



EU ECOLABEL FOR DETERGENTS

BEUC and EEB comments to the criteria proposal October 2015

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Summary

The European Commission (EC) is revising the EU Ecolabel criteria for the Detergent Product Group which is comprised of:

- Laundry detergents (LD);
- Industrial and institutional laundry detergents (IILD);
- Detergents for dishwashers (DD);
- Industrial and institutional automatic dishwasher detergents (IIDD);
- Hand dishwashing detergents (HDD);
- All-purpose cleaners and sanitary cleaners (APC).

In September 2015, the Joint Research Center (JRC) of the European Commission presented draft criteria proposals which were discussed at the 2nd Ad Hoc Working Group (AHWG) on 20 and 21 October 2015 in Brussels, Belgium.

Ahead of the EUEB meeting which will take place on 20, 21 and 22 January 2016, this paper provides BEUC and EEB recommendations on the draft criteria proposals that will be discussed during the meeting.

We consider that the proposals should be improved in particular with regard to the ambition level of:

- The Critical Dilution Volume (CDV) limits. BEUC and EEB call the JRC to gather more information on Industrial and institutional laundry detergents (IILD) and propose more ambitious CDV limits in the next draft.
- The anaerobic biodegradability of all surfactants without exceptions. Based on the precautionary principle, BEUC and the EEB hold the view that all surfactants, not only those classified as harmful to the environment, should be anaerobically biodegradable.
- The certification system for sustainable sourcing of palm oil, palm kernel oil and their derivatives. The Book and Claim certification system proposed by the JRC is not acceptable in ecolabelled products as this system does not guarantee that the palm oil bought by the manufacturer is sustainable. BEUC and the EEB rather recommend using other certification schemes such as segregated or mass-balance in order to ensure the authenticity of the sustainable palm oil.
- Conditions for derogations given to certain hazardous substances: substances such as fragrances or preservatives should not be derogated when they are not needed in the cleaning process.
- The Phosphorus content. BEUC and EEB disagree with the proposal and consider that phosphorus should be banned in all product groups. The presence of phosphorus-free products in the market carrying other ecological labels such as Good Environmental Choice (GEC) or Nordic Swan demonstrates that our demand is feasible.





1. Scope and definitions

Fabric softeners should be strictly excluded from the scope of laundry detergents

It should be explicitly stated that fabric softeners should not be included in the scope of laundry detergents. Fabric softeners do not have any cleaning properties and are not needed in the washing process. In addition, they may have a high level of ecotoxicity to aquatic organisms and they are poorly biodegradable. Besides, it remains difficult to differentiate the formulations of the existing products and to identify the best environmentally performing formulation

Ready-to-use (RTU) product shall not be included in the APC scope

Ready-to-use (RTU) products should be completely restricted from All-Purpose Cleaners (APC) product group, in alignment with the Blue Angel and the Austrian ecolabel scheme. As these RTU products are not necessary for all-purpose cleaners and there is no environmental benefits compared to concentrated APC, BEUC and the EEB rather recommend using concentrated products instead of RTU products.

Strict requirements on multi-component systems in IILD

It should be clearly stated how the different components of the multi-component systems should comply with the requirements. It should be clearly indicated that each component should be assessed separately or that the multi-component system should be considered and assessed like a laundry detergent. In both cases BEUC and the EEB recommend setting strict requirements to prevent any chemical risks occurring from the product. Like previously mentioned, fabric softeners should also not be automatically included.

2. Assessment and verification requirements for all product groups

In the proposal for common text on the Assessment and verification and measurement thresholds criterion, consumers' organisations and environmental NGOs strongly recommend deleting the point (iii) stating "*In exceptional cases, if the ingoing substances included in a mixture are unknown, the applicant can supply the information requested in (i) for the mixture*" as it would introduce a risk-based approach whereas the Ecolabel scheme has to be based on a precautionary approach.

A large part of the information for the ingredients required should be available in the Safety Data Sheets (SDS) according to Article 31 and Annex II of REACH Regulation on the Requirements for Safety Data Sheets. There is therefore no obstacles to obtain relevant information on ingoing substances in the product.





Due to the different cut-off limits set in the rules for SDSs ranging from 0.1% and 10% for a substance or a preparation, we are concerned that some substances may become hidden in a mixture. Therefore, we propose to lower the cut-off limit in the Ecolabel requirements to 0.0010% which is the safest threshold, in order to limit impurities of excluded substances which might be in products from the production process.¹ This will force the manufacturers of mixtures to go beyond the requirements of the SDSs and ask for more information on the mixture.

3. Toxicity to aquatic organisms: Critical Dilution Volume (CDV) values for IILD

BEUC and the EEB are very concerned to see that no improvement has been brought to the CDV limits of IILD. We do not understand why the JRC is missing data and information about the IILD formulations as they are today 15 ecolabelled products on the market. We therefore ask industry to provide more data and the JRC and Competent Bodies to take further action in order to gather this information and set more ambitious limits for CDV in the next draft.

4. Anaerobic Biodegradability of all surfactants without exceptions

BEUC and the EEB recognize the improvement that has been brought to this requirement in line with our previous recommendations.

However, BEUC and the EEB strongly recommend ensuring the biodegradability under anaerobic and aerobic conditions for all surfactants, regardless of their classification. BEUC and the EEB disagree with the exception made to surfactants classified as hazardous to aquatic environment. In compliance with the precautionary principle, it is of high importance to make sure that all surfactants are covered by this requirement, in case they are not classified.

Furthermore, there are today enough anaerobically biodegradable surfactants available on the market and there is no reason not to fulfil our demand.

It is indeed feasible for manufacturers to produce products where all surfactants are anaerobically biodegradable. Indeed, among the surfactants that are included in the DID-list database and have been tested, 43 out of 97 are anaerobically biodegradable, 46 are not tested, or test results are not yet published.

In addition, BEUC and the EEB recommend using better anaerobic testing methods providing a representative testing environment in order to properly define the anaerobic biodegradability.

As the standardized anaerobic test methods such as EN ISO 11734², OECD 311³, might not always be the most appropriate ones, other test regimes for anaerobic biodegradability should be considered in addition, in case they are carried out in real, representative and relevant environments. These conditions are crucial to ensure the reliability of the tests and avoid misleading conclusions.

¹ The limit of 0.0010% refers to impurities of excluded substances which might be in products at the production process. Until now this has been regulated via the Limit of detection of the analytical method but it is not described which analytical methods have to be used. It is also regulated via this method in the Blue Angel.

² International Organization for Standardization (1995) ISO 11 734 Water Quality - Evaluation of the ultimate anaerobic biodegradation of organic compounds in digested sludge - Method by measurement of the biogas production.

³ OECD Guidelines for the testing of chemicals; Anaerobic Biodegradability of Organic Compounds in Digested Sludge: By Measurement of Gas Production; 23 March 2006.





For instance, marine sediment which was used when testing the biodegradability of linear alkylbenzene sulfonate (LAS) as presented in the technical report is real but not a representative environment. This could lead to misleading and inaccurate results regarding the biodegradability of LAS.

Results can indeed vary according to the testing method used. Another example is provided by a study which demonstrates that LAS is not anaerobically biodegradable in a reasonable time. Indeed, in a new article where commercial detergents wastewater was treated in an anaerobic fluidized bed reactor (FBR) the average chemical oxygen demand (COD), the removal efficiency was 89% and the biodegradation of LAS was 57% during the 489 days of anaerobic FBR. This cannot be compared with the standardized test methods carried out over maximum 60 days and demanding a result of 60% degradation.⁴ The biodegradability of LAS is then much longer than expected.

5. Excluded and restricted substances criteria and derogations

The exclusion of microplastics is welcome

We highly welcome the exclusion of microplastics in the six product groups. With regard to their definition, BEUC and EEB support the proposal made by the German competent body in alignment with the Blue Angel criteria for Hand Dishwashing Detergents. The following definition should be included in the EU Ecolabel criteria for more clarity:

"Plastic particles ranging in size from 100 nm to 5 mm.

Plastic should also be defined as follow in alignment with the Blue Angel criteria: Plastic: A macromolecular substance with a water solubility < 1 mg/L, obtained through:

a) a polymerisation process such as e.g. polyaddition or polycondensation or a similar process using monomers or other starting substances; or

b) chemical modification of natural or synthetic micromolecules; or

c) microbial fermentation".

Micro-organisms excluded until benefits are well-known

Regarding the micro-organisms, BEUC and the EEB hold the view that they should not be allowed in the products as there is for the moment no clear indication on the benefits that they bring to the products. As we cannot support substances without proven benefits, we are calling on the JRC to further investigate and give clear indication on their benefits in the next background report.

If not supported, consumers' organisations and environmental NGOs recommend at least setting the same requirements on micro-organisms as in the Nordic Swan criteria for cleaning products.⁵ The Nordic Swan scheme allows micro-organisms only in professional products and exclude them from spray products.

⁴ For more details please see: Biodegradation of linear alkylbenzene sulfonate in commercial laundry wastewater by an anaerobic fluidized bed reactor, Journal of Environmental Science and Health, Part A: Toxic/Hazardous Substances and Environmental Engineering, 2015, http://www.tandfonline.com/doi/pdf/10.1080/10934529.2015.1030290#.Vh6htitaZNU.

⁵ <u>http://www.svanen.se/Templates/Criteria/CriteriaGetFile.aspx?fileID=500</u>, see criterion R14 on microorganisms.





If this second alternative is supported, BEUC and the EEB recommend the JRC to underpin the inclusion of requirements by carrying out environmental assessments of the use of products based on microorganisms and comparing with chemical detergents. It would be very beneficial to show if and to what extent the use of products containing micro-organisms has less environmental impact than those which are chemical-based.

Dishwashers Detergents: additional classification H314 on the end product

The EEB and BEUC strongly support the JRC proposal regarding the moving from "total chemicals" to "dosage requirements" for DD. Dosage criteria will promote concentrated products which bring significant environmental benefits with regard to less transport emissions and less packaging.

As concentrated products might be toxic and harmful to consumers, BEUC and the EEB support the JRC proposal to set strict requirements on the end product. We agree that the final product shall not be classified and labelled as being acutely toxic, a specific target organ toxicant, a respiratory or skin sensitizer, carcinogenic, mutagenic or toxic for reproduction, or hazardous to the environment, in accordance with CLP Regulation.

However, BEUC and the EEB highly recommend including in Criterion 4(b) an additional classification to the end product: H314, causes severe skin burns and eye damage

Derogation for enzymes not supported

BEUC and the EEB do not support the extension of the derogations to subtilisin, one of the available protein-removing enzymes, in HDD and ACP regardless their concentration as they are classified as hazardous to the environment.

Derogations should not be accepted for surfactants classified H400 and H412

BEUC and the EEB strongly disagree with the use of surfactants classified as H400 and H412 as they are very toxic to the environment and this is not acceptable in sustainable and ecological products.

If the derogation is kept, we highly recommend lowering the threshold of the derogation as this is much too high. It has been recognized by the Belgian competent body that many products can comply with a much lower threshold than 25%. As the product groups are very different from each other, we recommend at least analysing the average amounts of surfactants with different H statements used in the products before suggesting different limits.

Stricter exclusion of preservatives classified as skin sensitizers

Preservatives classified as H 317 (may cause an allergic skin reaction) should not be derogated.

Isothiazolinones should be excluded as they can cause harm to human health. They can indeed cause skin and eyes irritation, and are strong skin sensitizers.

Fragrances should be excluded from EU Ecolabel

Consumers' organisations and environmental NGOs urge the JRC to extend the ban of fragrances in IIDD to all other product groups. Fragrances should be indeed excluded from ecolabelled products as they do not improve the cleaning efficiency and are not needed in the product formulation to be performant. Fragrances can be very harmful to the consumers, causing allergies, skin irritations or asthma.





In addition, these substances are also very toxic to the environment as they are often classified as H412: Harmful to aquatic life with long-lasting effects.

If fragrances are restricted but not banned from Ecolabel products, we highly recommend setting clear and specific requirements on fragrances considered as ingoing single substances and not as part of a mixture. Fragrances should be indeed evaluated as a single product and all the substances present in fragrances should comply with the requirements on hazardous substances.

6. Laboratories accreditation

BEUC and EEB call for a horizontal requirement for all physical/chemical analyses and for (eco) toxicological tests to perform the testing in EN ISO 17025 or GLP (Good Laboratory Practice) accredited laboratories, in order to ensure the reliability of the tests results.

7. Phosphorus content should be further restricted

The JRC proposes to allow the use of phosphates only in IIDD, remove the ban on phosphonates that are non-biodegradable and set limits on phosphorus content. BEUC and the EEB do not agree with the JRC proposal as this is not stringent enough. We think that phosphates should be banned in all product groups, including IIDD, and phosphorus content should be further restricted, based on the following reasons:

- Phosphates have strong environmental impact. They highly contribute to eutrophication and detergents are among the biggest sources discharging phosphates after agriculture. Product design changes can be easier achieved for detergents than changes in agricultural production processes. Phosphates in detergents can easily be replaced with other builders, strong amino acid derived organic chelating agents such as zeolites, MGDA, GDLA, NTA, EDTA, DTPA⁶, available on the European market. Therefore consumers' organisations and environmental NGOs do not see technical barriers to ban phosphates completely.
- Other schemes such as Nordic Swan or Good Environmental Choice (GEC) have not only banned phosphates but have also set very strict criteria on phosphorus content: GEC does not accept professional dishwashing detergents with Phosphorous and Nordic Swan accepts 0,08g P/litre water for dishwasher detergents.⁷ For hard water the JRC accepts more than 6 times of phosphorus content than the Nordic Swan criteria for professional dishwashing detergents. Besides, there are today many products on the Swedish market which are phosphorus-free: Diskteknik, a Swedish manufacturer produces many phosphorus-free detergents carrying the Nordic Swan.
- Strict limits do not prevent the products from being successful on the market as both Nordic Swan and GEC products benefit from a large uptake in the market. The Nordic Swan has among 208 products labelled and at least 3 products labelled with GEC can be counted in Denmark where water is hard.

⁶ NTA: nitrilotriacetic acid, CAS N° 139-13-9 ; EDTA: ethylenediaminetetraacetic Acid, CAS N° 60-00-4; MGDA: methyl glycine di-acetic acid, CAS n° 29578-05-0; DTPA:diethylene triamine pentaacetic acid, CAS N° 67-43-6

⁷ See <u>http://www.svanen.se/Templates/Criteria/CriteriaGetFile.aspx?fileID=714</u>, criterion R13.





 Products from other ecolabelling schemes demonstrate that our request is feasible. As this is already done in other schemes, the EU Ecolabel should remain a frontrunner in the market. The Ecolabel criteria should reflect the evolutions of the market and the Ecolabel should remain a frontrunner in the market. This is the reason why thresholds for phosphorus content should have been lowered in the revised criteria.

In addition, BEUC and the EEB strongly encourage the JRC to re-include the criterion on the ban of phosphonates that are non-biodegradable in machine dishwashing detergents, where they are not necessary.

8. No substances of very high concern in packaging material

BEUC and the EEB are in favour of including an additional requirement making sure that there are no Substances of Very High Concern (SVHC), as referred to in Article 57 of Regulation (EC) No 1907/2006, in the packaging material of the product.

In addition, BEUC and the EEB strongly encourage the JRC to clearly exclude PVC in the packaging material. PVC is known to be very harmful to human health and the environment at all the life stages: emissions of vinyl chloride monomer (VCM) during PVC production create volatile pollutants, and PVC has a very low recyclability potential.

Finally, BEUC and the EEB hold the view that the use of recycled material should be better promoted in ecolabelled products. We suggest that manufacturers should not be allowed to use packaging material that contain less than 80% of recycled material. This threshold should be applied to paper, cardboard and PET materials.

9. Sustainable sourcing of palm oil, palm kernel oil and their derivatives, reservations expressed regarding the Book and Claim system

Consumers' organisations and environmental NGOs welcome the requirement on the sustainable sourcing of palm oil, palm kernel oil and their derivatives.

However, we strongly disagree with the use of the Book and Claim supply chain system which has a very low level of traceability and which does not provide sufficient guarantee to consumers that the palm oil bought is sustainable and that it is not destroying forests and potentially triggering conflicts in local communities. The Book and Claim system only guarantees that the manufacturer of the detergents pays a certain amount per tonne of palm toil to a producer or a plantation who is producing RSPO-certified⁸ palm oil, in order to get the "Green Palm certificates". The main reason why manufacturers are more likely to buy Book and Claim palm oil is that it is much cheaper to buy green certificates than to buy palm oil which is actually certified. This certification system based on a trading system cannot be used in the Ecolabel as it does not bring any added value with regards to the authenticity of the sustainable palm oil compared to conventional palm oil trading systems. As there are three different types of supply chains, the choice of the supply chain is of high importance in order to ensure the highest environmental benefits.

⁸ Roundtable on Sustainable Palm Oil.





BEUC and the EEB rather strongly recommend requiring the mass balance or segregated supply chain systems, which offer a higher reliability in the traceability of the palm oil from the mill to the manufacturer.

In addition, mass balance palm oil is available from many suppliers such as Sasol, BASF, Henkel, Evonik.

BASF has recently presented surfactants for cosmetic formulations or household cleaners with palm oil and palm kernel oil used to produce these ingredients that are certified by the Roundtable on Sustainable Palm Oil (RSPO) and sourced either through the supply chain system 'Segregated' or 'Mass Balance'. As these surfactants are already on the market, it is of high importance that they are used in Ecolabel products. These methods offer better guarantees that the palm oil is coming from sustainable plantations.

10. Criteria validity shall not be longer than 4 years

BEUC and the EEB consider the criteria validity is of high importance in the EU Ecolabel scheme. In our view, a 4 years period is already long enough for safer alternatives to come up on the market and scientific evidence-based studies to be published. In order to make the EU Ecolabel a signpost and a front-runner in the green sector, it is crucial that the scheme is given flexibility to be able to reflect the market's innovations in the criteria. Such an approach would ensure that the Ecolabel products stay at the forefront of innovation and comply with the highest safety standards existing on the market.