



Ecolabel draft criteria for All Purpose Cleaners and Hand Dishwashing Detergents - EEB and BEUC comments



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This paper represents the views of the European Environmental Bureau (EEB) and the European Consumers Organisation (BEUC) on the Draft Background Report on the Revision of EU Ecolabel criteria for all-purpose cleaners and hand dishwashing detergents (March 2010) and on the discussion of this document and the draft criteria on 14 April and 2 June 2010..

I. INTRODUCTION

EEB and BEUC acknowledge the improvements that have been included in the current draft criteria proposal. In particular, we are pleased to see the introduction of a list with hazardous classifications which exclude substances according to their hazardous properties. We also support the exclusion of nano-materials and the introduction of an additional criterion to limit the relative weight of packaging compared to the product. However, we are still very concerned that the general ecotoxicity requirements are even less ambitious than market average. Furthermore, we consider the proposed limit of anaerobically not biodegradable surfactants, instead of the existing ban of these surfactants, as a weakening of the criteria. Finally, criteria on biocides and phosphorus need to be strengthened in order to ensure that only products of environmental excellence can be awarded with the EU Ecolabel.

II. TOXICITY TO AQUATIC ORGANISMS

The current limits on the Critical Dilution Volume (CDV) are not acceptable for environmental NGOs and consumer organisations. **We urge the Commission and national Competent Bodies to review the data provided by DHI as well as formulation of national licenses. CDV limits can be a lot more ambitious as many products that also contain fragrances already prove.** EEB and BEUC propose the following changes:

Product	Proposed CDV hurdle in litres	% passing CDV hurdle	EEB and BEUC proposal	% passing CDV hurdle
All Purpose Cleaners	18 000	73,5	12 500	57
Sanitary Cleaners	80 000	71,3	56 000	50
Window Cleaners	4 800	75	4000	75
Hand Dishwashing Detergents	3 800	71,2	2650	47

Rationale:

The current background report states that the CDV is the *“most important single parameter to ensure that an ecolabelled product complies with high environmental standards”* (S.1). Indeed,

the CDV requirement allows a quantification of the toxic effects of products to aquatic organisms and it is therefore possible to compare different products and assess their relative environmental performance.

Consequently, **CDV values of ecolabelled products must be significantly lower than those of average products on the market.** The new Ecolabel Regulation also makes a clear reference to the relation of the environmental performance of ecolabelled products and other products on the market as the ecological criteria “*shall correspond indicatively to the best 10-20% of the products available...on the market in terms of environmental performance*”. Although we acknowledge that the CDV values are not the only requirements for this product group, they should at least be significantly better than the market average.

In the appendix of the background report product data is provided. Unfortunately, CDV figures are only indicated in the range of the proposed maximum and minimum limits. We would welcome more concise data on products in order to identify ‘best-in-class’ products and to relate the proposed requirements to a market average.

In any case, based on the calculations made in the minutes of the second AHWG meeting, **about three quarters (~ 71-75%) of the analysed products would PASS the proposed requirements.**

The background report gives more complete data for the **example of sanitary cleaners** (p.9) which allows a preliminary assessment of the proposed CDV levels.

Table 3.1. CDV values for sanitary cleaners divided into bathroom cleaners and toilet bowl cleaners

	Minimum CDV	Maximum CDV	Average CDV
Bathroom cleaners	2679	99214	53235
Toilet bowl cleaners	961	77471	43096

The proposed limit for the whole product group is **80,000** litres. This would mean that:

- The **proposed minimum CDV requirement is higher than the maximum CDV of all toilet bowl cleaners in the sample** of the background report. That means that all products would meet the proposed limits.
- The proposed requirements are 27,000 to 37,000 litres **higher than the average CDVs of the product sample.**
- The proposed limits are **not even close to the best performing products of the sample.**

For environmental NGOs and consumer organisations this is clearly not acceptable. If the CDV value is the most important single requirement it is incomprehensible why most of the products should be able to pass the proposed levels.

An important question in this context is how representative the presented data is and if it can be considered to reflect market realities in Europe. If the sample is not representative of the market (e.g. in the case that too many ecolabelled products were considered) we urge the industry to provide (and DHI to collect) data that would justify the proposed CDV requirements. In this context, EEB and BEUC continue to stress that as long as no comparative benchmarking is performed with reference to the ‘average product on the market’ it is difficult to tell what the real environmental benefits of the proposed criteria actually are.

III. Anaerobic Biodegradability of Surfactants

- a. **EEB and BEUC support keeping the current requirement that surfactants used in the product shall be biodegradable under anaerobic conditions.**

Justifications:

- The economically most important anionic surfactant LAS is not biodegradable under anaerobic conditions. Therefore, **the use of anaerobically non-biodegradable surfactants is high.**
- **Achieving low toxicity values with surfactants that are biodegradable under anaerobic conditions is possible**

As the background information provided by DHI clearly shows, **there are several products already on the market that fulfil strict CDV requirements and that do not contain surfactants that are non-biodegradable under anaerobic conditions.**

For All Purpose Cleaners, data concerning the biodegradability for 33 products was provided. 17 of these products contain surfactants that are biodegradable under anaerobic conditions. Of these 17 products, 10 products additionally achieve the most ambitious CDV level (< 7 500l). For sanitary cleaners, 20 out of 23 listed products contained surfactants that are biodegradable under anaerobic conditions whereas 12 also achieve the most ambitious CDV level (<38 000l).

These two examples indicate that producers already found ways to formulate detergents that meet strict toxicity requirements and do not contain surfactants that are not biodegradable under anaerobic conditions.

- **SCHER opinion not conclusive - further research needed**
As mentioned in the SCHER opinion of 2008, the PNEC (Predicted No Effect Concentration) value for LAS concerning soil microbial communities needs further investigations. According to SCHER, microbial iron reduction was not taken sufficiently into account in the calculation of the higher PNEC value for soil that was proposed by industry. Furthermore, toxicity data for the most sensitive species was not used.
- **Surfactants with poor anaerobic biodegradability may have adverse effects to soil living organisms**
Data on surfactants in sludge amended soils presented in the background report show high PEC/PNEC ratios for the most commonly used non anaerobically biodegradable surfactant LAS. The report argues that the risk for the soil living organisms will decrease after a year with aerobic degradation of the LAS in sludge. We do not share this opinion, especially as the authors themselves note that LAS may contribute to adverse effects during the first months after spreading the sludge. It is not developed in the background report if the soil living organisms recover after these months of adverse effects or if the ecosystem is disturbed for a longer period.
- The fate of many surfactants in marine environments is little known, but in general degradation is slower than in limnic environments (McWilliams and Payne (2001)¹). Thus, there

¹ McWilliams and Payne (2001): Bioaccumulation potential of surfactants: a review

is a risk for accumulation of anaerobically non-biodegradable surfactants in oxygen poor sediments and potentially negative effects on sediment dwelling organisms.

- b. As described above, EEB and BEUC favour a total exclusion of surfactants that are not biodegradable under anaerobic conditions. **However, if the EUEB decides to allow anaerobically non-biodegradable surfactants, EEB and BEUC call for an additional requirement to limit the use of surfactants to those that are not bioaccumulative (i.e. log Kow less than 3 or BCF less than 100).**

IV. NANOMATERIALS

The draft criteria proposal excludes “*nanomaterials and nanoparticles with a physical size of less than 100nm in at least two dimensions*”. EEB and BEUC support the exclusion of nanomaterials in ecolabelled products until a proper toxicological and ecotoxicological assessment framework for these new substances is in place.

V. BIOCIDES

- a. At the working group meeting on 14th April a change of the requirements for bioconcentration and bioaccumulation of biocides was discussed. **EEB and BEUC support the new proposal for bioaccumulation with a bioconcentration factor (BCF) that should be (at least) ≥ 100 . This requirement should apply to all biocides and not only to those classified as R50-53.**

Rationale:

As mentioned in the working group meeting, a requirement for bioaccumulation with the log Kow (log octanol/water partition coefficient) ≥ 4.0 (unless the experimentally determined BCF ≤ 500) would have allowed the use of problematic substances such as triclosan. Triclosan has a log octanol/water partition coefficient (log KOW) of 4.76 and reported bioconcentration factors (BCF) in the range of 372 to 8700².

- b. **Additionally to the requirements for bioaccumulation, we believe that biocides should also comply with the general requirements for all substances in the product.** However, the detection limit for substances added to the product is 0,01%. Given that many biocides added to a detergent product have a weight that is below 0,01% of the overall mixture, we suggest that this threshold should not apply for biocides. In other words, **all biocides added to the mixture should comply with the general requirements for substances regardless of their relative weight.**
- c. EEB and BEUC do not support the proposed derogation for R50-53.

² Norwegian Scientific Committee for Food Safety 04/406-9 final. Risk assessment on the use of triclosan in cosmetics III: Environmental effects of triclosan

VI. FRAGRANCES

EEB and BEUC support Denmark's proposal to exclude fragrances for professional use products.

Fragrances have a **significant impact on the CDV value of a product**. In some cases the contribution of perfumes to the overall CDV values reaches **97%**. For HDDs the contribution of fragrances to the overall CDV value of the product is less dominant but still significant (up to one third). Given that fragrances are also the second most frequent source of allergies and do not contribute to the primary function of a product (i.e. cleaning) the Ecolabel should aim at reducing the overall amount of fragrances as much as possible.

VII. SENSITISING SUBSTANCES

The current criteria restrict the amount of sensitising substances (classified as R42 and/or R43) to 0.1% by weight of the final product. **EEB and BEUC propose to revise this criterion and restrict the amount of sensitising substances to 0.01% by weight of the final product for all product groups.**

VIII. PHOSPHORUS

EEB and BEUC call for a total exclusion of phosphorus for all product groups under discussion. Phosphorous cause eutrophication and the use in detergents can be easily replaced with other builders. Products without phosphorus are already on the market. We would like to stress that the Swedish Good Environmental Choice ("Bra Miljöval") Ecolabel successfully excludes phosphorus, and currently has 29 license holders for all purpose cleaners and 16 for hand dishwashing detergents. According to the Swedish Society for Nature Conservation that runs the Bra Miljöval there have not been any complaints on limited performance due to the use of phosphorus substitutes.

As Europe's environmental excellence label, the Ecolabel should actively promote all EU environmental policies and strategies. Concerning phosphorus, the EU Council on 22 December concluded the following:

*It "CALLS on Member States to take necessary measures against eutrophication in marine and fresh waters by different means, one being the **phasing out of phosphates in detergents**, and INVITES the Commission without delay to present proposals for harmonising EU legislation in the light of an impact assessment covering inter alia environmental and internal market aspects with a view to phasing out and/or banning phosphates in detergents starting with phosphates in laundry detergents for domestic use and going beyond that, based on the evidence from a further impact assessment."*³

³ COUNCIL OF THE EUROPEAN UNION. Regional approaches to management of water and the marine environment, including implementation of the EU Strategy for the Baltic Sea Region - Council conclusions. Brussels, 22 December 2009.

IX. Packaging

EEB and BEUC support the new criterion requiring that products sold with trigger spray must be also provided in refill packaging. Furthermore, we also support the new criterion on weight utility ratio.

EEB and BEUC have repeatedly called for an exclusion of halogenated plastics for all parts of the packaging. Halogenated plastics such as PVC are highly problematic in environmental terms in all life cycle stages as shown (for example) in the background documents for the Green Paper on PVC of the Commission (2000)⁴:

- Argus (2000) The behaviour of PVC in landfill.
- Bertin (2000) The Influence of PVC on the Quantity and Hazardousness of Flue Gas Residues From Incineration.
- Prognos (2000) Mechanical recycling of PVC wastes.

END

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⁴ http://ec.europa.eu/environment/waste/pvc/green_paper_pvc.htm