



EU ECOLABEL FOR LAUNDRY DETERGENTS AND DETERGENTS FOR DISHWASHERS FOR PROFESSIONAL USE - EEB AND BEUC POSITION

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1. Introduction

At the beginning of April 2011 two Ad Hoc Working Group (AHWG) meetings took place to discuss laundry detergents and dishwasher detergents - both for professional use. On 2 September 2011, the second AHWG took place covering both product groups. BEUC and EEB would like to comment in this document on the draft criteria presented during the second AHWG.

BEUC and EEB welcome improvements in the ecological criteria for laundry and dishwasher detergents. Nevertheless, we are not supporting broad exemptions from the list of banned hazardous substances and mixtures.

2. Product group definitions

We are satisfied with the wording of product group definitions. It is positive that dishwasher detergents for special machines used in food production and for medical devices are excluded from the scope as they need special requirements for their functions.

3. CDV values (Critical Dilution Volumes)

We find it difficult to judge whether the CDV values are appropriate as little data were presented. As the Ecolabel should be awarded to the best 10-20% of the products available on the Community market in terms of environmental performance, it is crucial to set the requirements in relation to the EU market average. Without sufficient market data it is however nearly impossible to assess the ambition level of the current CDV levels.

The assumption that products on the Nordic market do not reflect the whole European market as they perform better than in the rest of the EU, made in the technical report¹ for dishwasher detergents for professional use, should be better underpinned. If it is clear that the products on the Nordic market have better environmental characteristics, it is reasonable to adjust the levels of the CDV values after Nordic products as they could be seen as representing the best ten percent of the European market and hence be eligible for the EU Ecolabel. As we do not have access to relevant data from the companies we suggest setting CDV values at the level of the Nordic Swan.

Concerning water hardness, separate water softening devices for the incoming water could be used. Such devices use ion exchange with salts and have better environmental characteristics than the complexing agents used in detergents.

If water softening devices are used, the detergents may be used at lower dosage (for example 40 mL instead of 50 mL) and thus the usage of hazardous chemicals will be lower.

¹ http://ec.europa.eu/environment/ecolabel/ecolabelled_products/categories/prof_detergents_en.htm

4. Biodegradability

EEB and BEUC ask reintroducing the criterion demanding the anaerobic biodegradability of surfactants.

High concentrations (>400.000 tones per year) of the commonly used surfactant LAS (linear alkylbenzene sulphonate) can be found in sludge from waste water treatment plants. In many countries, sludge is used as soil improvers/fertilisers. Given that waste water management systems are not well developed in many EU countries and that concentration in sludge exceeds the predicted no effect concentration (and therefore the environmental effects cannot be excluded) it is crucial to minimize risks as far as possible. Especially in situation when alternatives are easily available.

Experience from ecolabelling in the Nordic countries since the early 1990s shows that it is possible to manufacture and successfully sell well functioning ecolabelled detergents without LAS. According to the background document such products are very successful on the market as the Nordic countries have high market values for ecolabelled detergents.

If anaerobic biodegradation of surfactants is not covered by the criterion 3a, then surfactants have to be explicitly included in criterion 3b which covers biodegradability of organic substances, anNBO (anaerobically non-biodegradable) in order to limit the use of surfactants not being anaerobically biodegradable.

EEB and BEUC are of the opinion that both values for aNBO and anNBO need to be decreased. An example of a dish washer detergent used at a dosage of 1 g/l at 13 °dH would with current rules be composed with all ingredients being not anaerobically biodegradable and 40% of the ingredients being not aerobically biodegradable. This is not a criterion driving the development towards the use of biodegradable substances.

5. Endocrine disruption substances

We propose including a criterion on endocrine disruption substances and follow in this matter the Nordic Swan approach:

Substances with potential for endocrine disruption of Category 1 or 2 in accordance with official EU lists should be prohibited from use in the product and ingredients. The EU report on endocrine disrupters can be read in full at http://ec.europa.eu/environment/endocrine/index_en.htm

Based on the precautionary principle, chemicals with endocrine disrupting properties should not be used in Ecolabel products.

We call for this requirement as the EU Commission points out in its 4th progress report on the implementation of the strategy on endocrine disrupters² that concerns are increasing in relation to the potential impact of endocrine disrupting substances, particularly in relation to human fertility.

² Commission Staff Working Paper 4th Report on the implementation of the "Community Strategy for Endocrine Disrupters" a range of substances suspected of interfering with the hormone systems of humans and wildlife (COM (1999)706), 11 August 2011, http://ec.europa.eu/environment/endocrine/documents/sec_2011_1001_en.pdf

6. Phosphorous

We are in favour of banning phosphate and other phosphorous substances (such as phosphonates) from laundry detergents but propose in addition to introduce a similar criterion for the dishwasher detergents.

To our knowledge dishwasher detergents for professional use are already today often produced without phosphorous. However, as the cleaning performance is important for consumers as they are customers of services such as professional laundry, the Ecolabel criteria should also define performance criteria for dishwasher detergents which will ensure that phosphate free dishwashing detergents provide for a good cleaning result.

According to manufacturers of dishwasher detergents the dosage does not need to be increased when replacing phosphates with other substances³. Therefore, products with smaller dosage and phosphates free are technically feasible.

The level of Phosphorous in the detergents on the Norwegian market is set on maximum level of 3,8 % Phosphorous. This led to completely phosphorous free products on this market as according to the manufactures a content of just 3,8% is insufficient to have a considerable effect on the cleaning performance. Therefore other complexing agents (such as MGDA, IDS, POLYCARBOXYLATES) are being used. Taking this into account, setting a limit for phosphorous compounds in the EU Ecolabel at 3,8% seems not to be reasonable.

Phosphates contribute to eutrophication and can easily be replaced with other builders (e.g zeolites, MGDA, GDLA, citrates) available on the European market since decades therefore we see no technical barriers to ban it completely.

Phosphates and other substances containing phosphorous have been pointed out in the Water Framework Directive as "main pollutant". The Water Framework Directive demands Member States to take measures to reduce pollution from such substances. To permit phosphates in ecolabelled products – which should show the best environmental performance on the market - will not be in line with the legislation and give a misleading message to consumers.

Furthermore, the new member states in Central and Eastern Europe have prolonged time until 2015 to implement the Water Framework Directive (2000/60/EC). An exclusion of phosphates in ecolabelled detergents would hence directly reduce the eutrophication as waste water treatment is not in function yet in all member states. With less load of phosphates to waste water treatment plants, less chemicals for chemical precipitation will be needed and the cost for running the waste water treatment plant will be reduced.

Another reason for excluding phosphate and other phosphorous substances is that more and more countries in Europe have national bans or restrictions on the use of phosphate in households' detergents⁴.

³ Information obtained from the Swedish company – Diskteknik – manufacturer of dish washer detergents for professional used labelled with the Nordic Swan.

⁴ Most western European nations, including the UK, France, Germany, Italy, Belgium and the Netherlands, have already either banned or restricted the use of phosphates in household laundry detergents. France will ban dishwasher detergent phosphates beginning in 2012, while Sweden and Finland are considering dishwasher bans.

<http://www.rsc.org/chemistryworld/News/2011/June/24061105.asp>

In the Baltic Sea, the Danube and the Black sea areas, water is consider more sensitive as it has been polluted for many years. Decreased phosphate pollution has been raised as an important measure to reach an sustainable environment in the proposed European Union Strategy for the Baltic Sea Region (COM (2009) 248) as well as in the 2001 Baltic Sea Action Plan by HELCOM (Convention on the Protection of the Marine Environment of the Baltic Sea Area).

Concerning the Danube and the Black Sea the question of eutrophication has been given attention by the European Commission. The European Commission pointed out in 2007 that countries within the Danube river basin and the Black Sea region could “proceed with national legislation and/or further voluntary agreements to replace phosphate-based detergents to protect the Danube and Black Sea from eutrophication while awaiting the outcome of the Commission’s evaluation of the need for measures at the EU level” (COM (2007) 234).

The ban also complements the Urban Waste Water Treatment Directive, 91/271/EEC, which aims to limit the concentrations of nutrients such as phosphorous and nitrogen in surface waters in order to counter eutrophication.

Furthermore, it has to be noted that the European Parliament is currently working on the European Commission proposal⁵ regarding restriction of phosphate in household’s laundry detergents. In the opinion of the Committee on the Internal Market and Consumer Protection (14.4.2011) proposal should be amended in that way that instead of restriction, ban of use of phosphates in household laundry detergents should be introduced. Moreover, in the same Opinion, amendment regarding professional use is added:

“1a. By 31 December 2017, the Commission shall evaluate, submit a report to the European Parliament and to the Council on the use of phosphates and of other phosphorous compounds in industrial and institutional detergents and other types of detergents following a study based on the life cycle assessment of industrial and institutional detergents, available alternatives, their performance, their cost-effectiveness and limits in terms of access to technology and, if justified, present a legislative proposal with a view to their gradual phase-out or restriction to specific applications.”

In such situation it has to be reminded that the Ecolabel should go beyond legislative requirements.

7. Nanomaterials

Nanomaterials such as nanosilver are already used in different products including laundry detergents. The Ecolabel should be prepared for dealing with these new kinds of substances. Requirements (e.g. on biocides) in the latest proposal are not entirely clear on this issue. Currently, nanosized materials are not sufficiently defined and methods for overcoming this problem (i.e. analytical methods and test methods for ecotoxicological and toxicological properties) are not sufficiently developed and harmonised.

⁵ Proposal for a REGULATION (EU) No .../... OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Regulation (EC) No 648/2004 as regards the use of phosphates and other phosphorous compounds in household laundry detergents.

The EU Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR) concluded that: *"Current risk assessment methodologies require some modification in order to deal with the hazards associated with nanotechnology (...). The Committee points to major gaps in the knowledge necessary for risk assessment. These include nanoparticle characterisation, the detection and measurement of nanoparticles, the dose-response, fate, and persistence of nanoparticles in humans and in the environment, and all aspects of toxicology and environmental toxicology related to nanoparticles."*

Taking this into account, nanomaterials have to be excluded in the EU Ecolabel based on the precautionary principle and as long as compliance with the general requirements on chemicals cannot be proven.

8. Chlorine

According to manufactures chlorinated compounds such as sodium chlorite are not needed to remove stains from coffee or tea⁶. Complexing agent MGDA (methylglycinediacetic acid) is used as substitute. As manufacturers do not see a need for chlorinated compounds, we call to banning sodium chlorine from Ecolabelled detergents.

Sodium chlorite is classified with R26, R24/25, R34, R50 and R8. Out of those: R26, R24, R25 and R50 are mentioned as risk phrases substances that Ecolabel products should not be classified with. It is clearly a hazardous substance and we strongly disagree with a derogation.

9. Other derogations

BEUC and EEB are of the opinion that all the derogations are not sufficiently justified. As the possibility of derogations has been newly introduced by the new Ecolabel Regulation, it is very important that derogations are used where they really lead to environmental benefits. This is not clear with the proposed derogations. As the knowledge about the contents in the products is scarce for all stakeholders involved in the criteria development process (according to the background report), the same of course is valid for the substances proposed for derogation.

We do not see a need for making derogation for surfactants classified as R50. By this derogation, the Ecolabel will not promote the development of efficient and less toxic surfactants. There are a lot of surfactants on the DID (detergent ingredient database) list not being very toxic, that still can be used in detergents. There are 71 different surfactants listed on DID and only 11 have toxicity values indicating that they would be classified as R50. This indicates that there is no need for derogation. This will mean that all surfactants used in detergents may be very toxic as the level of surfactants rarely is as high as 25%.

⁶ Information obtained from the Swedish company – Diskteknik – manufacturer of dish washer detergents for professional use labelled with the Nordic Swan.

Optical brighteners are not biodegradable and are added to make the washing goods look cleaner than they are by using a trick of the light. We strongly suggest following Nordic Swan approach on this matter – where for professional laundry detergents such substances are not allowed. BEUC and EEB are strongly against providing derogations for those substances in the Ecolabel criteria.

Derogations for biocides should only be given for products where they are absolutely needed. It is not clear from the background report to what extent biocides are used in laundry detergents and dishwashing detergents for professional use.

We propose setting levels of the products regarding biocides on level $BCF^7 < 100$ and $\log Kow^8 < 3.0$. To our knowledge proposition of $BCF < 500$ or $\log Kow < 4.0$ do not secure that antimicrobial substances such as triclosan are not used.

According to article 6 (7) of the Ecolabel Regulation the Commission may adopt measures to grant derogations only if it is not technically feasible to substitute substances as such or in the case of products which have a significantly higher overall environment performance compared with other goods of the same category. In our view, there are not sufficient arguments for providing such broad derogations.

10. Packaging

EEB and BEUC are repeatedly calling for an exclusion of halogenated plastics from all parts of the packaging. Halogenated plastics such as PVC are highly problematic in environmental terms in all life cycle stages.

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⁷ Bioconcentration factor.

⁸ The logarithm of the partitioning coefficient between octanol and water.