.500	0,8
Hard Surface Cleaners	17%	4.893	1,3
Dish Cleaning	15%	4.183	1,4
Maintenance Products	14%	3.987	1,5
Bleaches	3%	896	-2,8

Results: Aggregated Nielsen data

Hard surface cleaning:

=> 17 % of A.I.S.E. total household market value; the industry's second biggest market in Europe.

=> Market Value: 4.89 billion Euros in 2010

Estimated proportion for the value of Dilutable All Purpose Cleaners: about 33 % i.e. about 1.61 billion Euros.

(Source: Euromonitor International)

Source: A.I.S.E. Activity and Sustainability Report 2010-2011

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 the product within the category should be able to achieve the ASP targets within a reasonable timeframe.
2. The ASP criteria will reflect as completely as possible the key drivers of reduced environmental impact (hot spots), as identified by Life Cycle Assessment (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 ASPs for dilutable all purpose and floor cleaners

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

The A.I.S.E. Sustainability Steering Group (SSG) proposed on 17 June 2010 to develop an ASP for main hard surface cleaners, incl. dilutable all purpose cleaners (APC). The ASP Task Force; which was set up to develop such ASPs, met for the first time on 7 September 2010. It was composed of experts from nine companies, namely Colgate Palmolive, Dalli, Delta pronatura, Henkel, Jeyes, Luhns, P&G, SC Johnson and Unilever. Work was coordinated by the A.I.S.E. Secretariat.

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

Based on an existing generic Life Cycle Assessment [LCA] (see chapter 5) the TF identified relevant LCA parameters. In 2010 and 2011 a data collection on those parameters was organised by the A.I.S.E. secretariat. All nine 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 19 March and 22 May 2012, the A.I.S.E. Legal Panel in May 2012, the A.I.S.E. Management Committee on 29 May 2012 and the A.I.S.E. Board on 8 June 2012. 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

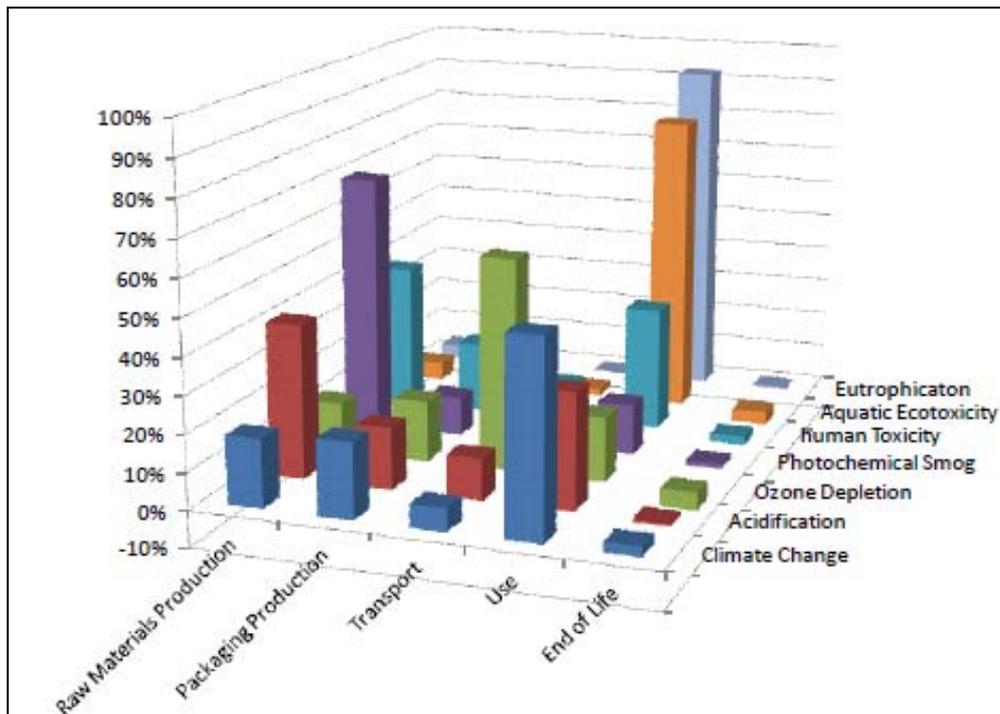
The ASP and the substantiation dossier were subject to consultation with Charter member companies and the industry from 15 June till 31 July 2012. Companies were asked to comment/input on the relevance and technical feasibility of the proposed thresholds.

Based on the received input, this ASP was finalised as part of the Charter and is made available to industry from 1 October 2012.

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

5) ASP criteria and rationale

Before the Charter ASP targets were set, an available comparative Life Cycle Assessment study of 3 cleaning products for kitchen surfaces, covering the dilutable format was analysed, to get an understanding of the environmental impacts of the various stages of the life cycle. A.I.S.E. LCA experts confirmed the validity of this LCA study for dilutable all purpose cleaners.



The impact of using Liquid Household Cleaner differentiated per life cycle phase. Characterized scores (expressed as %) with CML1992 baseline method.

The stages of the life cycle process considered were:

- raw material production
- packaging production
- transport
- use phase
- end of life

and the parameters evaluated were:

- eutrophication
- aquatic ecotoxicity
- human toxicity
- photochemical smog
- ozone depletion
- acidification
- climate change

The analysis confirms that most important factors in Life Cycle Analysis for dilutable all purpose cleaners are as follows:

1. The most significant impact on the environment is in the use phase of the product's life, due to the significant amounts of energy and water consumed when preparing the wash water. Therefore any LCA based criteria must take usage into account.
2. The second most important factor to reduce environmental impact is through the reduction in resources used to manufacture the product. By concentrating or compacting dilutable all



purpose cleaners, the use of chemical ingredients 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 per truck.

3. Given that dilutable all purpose cleaners end up as water-borne waste, it is essential that a more sustainable product poses a significantly reduced (or: minimised) risk for the environment. Therefore, all “down-the-drain” product categories must pass the Environmental Safety Check (ESC).

Using the above LCA as a starting point, the A.I.S.E. Task Force in charge of setting the ASP criteria for dilutable all purpose cleaners worked on the following main components:

- activities at product level, under the direct control of manufacturers:
 - by determining a maximum dosage of ingredients per job
 - by determining a maximum level of packaging material per job
 - by setting a minimum level of recycled content in primary and secondary packaging.
 - by allowing the use of cooler water when preparing the wash water
- activities at consumer level given that this represents the highest environmental impact:
 - providing on-pack guidance for the most sustainable product use (see annex ‘End User Information)

Implicit in the ASP criteria is that a product must deliver an acceptable level of performance at the use of cooler water (see annex ‘End User Information).

In order for a product to meet the criteria of the Advanced Sustainability Profile, it must meet the conditions in each and every domain as detailed below:

ASP Criteria for dilutable all purpose and floor cleaners

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

NB: Those Charter ASP criteria for All Purpose and Floor Cleaners cannot be applied to biocidal products, following EU and national legislation. Experience in some countries with an existing authorisation scheme has shown that national authorities have a conservative approach of legislation and exclude environmental voluntary logos (or similar) to be applied on biocidal products.

<p>Product formulation</p>	<p>Pass successfully Environmental Safety Check (ESC) on all ingredients AND Dosage ml/job (preparation of 1 l of wash water): $\leq 12 \text{ ml}$</p>
<p>Packaging weight per job</p>	<p>Total (primary + secondary but excluding tertiary) packaging g/job: $\leq 1.3 \text{ g}$</p>
<p>Board packaging – recycled content</p>	<p>Minimum requirement: $\geq 60 \%$ 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.</p>
<p>Materials other than board – recycled content</p>	<p>No minimum, but any recycled plastic content may be excluded from the calculation of total packaging weight per job</p>
<p>End User Information</p>	<p>Safe use tips AND Dosage information AND APC Cleanright Panel on-pack (see annex of ASP documentation)</p>
<p><i>Performance</i></p>	<p><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></p>



Product formulation

Based on the outcome of the Life Cycle Assessment, the experts identified the concentration of a product as one of the key factors, in order to reduce the environmental impact. Following industry experts' opinion, a dosage of 12 ml in order to prepare 1 l of wash water (job) currently appears as dosage that distinguishes a concentrated dilutable all purpose cleaner from a non-concentrated one when looking at the market. A survey of products, representing the market of dilutable all purpose cleaners in Europe has indicated that about 50 % of those products would meet the respective threshold. Those experts who were involved in the ASP criteria and thresholds development (see page 1) have judged this level of ambition as a fair amount of products in the market that comply with the criteria. The relevance of 12ml per job was confirmed as one outcome of the consultation.

Packaging

Based on the outcome of the Life Cycle Assessment, the experts identified the reduction of packaging as a further key factor, in order to reduce the overall environmental impact. A threshold of 1.3 g per job has been proposed for consultation on the basis that those are achievable using readily available technology. This threshold was confirmed in the consultation.

Packaging recycled content

The data provided to A.I.S.E. of current recycled board packaging content used by several major manufacturers, representing the majority of the dilutable all purpose cleaners market, indicates that the percentage of recycled board packaging material varies from 0 % to 100 %. A threshold of 60 % has been identified and confirmed as achievable by manufacturing companies, using conventional technologies yet leading to environmental benefit.

A further option in order to fulfil this ASP criteria has been launched earlier this year for the ASPs for automatic dishwashing detergents and the revised ASP for solid laundry detergents: 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 as one outcome of the consultation.

End user information

Considerable savings, both environmentally (water, energy, CO₂, chemicals), and economic (financial savings for consumers due to correct dosing), could be reached through better sustainable consumer behaviour. In addition to formulating products that are compact and efficient at lower temperatures, it is also key to continue providing the consumers with advice about dilutable all purpose cleaners parameters. Companies will be requested to use the 'APC Cleanright Panel', introduced by A.I.S.E. in October 2012 (see annex), e.g. inviting consumers to use the dosing instructions when preparing the wash water. Evidence has to be provided that the product has been performance tested and fulfils a level acceptable to consumers consistent with claims made. Those elements re end user information were confirmed in the consultation.

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, version 2005, Laundry Sustainability Projects), which have all achieved significant savings.²

In the specific case of a sustainability programme for Dilutable All Purpose Cleaners, the life cycle analysis developed in Section 5 of this report demonstrates that:

- Product concentration (formulation and packaging)
- Environmental Safety of ingredients
- Optimal use of the product at a cooler temperature ...

... are the critical parameters to be addressed. 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: 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 they 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 such as the Washright campaign for laundry 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 communication campaign with consistent messages that can only be possible in such a context.

Moreover the potential of such initiatives has been increasingly recognized by the European Commission to the point that it has been explicitly addressed in the SCP/SIP Action Plan.

² 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.

From 2006 to 2010, Charter member companies achieved: Chemicals covered by HERA: +10 %; Energy consumed per tonne of production: -13 %; CO₂ emitted per tonne of production: -14.3 %; Waste: -7.5 %; Water: -2.8 %; Products with at least two safe use icons: +129 %.

7) Expected benefits

With the implementation of the Advanced Sustainability Profile for dilutable all purpose cleaners 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: ³
→ **Expected benefits: 74,000 tons**
- Optimal use of packaging due to product compaction/concentration: ⁴
→ **Expected benefits: 3,700 tons**
- Optimisation on transport
→ **Expected benefits: 3,700 truck journeys⁵** due to reduction of product volume
- Savings on energy due to the use of lower temperature when preparing wash water:
→ **Expected benefits: Up to 1.7 million kWh⁶**
- Reassurance of companies' responsibility on sustainability
- Promotion of sustainable behaviour of end users

³ Based on data collection and aggregation of Euromonitor market overview data.

⁴ Dto.

⁵ 1 loaded with 20 tons.

⁶ This aggregation is based on following assumptions and calculations: The current average temperature of wash water is about 35°C (hand warm) and the target average temperature of wash water is set at 12°C (tap water). In order to warm 1 l of water per 1°C, 1 cal is needed, which means that in order to warm 1 l of water from 12°C up to 35°C it takes 23 cal. The potential savings can now be calculated via 23 cal x number of cleaning jobs per year in Europe (based on Euromonitor data and based on the assumption that 12 ml of product is currently used in order to prepare 1 l of wash water, the number of cleaning jobs is about 62 billion); 1 cal = 1.1163E-6 kWh.



8) Timing

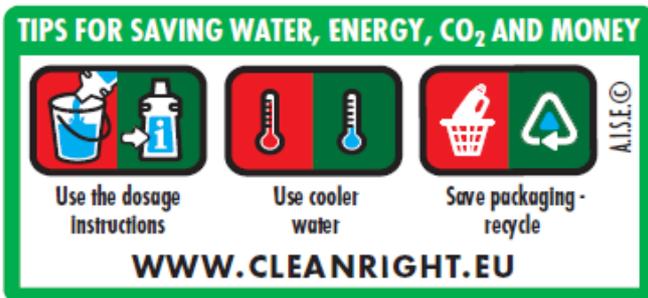
- From 15 June till 31 July 2012: Industry consultations on ASP for Dilutable All Purpose Cleaners
- By 30 September 2012: Finalisation of ASP package
- By 1 October 2012: Availability of ASP to the industry
- 1 October 2012 till 30 September 2013: Preparation period for implementation of ASP
- As from 1 October 2013: Activation – products complying with ASP requirements for all purpose and floor cleaners can start to appear on shelves with ASP logo

ANNEX: END USER INFORMATION

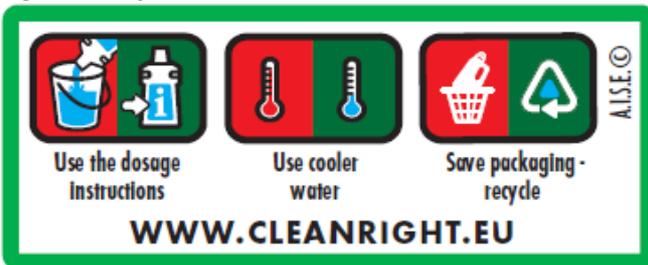
The following options are possible in order to fulfill the ASP criteria on End User Information for dilutable hard surface and floor cleaners. Professional graphic files and guidelines are available on www.aise.eu/end_user_info

1. All Purpose and Floor Cleaners Cleanright Panel with sentences

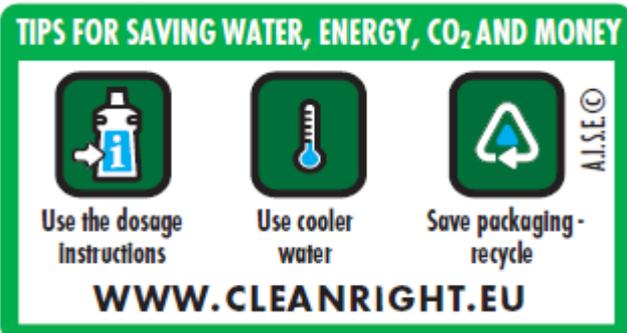
Option a)



Option b)



Option c)



Option d)



2. 'Silent' Panel

Option a)



Option b)



3. Sentence with tips and reference to Cleanright website

Option a)



Option b)



Option c)



Option d)



Option e)



Option f)

