



EUROPEAN COMMISSION
DIRECTORATE-GENERAL JRC
JOINT RESEARCH CENTRE
Institute for Prospective Technological Studies (Seville)
Sustainable Production and Consumption

1st Meeting of the AHWG for the revision of the Commission Decision establishing the Ecological Criteria for the Award of the Community Ecolabel for Soaps, Shampoos and Hair Conditioners

20 February 2012- (9:30 – 17:30)

Room A30, 1st Floor

Institute for Prospective Technological Studies (IPTS), Edificio Expo

Calle Inca Garcilaso, 3

41 092 Seville, SPAIN

Agenda

1.	Opening and welcome Political objectives and the process description of the Ecolabel
2.	Background information on the project development – Overview Outcomes of the technical analysis and product environmental performance
	Coffee break
3.	Product group definition and scope revision
4.	Revision proposals for existing criteria – Presentations and discussion Criterion 1: Toxicity to aquatic organisms Criterion 2: Environmental harmful products Criterion 3: Aerobic biodegradability Criterion 4: Anaerobic biodegradability (annbotox) Criterion 5: Fragrances
	Lunch break
5.	Revision proposals for existing criteria – Presentations and discussion Criterion 6: Dyes or colouring agents Criterion 7: Biocides Criterion 8: Environmental hazardous ingredients Criterion 9: Packaging Criterion 10: Fitness for use Criterion 11: Information appearing on the eco-label
	Coffee break
6.	Other issues of relevance – Presentation and discussion - Chemicals and substances used in formulations intended for infants, babies and children - Addressing nanomaterials in EU Ecolabel - Energy consumption in industries - Renewable sourced ingredients
7.	Conclusions and close of the workshop



Revision of European Ecolabel Criteria for Soaps, Shampoos and Hair Conditioners

1st Ad-hoc Working Group Meeting
20th February 2012, Seville

Joint Research Centre, Institute for Prospective Technological Studies



Content

1. Background information
2. State-of-art of the project
3. Current definition and scope
4. Market analysis
5. Technical analysis
 - LCA
 - analysis of substances



Revision of European Ecolabel Criteria for Soaps, Shampoos and Hair Conditioners

Overview



Background information

- Criteria adapted in the Commission Decision of 21 June 2007 establishing the ecological criteria for the award of the Community eco-label to soaps, shampoos and hair conditioners
- Commission Decision of 14 November 2011 prolonged the validity of these ecological criteria as well as the related assessment and verification requirements until 31 March 2013.
- Currently there are 55 licenses given to the manufacturers

Country	No of licences
Germany	12
Italy	11
France	7
Netherlands	5
United Kingdom	4
Spain	3
Poland	3
Australia	3
Austria	1
Belgium	1
Denmark	1
China	1
Slovenia	1



State-of-art of the project

- Initial recommendations for revision of the current criteria has been done based on inputs received,
- Questionnaire (18 responses received from the stakeholders)
- Further, these criteria revision proposals are motivated and/or justified by results obtained in the technical analysis: :
 - the Life Cycle Assessment conducted
 - the analysis of substances contained in products



Current criterion

Current definition and scope

The product group "soaps, shampoos and hair-conditioners" shall comprise
any rinse-off substance and preparation intended to be placed in contact with the epidermis and the hair system with a view exclusively or mainly to cleaning them.
That product group shall also comprise
any rinse-off substance and preparation intended to be placed in contact with the hair system with a view to improve the condition of the hair (hair conditioners).

The product group shall cover products for both private and professional use.

The product group shall not cover products that are specifically marketed for disinfecting or anti-bacterial use.



Market analysis

European market of perfumery and cosmetics is the largest in the world, for the EU 27 it is nearly €67.000 million/year (2010).

Countries with the largest cosmetics markets:

- Germany (€12.000 million)
- France (€11.000 million)
- UK (€10.000 million)
- Italy (€9.500 million)
- Spain (€8.000 million)



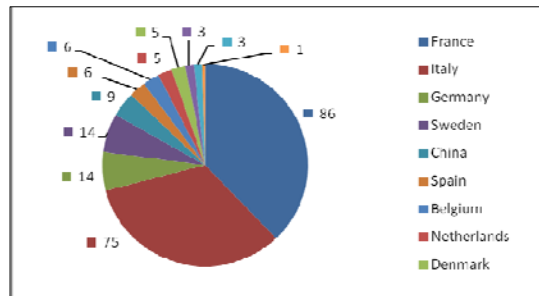
Market analysis

- More than 4.000 companies operating in the EU cosmetics industry.
- Employment is estimated to be 1.7 million people.
- The global market for soaps is dominated by a small number of multinational companies which account for half of the market.



Market analysis – Ecolabelled products

Number of products (soaps, shampoos and conditioners) with EU Ecolabel by country (2011)



Source: Elaboration from EU Ecolabel webpage data (www.eco-label.com)



Revision of European Ecolabel Criteria for Soaps, Shampoos and Hair Conditioners

Outcomes of the technical analysis and product environmental performance



Technical analysis - objectives

Investigate the environmental performance of the product:
product Life Cycle Assessment for the goal of drafting Ecolabel criteria
product oriented analysis and investigation of environmental savings
of Ecolabelled product

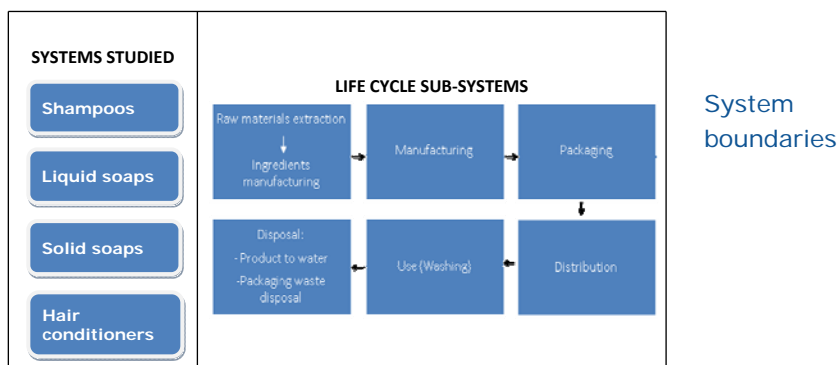
Identify the:

1. Life cycle phases in which high environmental impacts are identified
2. Environmental hot-spots in terms of:
 - a) the substances emitted to the environment
 - b) the processes which are related to these emissions
 - c) the ingredient that is found in the final product and is related to these processes and emissions
3. Investigate the relevance of taking an action within Ecolabel
4. Investigate and explore the environmental savings that an Ecolabelled product can achieve
5. Investigate potential alternatives/substitutions of specific substances that raise health risks



LCA – Technical analysis

Life cycle assessment analysis has been done based on ISO standards EN ISO 14040:2006 and EN ISO 14044:2006 EN-ISO 14040:2006



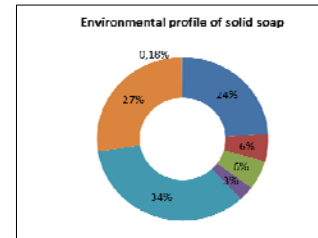
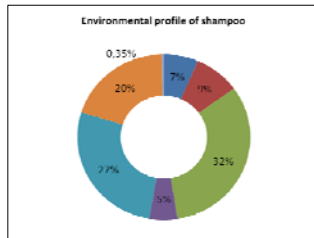
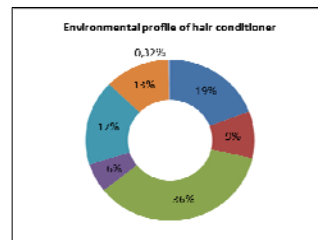
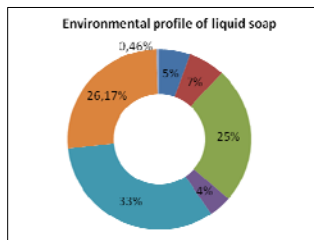


LCA – Functional unit

The Functional unit considered for soaps, shampoos and hair conditioners is:

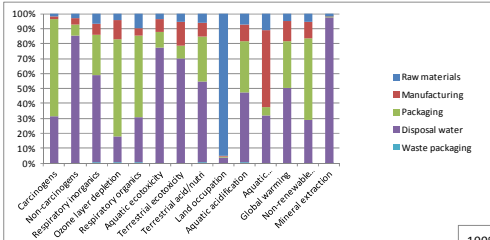
A washing action of a part of the body with the main objective of provide hygienic results and/or aesthetic improvements

Product	Reference flow
Liquid soap	A bottle of 250 ml of liquid soap (containing 255 g of product), with the main function of personal washing and personal care for 51 washing actions
Shampoo	A bottle of 250 ml of shampoo (containing 255 g of product), with the main function of personal washing and personal care for 32 washing actions
Hair conditioner	A bottle of 250 ml of hair conditioner (containing 255 g of product), with the main function of personal washing and personal care for 28 washing actions
Solid soap	A solid bar soap of 100 g with the function of washing the body or a part of the body for 25 washing actions

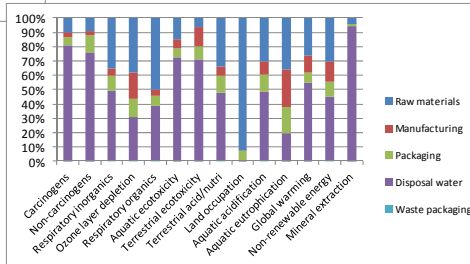


- Raw materials
- Manufacturing
- Packaging
- Transport
- Use
- Disposal
- Waste packaging

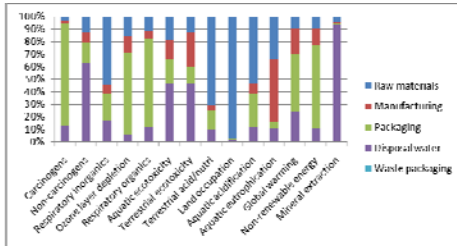
Distribution of environmental impact for midpoints impact categories (liquid soap) (Impact 2002+ method)



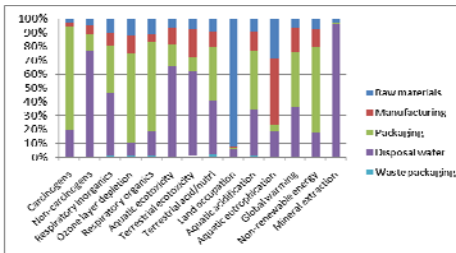
Distribution of environmental impact for midpoints impact categories (solid soap) (Impact 2002+ method)



Distribution of environmental impact for midpoints impact categories (hair conditioners) (Impact 2002+ method)



Distribution of environmental impact for midpoints impact categories (shampoo) (Impact 2002+ method)





Raw materials

Inventory data: Formulation of products (Frame formulations and real cases). Raw materials and processing of chemical ingredients are included.

Environmental impact: 24% of the total environmental impact for solid soaps, 19% for hair conditioners, 7% for shampoo, 5% for liquid soaps.

Potential regulation by EU Ecolabel: High

Criterion proposal:

- Select for each functional group of those substances less pollutant (Eco-toxicity factors, CLP, biodegradability)
- Select substances with low energy consumption and low resource depletion

Environmental impact saving expected:

Improvement of the environmental performance of ingredients used, including during stages of manufacturing, use and release to water. Minimize potential eco-toxicity effects if products are released to different environmental compartments. An important part of environmental impact of substances comes from energy and resources used during its manufacturing.



Manufacturing

Inventory data: Standard European process (Ecoinvent). Energy consumed, waste and emissions generated in manufacturing process included.

Environmental impact: 8% on average of the total environmental impact.

Potential regulation by EU Ecolabel: Moderate/medium

Criterion proposal: Improvement in manufacturing processes efficiency, mainly in energy use.

Environmental impact saving expected:

- Reduction of impacts from manufacturing process, which come mainly from the use of non-renewable energy for heating and electricity.
- Minimization of environmental impacts in categories of global warming and use of non-renewable energy.



Packaging (1/2)

Inventory data: Most common packaging of products

- Liquid products: Bottle of PE of 250 ml and 76 g of weight.
- Soap products: Paper-Cardboard packaging

Environmental impact: 25% of the total environmental impact for liquid soaps, 36% for hair conditioners, 32% for shampoo, 6% for solid soaps

Potential regulation by EU Ecolabel: High

Improvements:

- Minimize packaging weight
- Increase recycled material sources
- Materials selection: Use materials with a minor environmental impact
- Labeling / information system
- Refilling systems
- Guarantee recyclability: Use recyclable materials, all parts separable or compatible



Packaging (2/2)

Environmental impact saving expected:

- 70% environmental impact of packaging is due to the material used (the rest is generated by manufacturing of packaging)
- Decreases in weight (amount of material) have direct decreases in environmental impacts.
- Decrease of virgin material used has environmental impact savings.
- Select plastics which have lower environmental impact along their life cycle (including production phase and recycling phase). Consider potential for reusability and recyclability.
- Packaging without label has a 3% of less impact.
- Packaging without label is more easily recycled.
- Refilling system can provide a packaging saving of the 79% of weight
- Recycling of waste is in general environmentally preferable than other treatments (energy recovery or landfill), nevertheless it can differ for various materials. Recycling allows producing material which can enter again to the system enabling environmental impacts saving in first stages of life product.



Distribution

Inventory data: Standard European process, from existing LCA study (distance 920 km by road, lorry)

Environmental impact: 5% on the average of total environmental impact of products.

Potential regulation by EU Ecolabel: Low

Criterion proposal:

- Improve efficiency in logistic and transport processes.
- Decrease weight of packaging (lower weight of transported product)

Environmental impact saving expected:

- Environmental improvement due to saving of fossil fuel use.



Use

Inventory data: Water consumed in washing action included as input.

Environmental impact: 34-17% of total product environmental impact depending on each product

Potential regulation by EU Ecolabel: Low

Criterion proposal:

- Improvements in products performance: dosage, more easily rinse-off.
- Communication and awareness messages to users

Environmental impact saving expected:

- Reducing dose/washing action
- Reducing water consumed /washing action
- Reducing product and water consumed /washing action





Disposal to water

Inventory data: Treatment of wastewater generated after washing action (containing water and product consumed)

Environmental impact: 27-13% of total product environmental impact depending on each product

Potential regulation by EU Ecolabel: Impacts from this stage depend on raw materials and use stage.

Criterion proposal: Use substances which are not toxic for the environment or the humans.

Environmental impact saving expected: Environmental impact minimization coming from wastewater treatment.



Waste packaging treatment

Inventory data: European Statistics on packaging waste treatment. The part of waste which is recycled has avoided impacts due to savings of virgin materials.

Environmental impact: 0.5 % – 0.18 % of the total environmental impact of products (depending on each product)

Potential regulation by EU Ecolabel: Impacts from this stage depend on packaging stage

Criterion proposal:

- Increase recycling rates in packaging waste.
- Reduce amount of waste generated by packaging (refilling systems, lower packaging weight)

Environmental impact saving expected: Recycling of waste is environmentally preferable than other treatments (energy recovery or landfill), nevertheless, differences among materials exist in this respect.



Identification and analysis of alternatives for hazardous substances

The technical analysis has specifically taken into account the substances most commonly used that perform the same function and the identification of chemicals of high concern. In particular, focus on substances of very high concern (Annex XIV of REACH Regulation) and the candidate list for authorisation as referred to REACH Regulation.

The identification of hazardous substances is based on ingredients inherent properties.

The environmental and human health effects are measured by the classification status according to CLP regulation.



Methodology and information sources

The analysis follows the following stepwise approach:

Activity 1: Inventory of the formulation of products

Formulations have been defined from COLIPA frame formulations, from where the main functions for each product have been defined. Analysis of the most common chemical substances present in the products and their function has been carried out.

Product group	Number of products analysed
Liquid soap	20 362
Solid soap	4 183
Shampoo	13 188
Hair conditioner	5 327



Methodology and information sources

Activity 2: Obtaining information on composition (Safety Data Sheets)

The Safety Data Sheets (SDS) contain information which can be used for considerations of substitution.

As until now different classifications of the same substances appeared in the safety data sheets, we chose to use a harmonized classification based on information from ESIS and ECHA and not Safety Data Sheets from manufacturers.

Activity 3: Describing the function

Analysis of the most common chemical substances present in the products that may possibly fulfil an equivalent function to the uses applied for, has been carried out in the framework of this study.



Methodology and information sources

Activity 4: Assessing the risk

Based on the information provided by ESIS and ECHA, a priority list of hazardous substances which are determined to pose the most significant potential threat to human health and environment has been prepared.

Activity 5: Analysis of alternatives

In this analysis the potential to substitute hazardous substances with safer components, whenever technically feasible, in particular with regard to substances of very high concern (SVHC) as referred to in Article 57 of the REACH Regulation (EC) No 1907/2006 has been taken into account.

The analysis of alternatives is the first step in the process of planning for substitution, where assessment is made on the availability of suitable alternative substances, their risks for human health and the environment and their technical feasibility.



Conclusions on identification and analysis of alternatives for hazardous substances

The main hazardous substances which are determined to raise significant risks to human health and environment that should be considered to be excluded from ecolabelled products are:

Hazardous substances: According to the Article 6(6) of EU Ecolabel legislation EC/66/2010, the product or any part of it thereof shall not contain substances or mixtures meeting the criteria for classification as toxic, hazardous to the environment, carcinogenic, mutagenic or toxic for reproduction (CMR), in accordance with CLP Regulation (EC) No 1272/2008, nor to goods containing substances referred to in Article 57 of REACH Regulation.

Hazardous substances can be classified through the hazard statements provided in the next table:

Conclusions on identification and analysis of alternatives for hazardous substances

Hazard statement according to CLP 1272/2008/EEC	Associated risk phrases according to Directive 67/548/EEC
H300 Fatal if swallowed	R28
H301 Toxic if swallowed	R25
H304 May be fatal if swallowed and enters airways	R65
H310 Fatal in contact with skin	R65
H311 Toxic in contact with skin	R65
H330 Fatal if inhaled	R23; R26
H331 Toxic if inhaled	R23
H340 May cause genetic defects	R23
H341 Suspected of causing genetic defects	R68
H350 May cause cancer	R45
H350i May cause cancer by inhalation	R49
H351 Suspected of causing cancer	R40
H360F May damage fertility	R60
H360D May damage the unborn child	R61
H360FD May damage fertility. May damage the unborn child	R60-61
H360FD May damage fertility. Suspected of damaging the unborn child	R60-63
H360DF May damage the unborn child. Suspected of damaging fertility	R61-62
H361F Suspected of damaging fertility	R62
H361d Suspected of damaging the unborn child	R63
H361Fd Suspected of damaging fertility. Suspected of damaging the unborn child	R62-63
H362 May cause harm to breast-fed children	R64
H370 Causes damage to organs	R39/23; R39/24; R39/25; R39/26; R39/27; R39/28
H371 May cause damage to organs	R68/20; R68/21; R68/22
H372 Causes damage to organs through prolonged or repeated exposure	R48/25; R48/24; R48/23
H373 May cause damage to organs through prolonged or repeated exposure	R48/20; R48/21; R48/22
H400 Very toxic to aquatic life	R50
H410 Very toxic to aquatic life with long-lasting effects	R50-53
H411 Toxic to aquatic life with long-lasting effects	R51-53
H412 Harmful to aquatic life with long-lasting effects	R52-53
H413 May cause long-lasting harmful effects to aquatic life	R53
EUH059 Hazardous to the ozone layer	R59
EUH029 Contact with water liberates toxic gas	R29
EUH031 Contact with acids liberates toxic gas	R31
EUH032 Contact with acids liberates very toxic gas	R32
EUH070 Toxic by eye contact	R36-41
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled	R42
H374 May cause allergic skin reaction	R43



Conclusions on identification and analysis of alternatives for hazardous substances

Substances considered PBT (persistent, bioaccumulativ and toxic) and vPvB (very persistent and very bioaccumulativ) and/or those having endocrine disrupting properties according to article 57 of REACH regulation should be prohibited.

Substances included in the candidate list of Substances of Very High Concern (SVHC) for authorization should be prohibited. Currently there are 73 substances in the candidate list.



Conclusions on identification and analysis of alternatives for hazardous substances

Some specific substances that should be restricted are:

Triclosan (5-chloro-2-(2,4-dichlorophenoxy)phenol) - a preservative, classified as an agent that may cause adverse environmental effects. H410: very toxic to aquatic life with long lasting effects, H315: causes skin irritation and H319: causes serious eye irritation.

Formaldehyde - a preservative, known sensitizer and carcinogen, H351: suspected of causing cancer, H301: toxic if swallowed, H311: toxic in contact with skin, H331: toxic if inhaled; H314: causes severe skin burns and eye damage and H317: may cause an allergic skin reaction.

Formaldehyde releasers: Bronopol (2-Bromo-2-Nitropropane-1, 3-Diol), 5-bromo-5-nitro-1, 3-dioxane, sodium hydroxyl methyl glycinate, DMDM Hydantoin, Diazolidinyl Urea and Imidazolidinyl Urea – preservatives that decompose to form formaldehyde upon degradation. Some studies demonstrate that people exposed to formaldehyde releasers may experience an allergic reaction.



Fragrances chemicals most frequently reported as contact allergens

Conclusions on identification and analysis of alternatives for hazardous substances

Fragrance - sensitizers and known trigger of allergic reactions such as asthma and contact dermatitis.

In 1999, the Scientific Committee on Cosmetic Products and Non Food products intended for consumers (SCCP) based on criteria restricted to dermatological data reflecting the clinical experience, identified a list with the 13 most frequently reported allergens.

Sensitizing substances classified as H334 (R42): respiratory sensitization and/or H317 (R43): skin sensitization or is one of the 13 fragrances mentioned in the table, are proposed to be restricted to 0.01% (100 ppm).

SUBSTANCES	CAS No
Amyl cinnamal	122-40-7
Amylcinnamyl alcohol	101-85-9
Benzyl alcohol	100-51-6
Benzyl salicylate	118-58-1
Cinnamyl alcohol	104-54-1
Cinnamal	104-55-2
Citral	5392-40-5
Coumarin	91-64-5
Eugenol	97-53-0
Geraniol	106-24-1
Hydroxycitronellal	107-75-5
Hydroxymethylpentylcyclohexanecarboxaldehyde	31906-04-4
Isoeugenol	97-54-1



Conclusions on identification and analysis of alternatives for hazardous substances

Phthalates - Some phthalates can be found in rinse-off cosmetic formulations. It is assumed that they are added in the perfume mix. Phthalates in the table below should be prohibited because they are classified as toxic for reproduction and present in the candidate list of Substances of Very High Concern for authorisation according to REACH regulation.

Substance name	EC Number	CAS Number	Classification
Bis(2-methoxyethyl) phthalate	204-212-6	117-82-8	Toxic for reproduction (article 57 c)
Diisobutyl phthalate	201-553-2	84-69-5	Toxic for reproduction (article 57c)
Dibutyl phthalate (DBP)*	201-557-4	84-74-2	Toxic for reproduction (article 57c)
Benzyl butyl phthalate (BBP) *	201-622-7	85-68-7	Toxic for reproduction (article 57c)
Bis (2-ethylhexyl)phthalate (DEHP)*	204-211-0	117-81-7	Toxic for reproduction (article 57c)

* Substances subjected to authorization, Annex XIV of REACH regulation



Conclusions on identification and analysis of alternatives for hazardous substances

Ethyl-, methyl-, propyl- and butyl-Parabens – preservatives, categorised as potential endocrine disruptors (Category 1) under the EU strategy for endocrine disruptors. Safer alternatives to parabens exist, and around 5,4% of products are now marketed as “paraben-free”.

Ethyl-, methyl-, propyl- and butyl- Parabens are proposed to be prohibited or restricted based on precautionary principle.

D4 (octamethylcyclotetrasiloxane) - emollient or solvent, H413: may cause long lasting harmful effects to aquatic life, H361: suspected of damaging fertility or the unborn child and H226: flammable liquid and vapour, generally considered to be persistent in the environment.

Butylated Hydroxy Toluene (BHT) – antioxidant, H410 (R50/53) very toxic to aquatic life with long lasting effects.



Conclusions on identification and analysis of alternatives for hazardous substances

Packaging requirements in function of the material used: plastic, metal, paper, cardboard and related to the environmental performance of the material:

Plastic: shall not contain the next substances included in the candidate list of Substances of Very High Concern (SVHC) for authorization:

Name of substance	Plastics involved	EC number	CAS number	Reason for inclusion in Candidate List
2,4-Dinitrotoluene	Monomer	204-450-0	121-14-2	Carcinogenic (article 57a)
4,4'- Diaminodiphenylmethane (MDA)	Monomer	202-974-4	101-77-9	Carcinogenic (article 57a)
Acrylamide	PA Monomer	201-173-7	79-06-1	Carcinogenic and mutagenic (articles 57 a and 57 b)
Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	PVC	287-476-5	85535-84-8	PBT and vPvB (articles 57 d and 57 e)
Benzyl butyl phthalate (BBP)	PVC PP catalysts	201-622-7	85-68-7	Toxic for reproduction (article 57c)
Bis (2-ethylhexyl)phthalate (DEHP)	PVC PP catalysts	204-211-0	117-81-7	Toxic for reproduction (article 57c)
Chromium trioxide	HDPE catalysts	215-607-8	1333-82-0	CMR



Conclusions on identification and analysis of alternatives for hazardous substances

Name of substance	Plastics involved	EC number	CAS number	Reason for inclusion in Candidate List
Dibutyl phthalate (DBP)	PVC PP catalysts	201-557-4	84-74-2	Toxic for reproduction (article 57c)
Diisobutyl phthalate	PVC PP catalysts	201-553-2	84-69-5	Toxic for reproduction (article 57c)
Hexabromocyclododecane (HBCDD) and all major diastereoisomers	Flame Retardant EPS, XPS	247-148-4 221-695-9	25637-99-4	PBT (article 57d)
Lead chromate	Pigment	231-846-0	7758-97-6	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	Pigment	235-759-9	12656-85-8	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
Lead sulfochromate yellow (C.I. Pigment Yellow 34)	Pigment	215-693-7	1344-37-2	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
Tris(2-chloroethyl)phosphate	Flame Retardant, plasticiser	204-118-5	115-96-8	Toxic for reproduction (article 57c)

Paper/cardboard packaging: Chlorine shall not be used to bleach. Chlorine gas is classified as H400 (very toxic to aquatic life), H315 (causes skin irritation), H319 (causes serious eye irritation), H331 (Toxic if inhaled) and H335 (may cause respiratory irritation). Chlorine bleaching process produces highly toxic and persistent organochlorines such as dioxin. Dioxins are recognized as a persistent environmental pollutant, regulated internationally by the Stockholm Convention on Persistent Organic Pollutants. According to EU Ecolabel for tissue paper and for copying and graphic paper, chlorine gas shall not be used as a bleaching agent.



Conclusions

Overview of how the following information elements are related to each other:

- Outcomes of the environmental performance of the product group
- Appropriateness and potential to regulate this area through the policy tool of Ecolabel
- Ecolabel criterion that is taken or is now proposed per area of action.
- The environmental savings and improvement that is expected from the Ecolabel criterion is given.

STAGE	Environmental impact	Poten-tial	Good environmental practices /restrictions	Improvement potential
Chemicals	24% of the total environmental impact for solid soaps, 19% for hair conditioners, 7% for shampoo, 5% for liquid soaps	High	Select for each functional group of those substances less pollutant (Ecotoxicity factors, CLP, biodegradability) Select substances with less energy and non-renewable consumption	-Improvement of the environmental performance of ingredients used, including during stages of manufacturing, use and release to water. -Minimize potential ecotoxicity effects if products are released to different environmental compartments. -An important part of environmental impact of substances comes from energy and resources used during its manufacturing.

STAGE	Environmental impact	Potential	Good environmental practices /restrictions	Improvement potential
Manufacturing	8% on average of the total environmental impact	Moderate / Medium	Improvement in manufacturing processes efficiency, mainly in energy use	-Reduction of impacts from manufacturing process, which come mainly from the use of non-renewable energy for heating and electricity. -Minimization of environmental impacts in categories of global warming, use of non-renewable energy.
Packaging	25% of the total environmental impact for liquid soaps, 36% for hair conditioners, 32% for shampoo , 6% for solid soaps	High	Minimize packaging weight	-70% environmental impact of packaging is due to the material used (the rest is generated by manufacturing of packaging) -Decreases in weight (amount of material) have direct decreases in environmental impacts.
			Increase recycled material sources	-70% environmental impact of packaging is due to the material used -Decrease of virgin material has environmental impact savings.
			Materials selection: -Use materials with a minor environmental impact	-70% environmental impact of packaging is due to the material used (the rest is generated by manufacturing of packaging) -Select plastic with low environmental impact along its life cycle (including production phase and recycling phase). Consider potential for reusability and recyclability.
			Labelling / information system	-Packaging without label has a 3% of less impact. -Packaging without label is more easily recycled.
			Refilling systems	-Refilling system can provide a packaging saving of the 79% of weight

STAGE	Environmental impact	Potential	Good environmental practices /restrictions	Improvement potential
			Guarantee recyclability: -Use recyclable materials -All parts separable or compatible	-Recycling of waste is in general environmentally preferable than other treatments (energy recovery or landfill), nevertheless it can differ for various materials. Recycling allows producing material which can enter again to the system enabling environmental impacts saving in first stages of life product.
Distribution	Average of 5% of total product environmental impact	Low	Improve efficiency in logistic and transport processes. Decrease weight of packaging (lower weight of transported product)	-Environmental improvement due to saving of fossil fuel.
Use	34-17% of total product env. impact depending on each product	Low	Improvements in products performance: dosage, more easily rinse-off. Communication and awareness messages to users	-Reducing dose/washing action -Reducing water consumed /washing action - Reducing product and water consumed/washing action
Release to water	27-13% of total product environmental impact depending on each product	depend on raw materials and use stage	Use substances which are not toxic for the environment or the humans.	-Environmental impact minimization related to from wastewater treatment.
Treatment of packaging waste	0.5 % – 0.18 % of the total environmental impact of products (depending on each product)	depend on packaging stage	Increase recycling rates in packaging waste. Reduce amount of waste generated by packaging (refilling systems, lower packaging weight)	- In general, recycling of waste is environmentally preferable than other treatments (energy recovery or landfill), nevertheless, differences among materials exist in this respect.



Revision of European Ecolabel Criteria for Soaps, Shampoos and Hair Conditioners

Product group definition and scope revision



Definition and scope

- Products with a certain degree of similarity, for example a common function or way of application or with similar chemical composition.
- Other rinse-off cosmetic products for similar purposes, e.g. shaving products.
- Products with similar purposes for animals, especially pets, as well as products like wet wipes and toothpaste could also be discussed.

HAIR PRODUCTS	
SHAMPOO - LIQUID AND CREAM	
Ingredients	Max levels (% w/w)
Anionic surfactants (e.g. sodium/ammonium/TEA lauryl sulfates, sodium/ammonium/TEA laureth sulfates)	30
Amphoteric surfactants (e.g. betaine derivatives)	20
Non-ionic surfactants (e.g. fatty alkanolamides)	15
Viscosity controlling agents (e.g. propylene glycol, PEG)	10
Cationic surfactants C12 (e.g. stearamidopropyl dimethylamine, distearyldimonium chloride)	5
Hair conditioning agents (e.g. silicone derivatives, cysteine derivatives, cellulose derivatives, fatty acid esters)	each up to 5
Additional ingredients (e.g. UV filters, pearlescent agents, opacifying agents)	each up to 5
Preservatives, antimicrobials	1
Chelating agents (e.g. disodium EDTA)	0.5
Aqua	to 100



Definition and scope

Points for discussion:

- Based on the analysis of ingredients - the product group definition might include other rinse-off cosmetic products with similar purposes like shaving foam, shaving gel, shaving cream and shaving soap. Products for animals, especially pets, can also be included.
- Changing the product group name to "Rinse-off cosmetic products"



Stakeholders feedback

Definition and scope

Product group definition – proposal to extend the scope of the Ecolabel to all rinse-off cosmetic products: the principle is certainly to be considered; however, other important considerations are:

- need for market analysis and LCA for the new product categories;
- possible need to adjust some of the criteria (e.g. packaging for shaving foams - aerosol dispenser - would probably not meet the current criterion on packaging);
- shaving products have a different function from cleaning (they are used to remove hair, i.e. to change appearance);
- products for animals are not cosmetic products, as defined under the Cosmetics Regulation (1223/2009).

Covering also other non rinse-off products

We also propose excluding hair dyes from the scope of this product group.

Discuss the inclusion of "leave-on" products in this product group





Thank you



Stakeholders feedback

Preliminary results from the technical analysis

Scope of the study and Systems Descriptions and Boundaries:

We welcome the intention of the current analysis “to have a vision of the whole life cycle” for the products considered, and in particular the inclusion of water consumption during the use phase in the LCA. However, we do not support the exclusion of the energy used for heating the water, which is a significant contributor to the impact of the use phase, since showering, washing the hair and rinsing off the hair conditioner are actions that are done only in extreme cases with cold water. Excluding the energy consumption leads to a distorted view and a relative overestimation of other impacts. At least, advice for consumers how to reduce the energy consumption for heating the water (e.g. by limiting the duration of the shower) should be considered (see also suggestion under proposed criterion 11, consumer information).



Preliminary results from the technical analysis

Use phase

In the second paragraph of the "Use" section, it is stated that "it is important to investigate whether a risk that the product may have a negative health impact exists". We consider it important to recall that the European cosmetics legislation (Directive 76/768/EEC and Regulation 1223/2009) requires that "a cosmetic product made available on the market shall be safe for human health when used under normal or reasonably foreseeable conditions of use (...)". To this end, the safety of each and every cosmetic product is assessed by a qualified professional before the product is placed on the market, taking into account the hazard properties of all the ingredients used, as well as the daily amounts of product that consumers come in contact with. This safety assessment is available to authorities for control purposes, and should not be undermined by the Ecolabel. Furthermore, substances used in cosmetic products are regulated under REACH and CLP.



Preliminary results from the technical analysis

LCA – Functional unit

Consumer behaviour aspects (pages 14-15): Cosmetics Europe (at the time called Colipa) carried out a very large, state-of-the-art study on European consumers' exposure to cosmetics products between 2005 and 2010; the results of this study were included in the Scientific Committee on Consumer Safety (SCCS) Notes of Guidance for the testing of cosmetic ingredients and their safety evaluation, 7th Revision, 2010. According to these, the representative amounts (90th percentiles) of product used per application (e.g. per washing action) are as follows:

- **Hair conditioner: 14 g;**
- **Shampoo: 10.5 g;**
- **Shower gel: 13 g;**
- **Hand soap: 2 g.**



Preliminary results from the technical analysis

Identification and analysis of alternatives

Identification and analysis of alternatives for hazardous substances (pages 30-85): we would caution against an over-simplified, theoretical, approach regarding ingredient functions and the interchangeability of substances. Cosmetic product formulations are complex matrices, where ingredients have functions and sub-functions. Product reformulation, apart from being time and cost intensive, means replacing a formulation structure with another formulation structure, rather than just replacing one substance with another. Furthermore, some ingredients, such as preservatives, are added in order to maintain product characteristics over sufficiently long use periods, thus avoiding unnecessary product waste. Effectiveness of alternative preservatives (bearing in mind that sometimes preservation systems, i.e. combinations of preservatives, are used) needs to be assessed; in case alternatives are less effective, environmental consequences of product waste need to be included in the replacement scenarios.



Background report including draft criteria revision proposal

General comment on the approach:

The EU Ecolabel scheme is placed in the context of the sustainable consumption and production policy of the Community, which aims at reducing the negative impact of consumption and production on the environment, health, climate and natural resources. Therefore, Cosmetics Europe would welcome a more holistic approach to the Ecolabel, including also the environmental impact of manufacturing, transportation and of the use phase, as well as broadening the scope to environmental, social and ethical aspects such as sustainable sourcing of ingredients, biodiversity, labour ethics, etc. Taking the Ecolabel beyond environmental considerations would help it become more relevant from a sustainability point of view.



Revision of European Ecolabel Criteria for Soaps, Shampoos and Hair Conditioners

Issues regarding revision of existing criteria

1st Ad-hoc Working Group Meeting
20th February 2012, Seville

Joint Research Centre, Institute for Prospective Technological Studies



Content

- Criterion 1: Toxicity to aquatic organisms
- Criterion 2: Environmental harmful products
- Criterion 3: Aerobic biodegradability
- Criterion 4: Anaerobic biodegradability (annbotox)
- Criterion 5: Fragrances
- Criterion 6: Dyes or colouring agents
- Criterion 7: Biocides
- Criterion 8: Environmental hazardous ingredients
- Criterion 9: Packaging
- Criterion 10: Fitness for use
- Criterion 11: Information appearing on the eco-label



Criterion 1: Toxicity to aquatic organisms

The critical dilution volume toxicity (CDV) is calculated for each ingredient (i) and for the whole product using the following equation:

$$CDV(\text{ingredient } i) = \text{weight } (i) \times DF(i) \times 1\,000 / TF \text{ chronic } (i)$$

$$CDV = \Sigma CDV(\text{ingredient } i)$$

- where weight (i) is the weight of the ingredient (in grams) per functional unit. DF (i) is the degradation factor and TF chronic (i) is the toxicity factor of the ingredient (in milligrams/litre).

The total CDV of the product must not exceed the following values:

- Shampoo, shower products and liquid soaps: 20 000 l/g AC
- Solid soaps: 3 500 l/g AC
- Conditioner: 30 000 l/g AC



Criterion 1: Toxicity to aquatic organisms

Point 1 – Modifying the method for Critical Dilution Volume (CDV) calculation from the latest version of DID list.

$$NEW \text{ Calculation} = (CDV_{tox}(g \text{ product})) \times \frac{(dosage \text{ of use of the product})}{(\text{average dosage of use from Colipa for this product application})}$$

Where:

$$CDV_{tox}(\text{product}) = \Sigma CDV(\text{ingredient } i)$$

$$CDV(\text{ingredient } i) = \text{weight } (i) \times DF(i) \times 1000 / TF \text{ chronic } (i)$$

PROPOSAL: weight (i) is the weight of the ingredient (in grams) per product. DF (i) is the degradation factor and TF chronic (i) is the toxicity factor of the ingredient (in milligrams/litre)

EXISTING CRITERIA: weight (i) is the weight of the ingredient (in grams) per functional unit. DF (i) is the degradation factor and TF chronic (i) is the toxicity factor of the ingredient (in milligrams/litre)

In order to avoid that more concentrated products have disadvantages, results are related to the dosage of products



Criterion 1: Toxicity to aquatic organisms

Point 2 – With new data due to the first REACH registration deadline, **DID-list should be updated** (and add CAS and/or EINECS number) and enlarged to most commonly used surfactants and other relevant ingredients.

Point 3 – **Decreasing limits of critical dilution volume toxicity (CDV)** per grams of product for each kind of product.

- **Proposed CDV (minimum)**
 - Shampoo and liquid soaps: 18000 L/g AC
 - Solid soaps: 3000 L/g AC
 - Hair conditioners: To be discussed

Note: with proposal limits should be established by g of product



Criterion 1: Toxicity to aquatic organisms

CDV values for Nordic Ecolabel and EU Ecolabel

	Nordic Ecolabel (l/g active ingredient)	EU Ecolabel (l/g AC)
Liquid soap, shampoo,	13000	20 000
Hair conditioner		30 000
Solid soap	3 000	3 500

41% of the consulted stakeholders agreed with the proposed requirements on Critical Dilution Volume. Note that the same percentage disagreed.



Criterion 1: Toxicity to aquatic organisms

In principle, we would prefer a more risk-based approach to assessing the environmental impact of ingredients; however, there are currently no ready-to-use tools available for cosmetic products which could replace the CDV;

Updated figures for product amount per application shall be used (Values submitted by the stakeholder)

CDV calculation: in principle we agree with the approach, but it has to be coherent with the use test (fitness for use) to enable a fair comparison between products within a same category. Our experts have re-calculated CDVs according to the new method which had a significant impact on the values obtained; pass/fail limits have not been provided in the proposal, therefore it is not possible to comment on the impact of the new calculation method on the number of currently Ecolabelled products which would no longer meet this criterion;



Criterion 1: Toxicity to aquatic organisms

DID list: we support the proposal to update the list, add CAS/EINECS numbers and expand it to cover additional relevant ingredients; very important for our industry would be to add the INCI names of substances (INCI is the International Nomenclature for Cosmetic Ingredients);

Decreasing CDV limits: the proposal seems to be mixing limits per g and per AC - further clarification is needed; decreasing the CDV limits will further reduce the number of products which can comply with this criterion. In the motivation it is stated that in fact CDV values have not been analysed; therefore, this proposal seems arbitrary. As mentioned above, this criterion should account for fitness for use, because the product will not work without certain ingredients causing a high CDV, which in turn increase dosage.

Note: our experts have applied the current calculation method with the proposed limits and determined that 40% of existing Ecolabelled products would not pass.



Criterion 1: Toxicity to aquatic organisms

BEUC and EEB support the idea of enlarging and updating the Detergent Ingredient Database (DID-list). The current version was adopted in January 2007 and in our view it urgently needs revision to take into account technical progress. A lot of relevant information about the new ingredients can be found in the REACH dossiers and in other sources and should be used as a source when updating the database.

Without knowing the concentration of the different ingredients, we find it difficult to judge whether the Critical Dilution Values (CDV) that have been proposed are relevant.

One option could be decreasing CDV values of liquid products in order to promote the use of solid soaps, which are less toxic to aquatic organisms.

The best choice in this case would be to follow the Nordic Swan approach and use the same CDV values.



Criterion 1: Toxicity to aquatic organisms

Points for discussion

- Referring the CDV value to g of product instead of g of AC
- Extension of DID-list
- New stricter values for CDV



Criterion 2: Environmental harmful products

The product must not fulfil the requirements for classification for any of the following risk phrases according to Directive 67/548/EEC:

- **N, R50/53: $(WR50/53/25 \%) \geq 1$**
- **N, R51/53: $((WR50/53/2,5 \%) + (WR51/53/25 \%)) \geq 1$**
- **R52/53: $((WR50/53/0,25 \%) + (WR51/53/2,5 \%) + (WR52/53/25 \%)) \geq 1$**

WR50/53 = weight percent of ingredients that may be classified as R50/53.

WR51/53 = weight percent of ingredients that may be classified as R51/53.

WR52/53 = weight percent of ingredients that may be classified as R52/53.

Rubbing/abrasive agents in hand cleaning agents are not included.



Criterion 2: Environmental harmful products

Including limitations of the current criterion 2 in criterion 8: "Environmental hazardous ingredients" and updating them based on the CLP.

65% of the stakeholders consulted agreed with including these limitations in criterion 8.



Criterion 3: Aerobic biodegradability

- (a) Aerobic biodegradability of surfactants
Each surfactant used in the product shall be readily biodegradable.
- (b) Aerobic biodegradability of non-surfactants (aNBDO non-surf)
The content of ingredients that are not readily biodegradable (or have not been tested for aerobic biodegradability) must not exceed the following levels:
 - **Shampoo, shower products and liquid soaps: 30 mg/g AC**
 - **Solid soaps: 15 mg/g AC**
 - **Conditioner: 50 mg/g AC**

Rubbing/abrasive agents in hand cleaning agents are not included.
All ingredients (substances or preparations) exceeding 0,010 % by weight of the final product shall be considered. This includes also each ingredient of any preparation used in the formulation exceeding 0,010 % by weight of the final product.



Criterion 3: Aerobic biodegradability

- It is proposed to discuss if all surfactants must be readily aerobically and anaerobically biodegradable.
- Decrease limits to apply to aNBDO (Aerobic Non-Biodegradable Organics).

aNBDO values for Nordic Ecolabel and EU Ecolabel

	Nordic Ecolabel	EU Ecolabel
	aNBDO (mg/g AI)	aNBDO _{non-surf} (mg/g AC)
Liquid soap, shampoo,	15	30
Hair conditioner	15	50
Solid soap	5	15

47% of consulted stakeholders agreed with limiting the use of non biodegradable surfactants and decreasing limits to apply to ANBDO. Some discussions and doubts have arisen regarding anaerobic biodegradability (about environmental relevance and feasibility of fulfilling criteria), therefore this issue is proposed for a discussion during today meeting.



Criterion 3: Aerobic biodegradability

We are of the position that all surfactants in that product group have to be readily aerobically and anaerobically biodegradable.

The first criterion is a regulatory requirement (Detergents regulation).

According to the DID-list from 2007 a lot of surfactants are anaerobically biodegradable as well. Therefore we don't see a need to continue a percentage of allowed anaerobically non biodegradable surfactants.

We welcome to decrease the limits for these substances. But as rubbing and abrasive agents are excluded already, we would propose to broaden this criterion to all other substances and not only toxic.



Criterion 3: Aerobic biodegradability

The actual level of aerobic biodegradability of shampoo and shower gel has been evaluated as 82% by the industry and therefore the 30 mg (i.e. 97%) value is already very strict; decreasing the aerobic biodegradability limits will further drastically reduce the number of products which can comply with this criterion.

NOTE: our experts have determined that 85% of existing Ecolabelled products would not pass the new criterion.

BEUC and EEB welcome the JRC's proposal to require all surfactants to be biodegradable. Nevertheless, soap, shampoos and hair conditioners contain many other substances (e.g. emollients, humidifiers and conditioning agents) which are very similar to surfactants. Those substances have worse biodegradability and therefore they should be addressed with additional criteria as well.

We propose also using the Nordic Swan requirements to address these other substances.



Criterion 3: Aerobic biodegradability

Points for discussion

- All surfactants aerobically and anaerobically biodegradable
- Stricter values of aNBDO
- Extending this criterion to other substances similar to surfactants (e.g. emollients, humidifiers and conditioning agents)



Current criterion

Criterion 4: Anaerobic biodegradability (annbotox)

The content of ingredients that are not anaerobically degradable (or have not been tested for anaerobic biodegradability) and have a lowest acute toxicity LC50 or EC50 < 100 mg/l (similar to the classification limit for R52 in Directive 67/548/EEC) must not exceed the following levels:

- **Shampoo, shower products and liquid soaps: 25 mg/g AC**
- **Solid soaps: 15 mg/g AC**
- **Conditioner: 50 mg/g AC**

Rubbing/abrasive agents in hand cleaning agents are not included.



Criterion 4: Anaerobic biodegradability (annbotox)

- Decrease limits to apply to anNBDO (Anaerobic Non-Biodegradable Organics).

anNBO values for Nordic Ecolabel and EU Ecolabel

	Nordic Ecolabel	EU Ecolabel
	anNBDO (mg/g AI)	anNBDO (mg/g AC)
Liquid soap, shampoo,	15	25
Hair conditioner	15	50
Solid soap	5	15

65% of stakeholders consulted agree with decreasing the limits to anNBDO. Some comments referred to the fact that anNBDO values for some substances can be difficult to obtain and prove, if they are not in DID list.



Stakeholders feedback

Criterion 4: Anaerobic biodegradability (annbotox)

We welcome to decrease the limits for any other anaerobic not biodegradable substances.

Proposal regarding criterion 4 (anaerobic biodegradability): the anaerobic bio-degradability of readily biodegradable surfactants and other organic readily biodegradable ingredients is not a factor of environmental relevance (see SCHER opinion of 17.11.2008) and should therefore not be a requirement. Furthermore, data on anaerobic biodegradation are currently not widely available, therefore formulations are restricted with no real ecological basis, especially when a strict criterion is already in place for aerobic biodegradability and "harmful" substances are already removed.

NOTE: our experts have determined that 85% of existing Ecolabelled products would not pass the new criterion.



Criterion 4: Anaerobic biodegradability (annbotox)

In the view of BEUC and EEB it is good that the anaerobic biodegradation is taken into account in the draft revised criteria for soap and shampoos. However, the link to toxicity is questionable. One has to keep in mind that the total toxicity of the total product also depends on the concentration value. Even if the substance has a low toxicity (<100 mg/l), it may be used in high concentrations and thus contribute to a higher toxicity of the product as well as have low anaerobic biodegradation. Therefore, we propose keeping the criterion without the link to toxicity as has been proposed for aerobic biodegradation. Additionally, it is important that not only surfactants are covered by the criterion on anaerobic biodegradability, but also other above mentioned substances such as e.g. emollients, humidifiers and conditioning agents.



Criterion 4: Anaerobic biodegradability (annbotox)

- **Points for discussion**
 - All surfactants aerobically and anaerobically biodegradable
 - Stricter values of aNBDO
 - Extending this criterion to other substances similar to surfactants (e.g. emollients, humidifiers and conditioning agents)



Criterion 5: Fragrances

Any ingredient added to the product as a fragrance must have been manufactured, handled and applied in accordance with the code of practice of the International Fragrance Association.



Criterion 5: Fragrances

- Discuss if sensitizing substances should be further restricted (see criterion 8) or limited to 0.01%. Discuss if a total ban is possible.
- Consider possible extension of the scope of criterion 5 to substances other than fragrances which are known to act as sensitizers for allergic skin reaction and contact dermatitis.

SUBSTANCES	CAS No
Amyl cinnamal	122-40-7
Amylcinnamyl alcohol	101-85-9
Benzyl alcohol	100-51-6
Benzyl salicylate	118-58-1
Cinnamyl alcohol	104-54-1
Cinnamal	104-55-2
Citral	5392-40-5
Coumarin	91-64-5
Eugenol	97-53-0
Geraniol	106-24-1
Hydroxycitronellal	107-75-5
Hydroxymethylpentylcyclohexenecarboxaldehyde	31906-04-4
Isoeugenol	97-54-1

65% of the stakeholders consulted agreed to limit sensitizing substances to 0.01%.



Criterion 5: Fragrances

We strongly propose to establish concentration limits and bans as they are proposed in the draft opinion of the Scientific Committee on Consumer Safety from Dec. 2011 (SCCS opinion on Fragrance allergens in cosmetic products)

http://ec.europa.eu/health/scientific_committees/consumer_safety/docs/sccs_o_073.pdf

Because:

p.8 "The SCCS is of the opinion that the presence of the two constituents, chloroantranol and atranol (main constituents of Everna prunasteri and Everna furfuracea), in cosmetic products are not safe" and

p.112 "...12 were identified as posing a high risk of sensitisation to the consumers (Table 13-5) For these substances , a limitation of exposure would help to protect sensitised consumers from developing allergic contact dermatitis."



Criterion 5: Fragrances

We ask for a total ban of the 12 substances listed in tables 13-5 as well as Everna prunasteri and Everna furfuracea. All of them are part of the list of 26 allergenic compounds which have to be labelled from 0,01% according to 2003/15/EG (cosmetics regulation).

Because:

p.8 "The SCCS is of the opinion that this level of exposure (up to 0,01%) would suffice to prevent elicitation for the majority of allergic individuals. ... The general threshold, although limiting the problem of fragrance allergy in the consumer significantly, would not preclude that most sensitive segment of the population may react upon exposure to these levels and does not remove the necessity for providing information to the consumer concerning the presence of the listed fragrance substance in cosmetics." and

p.111 "Information on presence of all the substances given in Table 13-1, 13-2 and 13-3 in cosmetic products is important in order to enable aimed testing of patients with contact dermatitis... Further, this information is important to the sensitised consumer as it will enable them to avoid cosmetic products, which they may not tolerate."

We can accept a limit of 0,01% for all others (table 13.1, 13-2, 13-3) under the condition that the producer has to label this substances fragrances on the package from 0%.



Criterion 5: Fragrances

In our opinion the proposed criterion for soaps and shampoos on fragrances does not protect the consumer more than the EU Cosmetics regulation⁵. Therefore we suggest that the draft opinion on fragrance allergens from the Scientific Committee on Consumer Safety⁶ which is currently under consultation need to be incorporated into the future EU Ecolabel criteria.

Proposal regarding criterion 5 (fragrances): restrictions regarding sensitizing substances need to be based on scientifically valid evidence for rinse-off products, showing an added benefit, also bearing in mind that sometimes masking agents would need to be added to avoid products having an unpleasant smell; a ban would exclude most products.

NOTE: our experts have determined that 28% of existing Ecolabelled products would not meet the proposed new limit of 0.01%.

Extending the restriction to all sensitising substances, would significantly reduce the number of Ecolabelled products.

NOTE: our experts have determined that 100% of the existing Ecolabelled products would not pass this criterion.



Criterion 5: Fragrances

- **Points for discussion**

- Restriction/exclusion of sensitizing substances classified as:
 - **H334 (R42): may cause allergy or asthma symptoms of breathing difficulties if inhaled**
 - and/or
 - **H317 (R43): may cause an allergic skin reaction.**
- Restriction/exclusion of 13 presented most frequently reported contact allergens
- Integrating the outcomes of the SCCS analysis



Criterion 6: Dyes or colouring agents

Organic dyes or colouring agents must not be potentially bio-accumulating. In the case of colouring agents approved for use in foodstuffs it is not necessary to submit documentation of bioaccumulation potential.

In this context, a colouring agent or dye is considered to be potentially bio-accumulating if the experimentally determined BCF is > 100 . If no BCF (Bio-concentration Factor) test result is available, bioaccumulation may be demonstrated by the log Pow (log octanol/water partition coefficient).

If logPow is $> 3,0$ the colouring agent or dye is considered as potentially bio-accumulating.



Criterion 6: Dyes or colouring agents

According to CLP, a colouring agent or dye will be considered to be potentially bio-accumulating if the experimentally determined BCF is ≥ 500 or $\log Kow \geq 4$.

- Point 1 - whether the scope of this criterion should be extended also to other substance groups other than dyes or colouring agents
- Point 2 - whether the scope of this criterion should be extended also to other substance groups founding the final product other than dyes or colouring agents
- Point 3 - whether to change the determination of a "substance which is potentially bio-accumulating" as presented above but to keep the stricter –and curenly in force- thresholds based on the precautionary principle.

59% of the consulted stakeholders agreed that the thresholds should changed to be in line with CLP Regulation.



Criterion 6: Dyes or colouring agents

We propose to keep the limits of the bioaccumulation potentials characterised by $\log Pow < 3,0$ or $BCF \leq 100$. We decided to maintain this limits in the Ecolabel criteria for All Purpose Cleaners, 2011/383/EU as well (and others) and this should be harmonised.

This point should only be valid for dyes for the product.

We propose the exclusion of any colouring agents because they are highly discussed

http://ec.europa.eu/health/ph_risk/committees/04_sccp/sccp_opinions_en.htm#2



Criterion 6: Dyes or colouring agents

- **Points for discussion**

- Adapting the definition of a substance which is potentially bioaccumulating, but keeping the stricter threshold values currently in force based on the precautionary principle (or complete align with the CLP)
- Extending this criterion to other substance groups then dyes and colouring agents
- Exclusion of colouring agents from product formulation



Criterion 7: Biocides

- (a) The product may only include biocides in order to preserve the product, and in the appropriate dosage for this purpose alone. This does not refer to surfactants which may also have biocidal properties.
- (b) Biocides, either as part of the formulation or as part of any preparation included in the formulation, that are used to preserve the product and that fulfil the criteria for classification with R50-53 or R51-53 risk phrases, in accordance with Directive 67/548/EEC or Directive 1999/45/EC of the European Parliament and of the Council, are only permitted if they are not potentially bio-accumulating. In this context, a biocide is considered to be potentially bioaccumulating if the bio-concentration factor (BCF) is > 100 or, if no BCF-results are available, the log Pow (log octanol/water partition coefficient) is $> 3,0$.
- (c) Preservatives must not release substances that are classified in accordance with the criterion 8a.



Criterion 7: Biocides

- Point 1 - According to CLP, biocides must not be potentially bioaccumulating (i.e. BCF is < 500 or log Kow < 4). Shall the values from the current decision be kept or aligned with CLP.
- Point 2 - Discuss which substances should be additionally restricted:
 - Triclosan
 - Parabens
 - Formaldehyde
 - Formaldehyde releasers: Bronopol (2-bromo-2-nitropropane-1,3-diol), 5-bromo-5-nitro-1,3-dioxane, sodium hydroxyl methyl glycinate, DMDM Hydantoin, Diazolidinyl urea and Imidazolidinyl Urea.

53% of the stakeholders consulted agreed that the thresholds (see Point 1 above) should be in line with CLP Regulation and to restrict these specific preservatives (Point 2).



Criterion 7: Biocides

We propose to keep the limits of the bioaccumulation potentials characterized by $\log Pow < 3,0$ or $BCF \leq 100$. It was decided to maintain this limits in the Ecolabel criteria for All Purpose Cleaners, 2011/383/EU as well and this should be harmonised.

Several biocides are mentioned. We propose to adopt them and welcome the proposed additional bans of triclosan (which is excluded already by the corrected bioaccumulation potential) and parabens because of the endocrine disrupting properties. The ban of isothiazolinones should be discussed because of their allergenic properties.

The term used in cosmetics for this type of ingredients is "preservatives". Substances that have been assessed as safe for use in cosmetic products by independent expert panels (e.g. the Scientific Committee for Consumer Products, SCCP, of the European Commission) should not be brought into question by the Ecolabel.



Criterion 7: Biocides

BEUC and EEB propose to keep the criterion from 2007 regarding values for $\log Kow$ and BCF . We do not consider the proposal to apply CLP values to the EU Ecolabel criteria for soaps as feasible, since the CLP Regulation was not aimed to establish safe limit values for the use of chemicals in consumer products. For example in the triclosan case, applying the CLP values would allow this substance in the EU Ecolabel. When applying EU Ecolabel criteria from 2007, triclosan would fail to meet requirements.



Criterion 7: Biocides

- **Points for discussion**
 - Keeping stricter BCF and Kow values, adapting only the definition of substances which are potentially bioaccumulating (or complete align with CLP in this respect)
 - Exclusion of:
 - Triclosan
 - Parabens
 - Formaldehyde
 - Formaldehyde releasers: Bronopol (2-bromo-2-nitropropane-1,3-diol), 5-bromo-5-nitro-1,3-dioxane, sodium hydroxyl methyl glycinate, DMDM Hydantoin, Diazolidinyl urea and Imidazolidinyl Urea.
 - **Exclusion of isothiazolinones**



Current criterion

Criterion 8: Environmental hazardous ingredients

The requirements concern all ingredients (substances or preparations) exceeding 0,010 % by weight of the final product.

This includes also each ingredient of any preparation used in the formulation exceeding 0,010 % by weight of the final product.

(a) Classified ingredients

No constituent substance must be classified as carcinogenic (Carc), mutagenic (Mut) or toxic to reproduction (Rep) including rules for self-classification class III.



Criterion 8: Environmental hazardous ingredients

(b) Specified excluded ingredients

The following ingredients shall not be included in the product, either as part of the formulation or as part of any preparation included in the formulation:

- **Alkyl phenol ethoxylates (APEOs) and other alkyl phenol derivatives**
- **NTA (nitrilo-tri-acetate)**
- **Boric acid, borates and perborates**
- **Nitromusks and polycyclic musks**

(c) Specified limited ingredients

Ethylenediaminetetraacetate (EDTA) and its salts and non-readily biodegradable phosphonates may only be added to solid soaps and only to a maximum content of 0,6 mg/g AC.



Criterion 8: Environmental hazardous ingredients

- Point 1 - The product or any part of it shall not contain substances or mixtures meeting the criteria for classification with certain hazard classes or categories in accordance with CLP. All the implications of Ecolabel Regulation 66/2010 Article 6(6) have to be respected. Therefore it is proposed to expand H- phrases list similarly to recently developed EU Ecolabel criteria in other product groups.
- Point 2 - Substances considered PBT (Persistent, Bioaccumulable and toxic), vPvB (very persistent and very bioaccumulable) and/or those having endocrine disrupting properties should be restricted.



Criterion 8: Environmental hazardous ingredients

- Point 3 – It is proposed to exclude some specified ingredients:
 - Substances included in the candidate list of Substances of Very High Concern (SVHC) for authorization should be restricted.
 - Phthalates: Bis(2-methoxyethyl) phthalate, diisobutyl phthalate, dibutyl phthalate (DBP), benzyl butyl phthalate (BBP) and bis (2-ethylhexyl)phthalate (DEHP).
 - D4 (octamethylcyclotetrasiloxane)
 - Butylated Hydroxy Toluene (BHT)
 - See criterion 7 for biocides which specified substances should be excluded: triclosan, parabens, formaldehyde and formaldehyde releasers.



Criterion 8: Environmental hazardous ingredients

Criterion: Excluded or limited substances and mixtures

Sub-criterion 1: Hazardous substances and mixtures

Excluded or limited substances and mixtures

Sub-criterion 1: Hazardous substances and mixtures

According to the Article 6(6) of Regulation (EC) No 66/2010 on EU Ecolabel, the product or any part of it shall not contain substances or mixtures meeting the criteria for classification with the hazard classes in accordance with Regulation (EC) No 1272/2008 specified below nor shall it contain substances referred to in Article 57 of Regulation (EC) No 1907/2006.

Hazard statement	Risk Phrase
H300 Fatal if swallowed	R28
H301 Toxic if swallowed	R25
H304 May be fatal if swallowed and enters airways	R65
H310 Fatal in contact with skin	R27
H311 Toxic in contact with skin	R24
H330 Fatal if inhaled	R23/26
H331 Toxic if inhaled	R23
H340 May cause genetic defects	R46
H341 Suspected of causing genetic defects	R68
H350 May cause cancer	R45
H350i May cause cancer by inhalation	R49
H351 Suspected of causing cancer	R40
H360F May damage fertility	R60
H360D May damage the unborn child	R61
H360FD May damage fertility. May damage the unborn child	R60/61/60-61
(...)	(...)





Criterion 8: Environmental hazardous ingredients

Criterion: Excluded or limited substances and mixtures Sub-criterion 1: Hazardous substances and mixtures

This criterion applies to all ingredients present **in concentrations ≥ 0.010 %**, including preservatives, colouring agents and fragrances.

The use of substances or mixtures which **upon processing change their properties** (e.g. become no longer bioavailable, undergo chemical modification) in a way that the identified hazard no longer applies are exempted from the above requirement.

Concentration limits for substances or mixtures meeting the criterion for classification in the hazard classes or categories listed in the table above, and for substances meeting the criterion of Article 57 (a), (b) or (c) of Regulation (EC) No 1907/2006, shall not exceed the generic or specific concentration limits determined in accordance with the Article 10 of Regulation (EC) No1272/2008. Where specific concentration limits are determined, they shall prevail against the generic ones.

Concentration limits for substances meeting criteria of Article 57 (d), (e) or (f) of Regulation (EC) No 1907/2006 shall not exceed **0.1 % weight by weight**.



Criterion 8: Environmental hazardous ingredients

Sub-criterion '2: Substances listed in accordance with article 59(1) of Regulation (EC) No 1907/2006

No derogation from the exclusion in Article 6(6) of the Regulation (EC) No 66/2010 shall be given concerning substances identified as substances of very high concern and included in the list foreseen in Article 59 of Regulation (EC) No 1907/2006 present in mixtures in concentrations higher than 0.010 %.



Criterion 8: Environmental hazardous ingredients

Sub-criterion 3: Specified limited or excluded ingredients

Following the previous point and being proactive (precautionary principle) some specific substances are also considered to be restricted:

- Phthalates
- D4 (octamethylcyclotetrasiloxane)
- Butylated Hydroxy Toluene

Substances subjected to authorization, Annex XIV of REACH regulation

Substance name	EC Number	CAS Number	Classification
Bis(2-methoxyethyl) phthalate ^[1]	204-212-6	117-82-8	Toxic for reproduction (article 57 c)
Diisobutyl phthalate ^[2]	201-553-2	84-69-5	Toxic for reproduction (article 57c)
Dibutyl phthalate (DBP) ^[3]	201-557-4	84-74-2	Toxic for reproduction (article 57c)
Benzyl butyl phthalate (BBP) ^[4]	201-622-7	85-68-7	Toxic for reproduction (article 57c)
Bis (2-ethylhexyl)phthalate (DEHP) ^[5]	204-211-0	117-81-7	Toxic for reproduction (article 57c)

59% of consulted stakeholders agreed with this proposed amendment in the criterion regarding substances.



Stakeholders feedback

Criterion 8: Environmental hazardous ingredients

As the substances aren't only excluded because of environmental properties we propose to rename this capture to "Excluded or limited substances and mixtures" as it is called in criteria for All Purpose Cleaners, 2011/383/EU

We ask to harmonise the excluded substances with the above mentioned criteria. Especially EDTA should be totally banned! Regarding non-readily biodegradable phosphonates we ask to check if they could not be banned as well.

Several biocides are mentioned in the list for all purpose cleaners, we propose to leave it here as well and welcome the proposed additional bans of triclosan (which is excluded already by the corrected bioaccumulation potential) and parabens because of the endocrine disrupting properties.



Criterion 8: Environmental hazardous ingredients


BEUC and EEB welcome the proposed list of substances to be excluded from the EU Ecolabel for soaps and shampoos. Additionally we propose to restrict chemicals which may disrupt the hormonal system (so-called EDCs) and therefore we would like to exclude also the following substances taken from the SIN List (Substitute It Now)


3-benzylidene camphor, CAS 15087-24-8
4-methylbenzylidene camphor
4-nitrophenol, CAS 100-02-7
4,4'-dihydroxybenzophenone, CA
Benzophenone-1, CAS 131-56-6
Benzophenone-2, CAS 131-55-5
Benzophenone-3, CAS 131-5
Butylparaben, CAS 94-26-8
Dicyclohexyl phthalate (DCHP), CAS 84
Diethyl phthalate (DEP), CAS 84-66-2
Dihexyl phthalate (DHP), CAS 84-75-3
Ethylhexyl methoxycinnamate, C
Metam natrium, CAS 137-42-
Propylparaben, CAS 94-13-3
Quadrosilan, CAS 33204-76
Resorcinol, CAS 108-46-3



Criterion 8: Environmental hazardous ingredients

Proposal regarding criterion 2 (environmentally harmful products) / criterion 8 (environmentally hazardous ingredients): given the number of key ingredients with an R52/53 (aquatic chronic 3) classification, the number of products which would pass this criterion would be significantly reduced. The 2nd ATP to the CLP Regulation (1272/2008) leads to more stringent classifications for ingredients, and notably for surfactants becoming aquatic chronic 2 or aquatic chronic 3; therefore, certain justified derogations need to be granted (e.g. for surfactants that are readily biodegradable) in order to ensure that there are products which could meet this criterion - please see suggested derogations in the table below:

 Stakeholders feedback			
Ingredient type	CLP classification	DSD classification	Short Rationale
Surfactants < 25% in the product	H400 Very toxic to aquatic life	R50	As already agreed for home care products
Surfactants <25% in the product	H411 Toxic to aquatic life with long-lasting effects When readily biodegradable	R51-53	2 nd ATP to CLP will make a number of important surfactants classified as H411 despite their readily biodegradability
Surfactants	H412 Harmful to aquatic life with long-lasting effects When readily biodegradable	R52-53	2 nd ATP to CLP will make a large number of important surfactants classified as H412 despite their readily biodegradability
Fragrances	H411 Toxic to aquatic life H412 Harmful to aquatic life with long-lasting effects	R51-53 R52-53	As already agreed for home care products. Fragrances and must have been manufactured and/or handled in accordance with the code of practice of the International Fragrance Association (IFRA). Fragrances is a very important part of the consumer perception and use in a limited quantity (<1%). Restriction too tightened would drastically limit the use of ecolabelled products.
Biocides used for preservation	H410, H411 and H412	R50-53, R51-53 and R52-52	Biocides can only be added in order to preserve the product, plus they may not be bioaccumulative as specified in the CLP.
Zn compounds	H410, H411 and H412	R50-53, R51-53 and R52-52	Zn compounds are used in some cosmetics to treat skin problems, and as such are relevant for consumers. (Nordic Ecolabel acknowledges this as well and contains a derogation for Zn compounds)


<h2 style="color: green;">Criterion 8: Environmental hazardous ingredients</h2> <h3 style="color: green; text-decoration: underline;">Points for discussion</h3> <ul style="list-style-type: none"> • Renaming the criterion as “Excluded or limited substances and mixtures” • Integrate all criteria on excluded substances in one criterion (?) • Harmonizing the excluded substances with the respective criterion for “All purpose cleaners” • Discuss the proposed potential derogations and the way forward



Criterion 8: Environmental hazardous ingredients

Points for discussion

- Consider exclusion of:

- EDTA
- Non-biodegradable phosphonates
- Biocides mentioned in the criteria decision for "All purpose cleaners" and additionally triclosan and parabens
- Formaldehyde and formaldehyde releasers
- Phthalates
- D4 (octamethylcyclotetrasiloxane)
- Butylated Hydroxy Toluene (BHT)
- endocrine disrupting substances, in particular the following proposed substances taken from the SIN List (Substitute It Now) – See Table

3-benzylidene camphor
 4-methylbenzylidene camphor
 4-nitrophenol
 4,4'-dihydroxybenzophenone
 Benzophenone-1
 Benzophenone-2
 Benzophenone-3
 Butylparaben
 Dicyclohexyl phthalate (DCHP)
 Diethyl phthalate (DEP)
 Dihexyl phthalate (DHP)
 Ethylhexyl methoxycinnamate
 Metam natrium
 Propylparaben
 Quadrosilan
 Resorcinol



Current criterion

Criterion 9: Packaging

(a) The Weight/Content Relationship (WCR) must be less than 0,30 g of packaging per gram of product, and is calculated as follows.

$$WCR = \Sigma((W_i + N_i) / (D_i - r))$$

Where:

- W_i** = the weight (in grams) of packaging-component i (this applies to both primary or secondary packaging), including any labels.
- N_i** = the weight (in grams) of the packaging component that comes from virgin material rather than recycled sources (this applies to both primary or secondary packaging). If the packaging component does not contain recycled material then N_i = W_i.
- D_i** = the weight in grams of product that the packaging-component contains.
- r** = the Return number, i.e. the number of times the packaging-component i is used for the same purpose through a system of return or refill (by default r = 1 if no reuse occurs).

If the packaging is reused r is set to 20 for plastics and 10 for corrugated board unless the applicant can document a higher number.



Criterion 9: Packaging

- (b) Labelling of packaging
To allow for identification of different parts of the packaging for recycling, plastic parts in the primary packaging must be marked in accordance with DIN 6120, Part 2 or the equivalent. Caps and pumps are exempted from this requirement.
- (c) Dosage
The packaging must be designed to make correct dosage easy, e.g. by ensuring that the opening at the top is not too wide.
- (d) The packaging must contain neither additives based on Cadmium or Mercury or compounds with these elements, nor additives that do not fulfil criterion 8.



Criterion 9: Packaging

Point 1 - The Weight/Content Relationship (WCR) should take into account refillable and refill packaging:

$$WCR = \Sigma(((Wirefillable/r + Wirefill) + Ni) / (Di \times r))$$

Where;

Di = the weight in grams of product that the packaging-component contains.

r = the Return number, i.e. the number of times the packaging-component i is used for the same purpose through a system of return or refill (by default r = 1 if no reuse occurs).

Wirefillable = the weight (in grams) of refillable packaging-component i

Wirefill = the weight (in grams) of refill packaging-component i

If there is not any refillable/refill packaging, then, Wirefillable = Wi, r = 1 and Wirefill = 0

Ni: the weight (in grams) of the packaging component that comes from virgin and non-renewable material rather than recycled or renewable sources (this applies to both primary and secondary packaging). If the packaging component does not contain recycled material or bio based polymer, then Ni = Wi.



Criterion 9: Packaging

Point 2 - More restricting weight limit (< 0,3 g packaging/g product). Proposal of limit WCR < 0.2

Point 3 - Packaging shall not contain substances included in the candidate list of Substances of Very High Concern (SVHC) for authorization.

Point 4 – Specific Packaging requirements for each kind of material used: plastic, metal, paper and cardboard.

Point 5 - It should be possible to separate all materials in the packaging (paper, cardboard, plastic, metal) for sorting. Parts comprising mixed materials that cannot be separated should be restricted, with the exception of pump parts.

41% of stakeholders consulted agreed on proposed amendment of the criteria on packaging.



Stakeholders feedback

Criterion 9: Packaging

The package / product ratio should include the whole packaging system, and not only the retail packaging (low weight primary packaging usually requires more transport packaging). Regarding the proposal to exclude packaging containing SVHC, it needs to be considered that some recycled packaging can be contaminated during recycling; it would be impossible to test all recycled packaging, batch by batch. The proposal would be feasible only if a distinction is made between SVHC added intentionally and those introduced through contamination during recycling.

Calculation of WCR: the formula as written on page 50 is impractical:

- "r" can't be the same for refillable and for refill packaging: a bottle can be used a few times but pouches or doypack cannot be used more than once. There are also an "rrefillable" and an "rrefill".
- Di can be different for refillable packaging and refill packaging (for example a bottle of 250ml with a refill of 500ml).
- the definition of packaging levels should be made clear to include primary, secondary and tertiary packaging.



Criterion 9: Packaging

$$\text{WCR} = \sum \left[\left(\frac{\text{Wirefillable/rrefillable}}{\text{Direfillable} \times \text{rrefillable}} \right) + \frac{\text{Wirefill}}{\text{Direfill} \times \text{rrefill}} + \frac{\text{Nirefillable}}{\text{Direfillable} \times \text{rrefillable}} + \frac{\text{Nirefill}}{\text{Direfill} \times \text{rrefill}} \right]$$

instead of $\text{WCR} = \sum \left(\left(\frac{\text{Wirefillable}}{r} + \text{Wirefill} \right) + N_i \right) / \left(D_i \times r \right)$

Proposal to reduce weight limit from 0.3 to 0.25 g packaging/g product:
Our experts have calculated the weight (WCR) factor for a sample of 10 shampoos and conditioners, using the proposed calculation:

- bottles: WCR 0.22 (400 ml packs) - 0.34 (250 ml packs)
- sachets (doypacks): WCR 0.25 - 0.26
- tubes: WCR 0.22

Therefore, a limit of 0.2 is not practical and 0.25 will be very challenging.

In addition, it should be noted that the Ni factor is now classified as packaging that is not renewable or recycled. Previously, it was just non recycled. This change will generally lower the WCR figures compared to the current criteria.



Criterion 9: Packaging

Firstly, BEUC and EEB support including a criterion on recycling and refilling systems.

Secondly, the presence of Substances of Very High Concern (SVHCs) in the packaging material would not be acceptable from a consumer and environmental point of view and would also not be in line with the philosophy of the Ecolabel Regulation. Excluding PVC and polycarbonates containing bisphenol A (BPA) is an important point as well.



Criterion 9: Packaging

Points for discussion

- New formulas proposed by the project team and the stakeholder to calculate the weight/content ratio
- Stricter threshold for the weight/content ratio
- Specific separate requirements for plastics, paper /cardboard, metals (if shaving products are included in the scope)
- Exclusion of substances on the candidate list of SVHC for authorisation



Current criterion

Criterion 10: Fitness for use

The product's fitness for use must be demonstrated either through laboratory test(s) or a consumer test.

The test must be in conformity with the guidelines in Appendix I for testing of product efficiency.

Assessment and verification:

Report from a laboratory test or consumer test documenting satisfactory efficiency.



Criterion 10: Fitness for use

Proposal to consider a more stringent consumer testing.

It could address the following aspects:

- How easy is it to rinse-off the product in comparison with the market-leading product?
- If the product does not cause to consumers any sensitising effects in use and/or after use.

Further issues for consideration are as follows:

- Should a consumer test be different for professional use soaps and household soaps?
- Should the number of people tested be increased (currently 10 people)?
- When a laboratory performance test is provided, manufacturer shall also prove the ease of dosage and application.
- Should, apart of the main function of the product, the performance test make reference to the characteristics with which each product is sold/marketed (hydrating, moisturizing, softening, etc.)?

35% of stakeholders consulted disagreed on introducing a more stringent consumer test.



Stakeholders feedback

Criterion 10: Fitness for use

Proposal regarding criterion 10 (fitness for use): proposed definition: a product's fitness for use is the capacity to fulfil its primary function (e.g. cleaning, conditioning) and any secondary functions claimed (e.g. anti-dandruff, colour protection, etc.). Fitness for use should enable a fair comparison of product applications per product category and should especially be related to the definition of use dosages (as per criterion 1).

Claim substantiation and supporting tests should be:

- scientifically credible
- conclusive for a product dosing to provide a fair comparison of products within a product category
- living up to the consumer expectation created by the claim as well as considering the holistic positioning of the product
- tailored to a given use profile (professional as well as for consumer use)

Since product positioning in the market is tailored to an array of consumer groups, uses, habits & practices, the decision on the type of support testing needed should be taken case by case, in line with the guidelines developed in the context of the overall European Cosmetic Regulations.

Some relevant questions should be added to Appendix I, for example:

- how easy is it to obtain the dosage of product without incurring unnecessary waste?
- how easy is it to rinse off the product compared to the market-leading product?



Criterion 10: Fitness for use

Points for discussion

- Should a stricter consumer testing be proposed?
- Which additional issues should be addressed in such test?



Current criterion

Criterion 11: Information appearing on the eco-label

According to Annex III of Regulation (EC) No 1980/2000, Box 2 of the eco-label shall contain the following text:

- Minimal impact on aquatic ecosystems
- Fulfils strict biodegradability requirements
- Limits packaging waste

Depending on the final formulation of the revised criteria, the optional text on the label will be considered.





Criterion 11: Information appearing on the eco-label

In our view, the wording of the 4 recommended phrases should be better adapted to consumer understanding and to the personal care nature of these products (a consumer survey might be useful from this point of view).

In addition, as the use phase has a significant impact on the environment, consumers have a very important role to play in reducing this impact.

Therefore, we think it is important that the aspect of consumer education be also addressed by products carrying the EU Ecolabel. This could be done by providing sustainable use tips on, for example, the Ecolabel website.



Criterion 11: Information appearing on the eco-label

- **Points for discussion**

- Should a stricter consumer testing be proposed?
- Which additional issues should be addressed in such test?



Thank you



Revision of European Ecolabel Criteria for Soaps, Shampoos and Hair Conditioners

New/additional criteria and discussion points

1st Ad-hoc Working Group Meeting
20th February 2012, Seville

Joint Research Centre, Institute for Prospective Technological Studies



Content

1. Energy consumption in manufacturing
2. Substances used in formulations intended for infants, babies and children
3. Addressing nanomaterials
4. Renewable sourced ingredients



Energy consumption in manufacturing

- According to LCA carried out in the technical analysis manufacturing processes account for an average 8% of the total environmental impact of products under study.
- According to sustainability reports from companies, many initiatives have been already developed to reduce environmental impacts of manufacturing, mainly in terms of water and energy consumption.

Only 35% of the stakeholders consulted agreed on this proposed requirement on energy consumption.

General comments are that such requirement is very difficult to set up (especially for small companies) and will increase complexity for little added value, because the energy consumption in production is very limited compared to the use phase.



Substances used in formulations intended for infants, babies and children

Infant, baby and/or children products are products that are marketed as designed and intended for infants, babies and/or children of age below 3 years, or have any of these words on the label/packaging.

It is proposed to consider restriction/total ban on perfumes/fragrances used in formulations intended for infants, babies and children under the age of 3 years.

Any substance raising concerns regarding allergic reactions such as asthma and contact dermatitis should be completely eliminated from the formulations.



Substances used in formulations intended for infants, babies and children

Table 16. Share of perfume-free products

Product group	Percentage of perfume-free products
Liquid soaps	1,5%
Solid soaps	1,7%
Shampoos	1,3%
Hair conditioners	0,8%

Table 17. Share of baby products and perfume-free baby products

Product group	Percentage of baby products	Percentage of perfume-free baby products in the total amount of baby products)
Liquid soaps	3,8%	10%
Solid soaps	5,1%	3%
Shampoos	3,0%	11%
Hair conditioners	0,3%	12%

47% of consulted stakeholders agreed on introducing restrictions on perfumes in infants, babies and children products.



Stakeholders feedback

Substances used in formulations intended for infants, babies and children

We propose to exclude fragrances in products for babies and children under 3.

Above all we agree strongly to exclude all substances raising concern regarding allergic reactions – e.g. isothiazolinones

The European cosmetics legislation has specific requirements regarding the safety assessment of products intended for children under the age of three. Furthermore, from a sustainability point of view, such products are no different than other cosmetic products.



Addressing nanomaterials in EU Ecolabel

One of the issues for discussion may refer to the question if nanomaterials and/or nanoparticles insoluble or biopersistent should be restricted. A horizontal task force within the frame of EUEB about how nanomaterials shall be addressed and/or regulated for all the different product groups within the EU Ecolabel is going to work and provide feedback.

In the meanwhile it is proposed for the current product group to discuss with stakeholders if a potential inclusion of requirements regarding nanomaterials is relevant.

If nanomaterials shall be regulated due to concerns related to their potential health and environmental risks then an inclusion of a respective text in Criterion 8 (with respect to article 6.6 of Ecolabel Regulation 66/2010) could be considered.



Stakeholders feedback

Addressing nanomaterials in EU Ecolabel

We ask to exclude all nanomaterials/particles insoluble or biopersistent. The notification of this substances starts from January 2013, the labelling from July 2013 (EU cosmetics regulation 1223/2009). Presently we cannot say if this regulatory requirements are sufficient for the voluntary labeling scheme which is intended to award the best 30% products of the market. Secondly Nanomaterials are at this point of date not adequately regulated by REACH, as it is documented by citations from the EC webpage and the published reports of the REACH Implementation Project on Nanomaterials (RIPoNs).

"Nanomaterials such as nanosilver are already used in many different products including soaps. The Ecolabel should be prepared for dealing with these new kinds of substances. Despite the fact that the EU had adopted a recommendation for the term "nanomaterial" for regulatory purposes, the problem that currently no adequate harmonised analytical and test methods for ecotoxicological and toxicological properties are available." 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 safety requirements on chemicals cannot be proven."

We agree with the conclusion in the report that there is no established specific risk confirmed for nanotechnology.





Renewable sourced ingredients

Future criteria could also be considered regarding use of renewable ingredients in order to:

- limit the use of fossil fuel based ingredients
- and
- promote vegetable based ingredients.

Discussions and different studies exist about possibilities of substitution of non-renewable ingredients, although some issues as economic or ecological impacts of vegetable ingredients' production have to be assessed and further considered.



Stakeholders feedback

Renewable sourced ingredients

We would propose to refer to sustainable sourcing of ingredients and packaging materials (e.g. sustainable palm oil, sustainable forestry, etc.).

We would like to propose to investigate a possibility to include a criterion on sustainable palm oil.





Thank you