COMMISSION DECISION

of *[date]*

establishing the ecological criteria for the award of the EU Ecolabel for industrial and institutional laundry detergents

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EC) No 66/2010 of the European Parliament and of the Council of 25 November 2009 on the EU Ecolabel[1], and in particular Article 8(2) thereof,

After consulting the European Union Eco-labelling Board,

Whereas:

(1) Under Regulation (EC) No 66/2010, the EU Ecolabel may be awarded to those products with a reduced environmental impact during their entire life cycle.

(2) Regulation (EC) No 66/2010 provides that specific EU Ecolabel criteria are to be established according to product groups.

(3) Commission Decision 2012/721/EU[2], as amended by Commission Decision 2014/313/EU[3], has established the ecological criteria and the related assessment and verification requirements for industrial and institutional laundry detergents, which are valid until 14 November 2016.

(4) In order to better reflect the state of the art of the market for this product group and take into account the innovation that has taken place during the intervening period, it is considered appropriate to establish a revised set of ecological criteria.

(5) The revised criteria, as well as the related assessment and verification requirements, should be valid for five years from the date of adoption of this Decision, taking into account the innovation cycle for this product group. These criteria aim at promoting products that have a reduced impact on aquatic ecosystems, contain a limited amount

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1 OJ L 27, 30.1.2010, p. 1-19.
2 OJ L 326, 24.11.2012, p. 38-52.
3 OJ L 164, 3.6.2014, p. 74-82.

of hazardous substances, are effective at the recommended temperatures, and minimise waste production by reducing packaging.

(6) Decision 2012/721/EU should be replaced for reasons of clarity.

(7) A transitional period should be allowed for producers whose products have been awarded the Ecolabel for industrial and institutional laundry detergents on the basis of the criteria set out in Decision 2012/721/EU, so that they have sufficient time to adapt their products to comply with the revised criteria and requirements. Producers should also be allowed to submit applications based on the criteria set out in Decision 2012/721/EU or on the criteria set out in this Decision until the lapse of validity of that Decision.

(8) The measures provided for in this Decision are in accordance with the opinion of the Committee established by Article 16 of Regulation (EC) No 66/2010,

HAS ADOPTED THIS DECISION:

Article 1

The product group ‘industrial and institutional laundry detergents’ shall comprise any laundry detergent falling under the scope of Regulation (EC) No 648/2004[4] of the European Parliament and of the Council on detergents designed to be used by specialised personnel in industrial and institutional facilities.

Included in this product group are multi-component systems constituted of more than one component used to build up a complete detergent or a laundering program for an automatic dosing system. Multi-component systems may incorporate a number of products including fabric softeners, stain removers and rinsing agents.

This product group shall not comprise products which induce textile attributes such as water-repellency, waterproofness or fire retardancy, etc. Furthermore, the product group shall not comprise products that are dosed by carriers such as sheets, cloths or other materials, as well as washing auxiliaries used without subsequent washing, such as stain removers for carpets and furniture upholstery.

Laundry products to be used in household washing machines are excluded from the scope of this product group.

Article 2

For the purpose of this Decision, the following definitions shall apply:

(1) 'ingoing substances' means substances intentionally added, by-products and impurities from raw materials in the final product formulation (including water-soluble foil, if applicable).

[4] OJ L 104, 8.4.2004, p. 1-35.

(2) 'primary packaging' means packaging conceived so as to constitute the smallest sales unit of distribution to the final user or consumer at the point of purchase in direct contact with the content, including label where applicable.

(3) 'microplastics' means plastic micro beads used as a scrub/abrasive material in detergent and cleaning products.

Article 3

In order to be awarded the EU Ecolabel under Regulation (EC) No 66/2010, a laundry detergent shall fall within the product group 'industrial and institutional laundry detergents', as defined in Article 1 of this Decision and shall comply with the criteria as well as the related assessment and verification requirements set out in the Annex.

Article 4

The criteria for the product group 'industrial and institutional laundry detergents' and the related assessment and verification requirements shall be valid for five years from the date of adoption of this Decision.

Article 5

For administrative purposes the code number assigned to the product group 'industrial and institutional laundry detergents' shall be '039'.

Article 6

Decision 2012/721/EU is repealed.

Article 7

1. By derogation from Article 6, applications for the EU Ecolabel for products falling within the product group 'industrial and institutional laundry detergents' submitted before the date of adoption of this Decision shall be evaluated in accordance with the conditions laid down in Decision 2012/721/EU.

2. Applications for the EU Ecolabel for products falling within the product group 'industrial and institutional laundry detergents' submitted within two months from the date of adoption of this Decision may be based either on the criteria set out in Decision 2012/721/EU or on the criteria set out in this Decision.

Those applications shall be evaluated in accordance with the criteria on which they are based.

3. EU Ecolabel licenses awarded in accordance with the criteria set out in Decision 2012/721/EU may be used for 12 months from the date of adoption of this Decision.

Article 8

This Decision is addressed to the Member States.

Done at Brussels,[]

For the Commission
Karmenu VELLA
Member of the Commission

ANNEX

EU ECOLABEL CRITERIA AND ASSESSMENT AND VERIFICATION REQUIREMENTS

FRAMEWORK

CRITERIA

Criteria for awarding the EU Ecolabel to 'industrial and institutional laundry detergents':

1. Toxicity to aquatic organisms
2. Biodegradability
3. Sustainable sourcing of palm oil, palm kernel oil and their derivatives
4. Excluded and restricted substances
5. Packaging
6. Fitness for use
7. Automatic dosing systems
8. User information
9. Information appearing on the EU Ecolabel

ASSESSMENT AND VERIFICATION

a) Requirements

The specific assessment and verification requirements are indicated within each criterion.

Where the applicant is required to provide declarations, documentation, analyses, test reports, or other evidence to show compliance with the criteria, these may originate from the applicant and/or their supplier(s) as appropriate.

Competent Bodies shall preferentially recognise attestations which are issued by bodies accredited according to the relevant harmonised standard for testing and calibration laboratories and verifications by bodies that are accredited according to the relevant harmonised standard for bodies certifying products, processes and services.

Where appropriate, test methods other than those indicated for each criterion may be used if the Competent Body assessing the application accepts their equivalence.

Where appropriate, competent bodies may require supporting documentation and may carry out independent verifications.

As pre-requisite, the product must meet all respective legal requirements of the country (countries) in which the product is intended to be placed on the market. The applicant shall declare the product's compliance with this requirement.

Appendix I makes reference to the "Detergent Ingredient Database" list (DID list) which contains the most widely used ingoing substances in detergents and cosmetics formulations. It shall be used for deriving the data for the calculations of the Critical Dilution Volume (CDV) and for the assessment of the biodegradability of the ingoing substances. For substances not present on the DID list, guidance is given on how to calculate or extrapolate the relevant data. The latest version of the DID list is available from the EU Ecolabel website or via the websites of the individual competent bodies.

The following information shall be provided to the competent body:

(i) The list of all ingoing substances indicating trade name, chemical name, CAS no., DID no., the ingoing quantity, the function and the form present in the final product formulation (including foil) at or above the following concentrations:

- preservatives, fragrances and colouring agents - regardless of concentration,

- other ingoing substances - 0,010% by weight;

For each ingoing substance listed, the safety data sheet in accordance with Regulation (EC) No 1907/2006[1] of the European Parliament and of the Council shall be provided.

(ii) If a supplier prefers not to disclose the ingoing substances included in a mixture to the applicant, the information can be sent directly to the Competent Body by the supplier;

(iii) In exceptional cases, if the ingoing substances included in a mixture are unknown, the applicant can supply the information requested in (i) for the mixture.

b) Measurement thresholds

Compliance with the ecological criteria is required for all ingoing substances as specified in Table 1.

Table 1 Threshold levels applicable to ingoing substances by criterion for industrial and institutional laundry detergents

Criterion name		**surfactants**	**preservatives**	**colouring agents**	**fragrances**	**other**
Toxicity to aquatic organisms		≥ 0,010	no limit*	no limit*	no limit*	≥ 0,010
Biodegradability	Surfactants	≥ 0,010	x	x	x	x
	Organics	≥ 0,010	no limit*	no limit*	no limit*	≥ 0,010

[1] Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (OJ L 396, 30.12.2006, p. 1)

Sustainable sourcing of palm oil		≥ 0,010	x	x	x	x
Excluded or limited substances and mixtures	Specified excluded and limited subst.	no limit*	no limit*	no limit*	no limit*	no limit*
	Hazardous subst.	≥0,010	≥0,010	≥0,010	≥0,010	≥0,010
	SVHCs	no limit*	no limit*	no limit*	no limit*	no limit*
	Fragrances	x	x	x	no limit*	x
	Preserva-tives	x	no limit*	x	x	x
	Colourants	x	x	no limit*	x	x
	Enzymes	x	x	x	x	≥ 0,010

* "no limit" means: regardless of the concentration, all substances intentionally added, by-products and impurities from raw materials (analytical limit of detection)

REFERENCE DOSAGE

The following dosage is taken as the reference dosage for the calculations aiming at documenting compliance with the EU Ecolabel criteria and for testing of cleaning ability:

Worst-case dosage recommended by the manufacturer to wash one kilogram of dry laundry (indicated in g/kg laundry or ml/kg laundry). The worst-case scenario is considered to be the worst soiling acceptable for clothes (see classification in table below) and the maximum water hardness found at the location where the product is marketed. All products in a multi-component system must be included with the worst case dosage when assessments of the criteria are made.

Table 2 Examples of degree of soiling

Light	**Medium**	**Heavy**
Hotel: bed-linen, bedclothes and towels, etc. (towels may be considered heavily soiled)	Work clothes: institutions/retail/service, etc.	Work clothes: industry/kitchen/butchering, etc.
Cloth hand towel rolls	Restaurants: table-cloths, napkins, etc.	Kitchen textiles: clothes, dish towels, etc.

	Mops and mats	Institutions as hospitals: bed-linen, bedclothes, contour sheets, patient clothing, doctor's coat or coatdress, etc.

Assessment and verification: the applicant shall provide the product label or Safety Data sheet that includes the dosing instructions.

Criterion 1 - Toxicity to aquatic organisms

The critical dilution volume (CDV) of the product must not exceed the following limits for the reference dosage:

Soft water (<1,5 mmol $CaCO_3$/L)			
Degree of soiling / Product type	**Light**	**Medium**	**Heavy**
Powder	30 000	40 000	50 000
Liquid	50 000	60 000	70 000
Multi-component-system	50 000	70 000	90 000

Medium water (1,5 – 2,5 mmol$CaCO_3$/L)			
Degree of soiling / Product type	**Light**	**Medium**	**Heavy**
Powder	40 000	60 000	80 000
Liquid	60 000	75 000	90 000
Multi-component-system	60 000	80 000	100 000

Hard water (> 2,5 mmol $CaCO_3$/L)			
Degree of soiling / Product type	**Light**	**Medium**	**Heavy**
Powder	50 000	75 000	90 000
Liquid	75 000	90 000	120 000
Multi-component-system	75 000	100 000	120 000

Assessment and verification: the applicant shall provide the calculation of the CDV of the product. A spreadsheet for calculating of the CDV value is available on the EU Ecolabel website.

The CDV is calculated for all ingoing substances (i) in the product using the following equation:

$$CDV = \sum CDV(i) = 1000 \cdot \sum dosage(i) \cdot \frac{DF(i)}{TF(i)}$$

Where:

dosage(i): weight (g) of the substance or mixture i in the reference dose,

DF(i): degradation factor for the substance or mixture i

TF(i): toxicity factor for the substance or mixture i

The values of DF(i) and TF(i) shall be as given in the DID list Part A. If an ingoing substance is not included in the DID list Part A, the applicant shall estimate the values following the approach described in the DID list Part B and attaching the associated documentation (for more information see Appendix I).

Because of the degradation of certain substances in the wash process, separate rules apply to the following:

- hydrogen peroxide (H2O2) – not to be included in calculation of CDV
- peracetic acid – to be included in the calculation as acetic acid.

Criterion 2 - Biodegradability

(a) Biodegradability of surfactants

All surfactants shall be readily degradable (aerobically).

All surfactants classified as hazardous to aquatic environment shall be in addition anaerobically biodegradable.

(b) Biodegradability of organic compounds

The content of organic substances in the product that are aerobically non-biodegradable (not readily biodegradable aNBO) or anaerobically non-biodegradable (anNBO) shall not exceed the following limits for a reference dosage:

aNBO (g/kg laundry)

Soft water (<1,5 mmol $CaCO_3$/L)			
Degree of soiling / Product type	**Light**	**Medium**	**Heavy**
Powder	0,70	1,10	1,40
Liquid	0,50	0,60	0,70
Multi-component-system	1,25	1,75	2,50

Medium water (1,5 – 2,5 mmol$CaCO_3$/L)			
Degree of soiling / Product type	**Light**	**Medium**	**Heavy**
Powder	1,10	1,40	1,75
Liquid	0,60	0,70	0,90
Multi-component-system	1,75	2,50	3,75

Hard water (> 2,5 mmol $CaCO_3$/L)			
Degree of soiling / Product type	**Light**	**Medium**	**Heavy**
Powder	1,40	1,75	2,20
Liquid	0,70	0,90	1,20
Multi-component-system	2,50	3,75	4,80

anNBO (g/kg laundry)

Soft water (<1,5 mmol $CaCO_3$/L)			
Degree of soiling / Product type	**Light**	**Medium**	**Heavy**

Powder	0,70	1,10	1,40
Liquid	0,50	0,60	0,70
Multi-component-system	1,25	1,75	2,50

Medium water (1,5 – 2,5 mmol$CaCO_3$/L)			
Degree of soiling / Product type	**Light**	**Medium**	**Heavy**
Powder	1,10	1,40	1,75
Liquid	0,60	0,70	0,90
Multi-component-system	1,75	2,50	3,75

Hard water (> 2,5 mmol $CaCO_3$/L)			
Degree of soiling / Product type	**Light**	**Medium**	**Heavy**
Powder	1,40	1,75	2,20
Liquid	0,70	0,90	1,20
Multi-component-system	2,50	3,75	4,80

Assessment and verification: the applicant shall provide documentation for the degradability of surfactants, as well as the calculation of aNBO and anNBO for the product. A spreadsheet for calculating aNBO and anNBO values is available on the EU Ecolabel website.

For both surfactants and aNBO and anNBO values, reference shall be done to the DID list.

For ingoing substances which are not included in the DID list, the relevant information from literature or other sources, or appropriate test results, showing that they are aerobically and anaerobically biodegradable shall be provided as described in Appendix I, which is available on the EU Ecolabel website.

In the absence of documentation in accordance with the above requirements, an ingoing substance other than a surfactant may be exempted from the requirement for anaerobic degradability if one of the following three alternatives is fulfilled:

1. Readily degradable and has low adsorption (A < 25 %);

2. Readily degradable and has high desorption (D > 75 %);

3. Readily degradable and non-bioaccumulating.

Testing for adsorption/desorption may be conducted in accordance with OECD guidelines 106.

Criterion 3 - Sustainable sourcing of palm oil, palm kernel oil and their derivatives

Ingoing substances used in the products which are derived from palm oil or palm kernel oil shall be sourced from plantations that meet the criteria for sustainable management that have

been developed by multi-stakeholder organisations that have a broad membership including NGOs, industry and government.

Assessment and verification: the applicant shall provide third-party certifications that the palm oil and palm kernel oil used in the manufacturing of the product originates from sustainably managed plantations. Certifications accepted shall include RSPO (by identity preserved, segregated or mass balance) or any equivalent scheme based on multi-stakeholder sustainable management criteria. For chemical derivatives of palm oil and palm kernel oil, it is acceptable to demonstrate sustainability through book and claim systems such as GreenPalm or equivalent.

Criterion 4 - Excluded and restricted substances

(a) Specified excluded and restricted ingoing substances

(i) Excluded substances

Substances indicated in Table 3 shall not be included in the product formulation:

Table 3 List of substances excluded from detergents and cleaning products regardless of concentration

–APEO and ADP
–Atranol
–Chloroatranol
–Diazolinidylurea
–DTPA
–EDTA
–Formaldehyde
–Hydroxyisohexyl 3-cyclohexene carboxaldehyde (HICC)
–Microplastics
–Nanosilver
–Nitromusks and polycyclic musks
–Phosphates
–Per-fluorinated alkylates
–Quaternary ammonium salts not readily biodegradable
–Reactive chlorine compounds
–Sodium hydroxyl methyl glycinate
–Triclosan
–5-bromo-5-nitro-1,3-dioxane

–2-bromo-2-nitropropane-1,3-diol

(ii) Restricted substances

Substances listed below shall not be included in the product formulation above the specified mass concentration:

- Total content of phosphorus compounds in the product is limited to:
  - 0.5Pg/kg laundry (dry weight) for light soil
  - 1.0Pg/kg laundry (dry weight) for medium soil
  - 1.5Pg/kg laundry (dry weight) for heavy soil

- Fragrance substances subject to the declaration requirement provided in Regulation (EC) No 648/2004[1] shall not be present in quantities ≥ 0,010 % (≥ 100 ppm) per substance.

Assessment and verification: the applicant shall provide:

- a signed declaration of compliance supported by declarations from suppliers, if appropriate, confirming that the listed substances have not been included in the product formulation, either regardless of mass concentration (substances listed in (i)) or above specified concentration (substances listed in (ii)),

- for phosphorus: a) information on the complexing agent in the product (detail information of the type of phosphorus-containing substances added as ingredients), b) calculation of the product's total P-content.

(b) Hazardous substances

The final product shall not be classified and labelled as being acutely toxic, a specific target organ toxicant, a respiratory or skin sensitiser, carcinogenic, mutagenic or toxic for reproduction, or hazardous to the environment, in accordance with Regulation (EC) No 1272/2008 of the European Parliament and of the Council[2].

The product shall not contain ingoing substances meeting the criteria for classification as toxic, hazardous to the environment, respiratory or skin sensitizers, carcinogenic, mutagenic or toxic for reproduction in accordance with Regulation (EC) No 1272/2008 and as interpreted according to the hazard statements listed in Table 4.

Any ingoing substance present at a concentration above 0,010% w/w in the product shall meet this requirement. Where stricter, the generic or specific concentration limits determined in accordance with Article 10 of Regulation (EC) No 1272/2008 shall prevail to the cut-off limit value of 0,010% w/w.

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1 Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents (OJ L 104 du 8.4.2004, p. 1)

2 Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (OJ L 353, 31.12.2008, p. 1).

Table 4 Restricted hazard classifications and their categorisation

Acute toxicity	
Category 1 and 2	**Category 3**
H300 Fatal if swallowed	H301 Toxic if swallowed
H310 Fatal in contact with skin	H311 Toxic in contact with skin
H330 Fatal if inhaled	H331 Toxic if inhaled
H304 May be fatal if swallowed and enters airways	EUH070 Toxic by eye contact
Specific target organ toxicity	
Category 1	**Category 2**
H370 Causes damage to organs	H371 May cause damage to organs
H372 Causes damage to organs through prolonged or repeated exposure	H373 May cause damage to organs through prolonged or repeated exposure
Respiratory and skin sensitisation	
Category 1A	**Category 1B**
H317: May cause allergic skin reaction	H317: May cause allergic skin reaction
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled	H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled
Carcinogenic, mutagenic or toxic for reproduction	
Category 1A and 1B	**Category 2**
H340 May cause genetic defects	H341 Suspected of causing genetic defects
H350 May cause cancer	H351 Suspected of causing cancer
H350i May cause cancer by inhalation	
H360F May damage fertility	H361f Suspected of damaging fertility
H360D May damage the unborn child	H361d Suspected of damaging the unborn child
H360FD May damage fertility. May damage the unborn child	H361fd Suspected of damaging fertility. Suspected of damaging the unborn child
H360Fd May damage fertility. Suspected	H362 May cause harm to breast fed children

of damaging the unborn child	
H360Df May damage the unborn child. Suspected of damaging fertility	
Hazardous to the aquatic environment	
Category 1 and 2	**Category 3 and 4**
H400 Very toxic to aquatic life	H412 Harmful to aquatic life with long-lasting effects
H410 Very toxic to aquatic life with long-lasting effects	H413 May cause long-lasting effects to aquatic life
H411 Toxic to aquatic life with long-lasting effects	
Hazardous to the ozone layer	
H420 Hazardous to the ozone layer	

The most recent classification rules adopted by the Union shall take precedence over the listed hazard classifications in accordance with Article 15 of Regulation (EC) No 1272/2008. The hazard statements generally refer to substances. However, if information on substances cannot be obtained, the classification rules for mixtures shall apply.

Ingoing substances which change their properties upon processing (e.g. become no longer bioavailable or undergo chemical modification) so that the hazards no longer apply and that any unreacted residual content of the hazardous substances is less than 0,010% w/w are exempted from this criterion 5(b).

This criterion does not apply to ingoing substances covered by Article 2(7)(b) of the Regulation (EC) No 1907/2006 which sets out criteria for exempting substances within Annex V from the registration, downstream user and evaluation requirements. In order to determine if this exclusion applies, the applicant shall screen any ingoing substance present at a concentration above 0,010% w/w.

Substances and mixtures included in Table 5 are exempted from the requirement of this criterion.

Table 5 Derogated substances

Substance	**Hazard statement**
Surfactants in total concentrations <15% in the final product	H400: Very toxic to aquatic life
Surfactants in total concentrations <15% in the final product	H412: Harmful to aquatic life with long-lasting effects

Subtilisin	H400: Very toxic to aquatic life H411: Toxic to aquatic life with long-lasting effects
Enzymes(*)	H317: May cause allergic skin reaction
	H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled
6-(phthalimido)peroxyhexanoic acid (PAP) as bleaching agent at max concentration of 0.6 g/kg laundry	H400: Very toxic to aquatic life H412: Harmful to aquatic life with long-lasting effects
Peracetic acid/hydrogen peroxide bleaching agent	H400: Very toxic to aquatic life H410: Very toxic to aquatic life with long-lasting effects
NTA as an impurity in MGDA and GLDA (**)	H351: Suspected of causing cancer
Fragrances	H412: Harmful to aquatic life with long-lasting effects
Preservatives	[Consultation is ongoing]

(*) Including stabilisers and other auxiliary substances in the preparations
(**) In concentrations lower than 0,2 % in the raw material as long as the total concentration in the final product is lower than 0,10 %.

Assessment and verification: the applicant shall demonstrate compliance with criterion 4(b) for the final product and for any ingoing substance present at concentrations greater than 0,010 % in weight in the final product. A declaration of compliance shall be provided by the applicant supported, where appropriate, by the declarations from their supplier(s) that none of these substances meets the criteria for classification with one or more of hazard statements listed in Table 4 in the form(s) and physical state(s) they are present in the final product. Material safety data sheet for the final product shall also be provided.

The following technical information related to the form(s) and physical state(s) of the ingoing substances as present in the product shall be provided to support the declaration of non-classification:

(i) For substances that have not been registered under Regulation (EC) No 1907/2006 and/or which do not yet have a harmonised CLP classification: Information meeting the requirements listed in Annex VII to that Regulation;

(ii) For substances that have been registered under Regulation (EC) No 1907/2006 and which do not meet the requirements for CLP classification: Information based on the REACH registration dossier confirming the non-classified status of the substance;

(iii) For substances that have a harmonised classification or are self-classified: safety data sheets where available. If these are not available or the substance is self-classified then information shall be provided relevant to the substances hazard classification according to Annex II to Regulation (EC) No 1907/2006;

(iv) In the case of mixtures: safety data sheets where available. If these are not available then calculation of the mixture classification shall be provided according to the rules under Regulation (EC) No 1272/2008 together with information relevant to the mixtures hazard classification according to Annex II to Regulation (EC) No 1907/2006.

For substances listed in Annexes IV and V to Regulation (EC) No 1907/2006, which are exempted from registration obligations under point (a) and (b) of Article 2(7) of that Regulation, a declaration to this effect by the applicant shall suffice to comply with criterion 5(b).

A declaration on the presence of ingoing substances that fulfil the derogation conditions shall be provided by the applicant, supported, where appropriate, by declarations from their supplier(s). Where required for the derogation, the applicant shall confirm the concentrations of these substances in the final product.

(c) Substances of very high concern (SVHCs)

The final product shall not contain any ingoing substances that have been identified according to the procedure described in Article 59(1) of REACH, which establishes the candidate list for substances of very high concern.

Assessment and verification: the applicant shall provide a declaration of compliance, supported by declarations from their suppliers, as appropriate, on non-presence of the candidate list substances.

Reference to the latest list of substances of very high concern shall be made on the date of application.

(d) Fragrances

Any ingoing substance added to the product as a fragrance shall be manufactured and handled following the code of practice of the International Fragrance Association (IFRA) available at http://www.ifraorg.org. The recommendations of the IFRA Standards concerning prohibition, restricted use and specified purity criteria for substances shall be followed by the manufacturer.

Assessment and verification: the applicant, their supplier or fragrance manufacturer, as appropriate, shall provide a signed declaration of compliance.

(e) Preservatives

(i) The product may only include preservatives 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.

(ii) The product may contain preservatives provided that they are not bio-accumulating. A preservative is considered to be not bio-accumulating if BCF < 100 or log K_{ow} < 3,0. If both BCF and log K_{ow} values are available, the highest measured BCF value shall be used.

(iii) It is prohibited to claim or suggest on the packaging or by any other communication that the product has an antimicrobial or disinfecting effect.

Assessment and verification: the applicant or their suppliers, as appropriate, shall provide a signed declaration of compliance, together with copies of the safety data sheets of any preservative added, and information on its BCF and/or log K_{ow} values. The applicant shall provide also artwork of the packaging.

(f) Colouring agents

Colouring agents in the product shall not be bio-accumulating.

A colouring agent is considered not bio-accumulating if BCF < 100 or log K_{ow} < 3,0. If both BCF and log K_{ow} values are available, the highest measured BCF value shall be used. In the case of colouring agents approved for use in food, it is not necessary to submit documentation of bio-accumulation potential.

Assessment and verification: the applicant or their suppliers, as appropriate, shall provide a signed declaration of compliance, together with copies of the safety data sheets of any colorant added together with information on its BCF and/or log K_{ow} value, or documentation to ensure that the colouring agent is approved for use in food.

(g) Enzymes

Only enzyme encapsulates (in solid form) and enzyme liquids/slurries shall be used.

Assessment and verification: the applicant shall provide a declaration of compliance supported by copies of the safety data sheets of any enzyme added.

Criterion 5 – Packaging

(a) Weight/utility ratio (WUR)

The weight/utility ratio (WUR) of the product shall be calculated for the primary packaging only and shall not exceed the following values for the reference dosage:

Water hardness / **Product type**	**Soft** **<1,5 mmol $CaCO_3$/l**	**Medium** **1.5 – 2,5 mmol $CaCO_3$/l**	**Hard** **> 2,5 mmol $CaCO_3$/l**
Powders	1,5	2,0	2,5
Liquids	2,0	2,5	3,0

Plastic/paper/cardboard packaging containing more than 80 % recycled materials is exempted from this requirement.

Assessment and verification: the applicant shall provide the calculation of the WUR of the product. If the product is sold in different packaging (i.e. with different volumes), the calculation shall be submitted for each packaging size for which the EU Ecolabel shall be awarded. In the case of trigger sprays and the allocation of weight to the primary packaging, this shall be on the basis of pan-European sales data for the product, indicating unit sales of each.

The WUR is calculated as follows:

$$WUR = \sum((W_i + U_i)/(D_i * R_i)$$

Where:

W_i: weight (g) of the primary packaging (i),

U_i: weight (g) of non-recycled packaging in the primary packaging (i). $U_i = W_i$ unless the applicant can document otherwise,

D_i: number of reference doses contained in the primary packaging (i),

R_i: number of times that the primary packaging (i) can be refilled and used for the same purpose. $R_i = 1$ (packaging is not reused for the same purpose) unless the applicant can document a higher number.

The applicant shall provide a signed declaration for the content of recycled material, along with relevant documentation. Packaging is regarded as recycled if the raw material used to make the packaging has been collected from packaging manufacturers at the distribution stage or at the consumer stage. Where the raw material is industrial waste from the material manufacturer's own production process, then the material will not be regarded as recycled.

(b) Design for recycling

Plastic packaging shall be designed to facilitate effective recycling by avoiding potential contaminants and incompatible materials that are known to impede separation or reprocessing or to reduce the quality of recyclate. The label or sleeve, closure and, where applicable, barrier coatings shall not comprise, either singularly or in combination the materials and components listed in Table 6. Pumps are exempted from this requirement.

Table 6 Materials and components excluded from packaging elements

Packaging element	Excluded materials and components*

Label or sleeve	- PS label or sleeve in combination material used with a PET, PP or HDPE bottle - PVC label or sleeve in combination with a PET, PP or HDPE bottle - PETG label or sleeve in combination with a PET bottle - Sleeves made of different polymer than the bottle - Labels or sleeves that are metallised or are welded to a packaging body (in mould labelling)
Closure	- PS closure in combination a with a PET, HDPE or PP bottle - PVC closure in combination with a PET, PP or HDPE bottle - PETG closures and/or closure material with density of above 1 g/cm3 in combination with a PET bottle - Closures made of metal, glass, EVA - Closures made of silicone. Exempted are silicone closures with a density < 1 g/cm3 in combination with a PET bottle and silicone closures with a density > 1g/cm3 in combination with PEHD or PP bottle - Metallic foils or seals which remain fixed to the bottle or its closure after the product has been opened
Barrier coatings	Polyamide, EVOH, functional polyolefins, metallised and light blocking barriers

* EVA – Ethylene Vinyl Acetate, EVOH – Ethylene vinyl alcohol, HDPE – High-density polyethylene, PET – Polyethylene terephtalate, PETG – Polyethylene terephthalate glycol-modified, PP – Polypropylene, PS – Polystyrene, PVC – Polyvinylchloride

Assessment and verification: the applicant shall submit a signed declaration of compliance specifying the material composition of the packaging including the container, label or sleeve, adhesives, closure and barrier coating, as appropriate, and a sample of primary packaging.

Criterion 6 - Fitness for use

A user test should be used to document the washing primary laundering effects of the detergent. The user test should meet the requirements stated in Appendix II. For user test the following apply:

- The test product must be tested against a reference product.

- The reference product may be a well-established product on the market or the product normally used by the user.

- The test product must show efficiency equal to or better than the reference product.

Assessment and verification: the applicant shall provide a test report providing information on:

(a) Information about the test centres where the detergent was tested and how/why they represent a selection of customers.

(b) Information about the products usually used by the test centres (reference products): recommended dosage, washing temperature, product's ability to remove soiling, date of purchase

(c) Information about the test procedure: type of spots and type of textile, information about the professional washing machines and washing programs (e.g. temperature, duration, rinsing, etc.), and the effectiveness of other products the detergent shall be used with (e.g. rinse aids)

(d) all reply forms received from the test users and the overall result on the wash performance of detergent specified in a table/a form. The overall result must be rated in accordance with point 6 of Appendix II

(e) Information on how satisfied the test centre is with visit reporting arrangements and the categories rated (point 5 of Appendix II)

Criterion 7 - Automatic dosing systems

For multi-component systems, the applicant shall ensure that the product is used with an automatic and controlled dosing system.

In order to ensure correct dosage in the automatic dosing systems, customer visits shall be performed at all premises using the product, at least once a year during the license period, and they shall include calibration of the dosing equipment. A third party can perform these customer visits.

Assessment and verification: the applicant shall provide a written description of responsibility for, frequency and content of customer visits.

Criterion 8 - User information

The detergent shall be accompanied by instructions for proper use so as to maximise product performance and minimise waste and use of resources. These instructions shall be legible or include graphical representation or icons and include information on (if appropriate):

(a) Dosing instructions

The applicant shall take suitable steps to help consumers respect the recommended dosage, making available the dosing instructions and if possible a convenient dosage system (e.g. caps). Dosing instruction shall include information on the recommended dosage in g or ml and a second or alternative metric may be given in brackets (e.g. capsules, squirts, or other if the packaging has a dosage system). Recommended dosage for a standard load for at least two levels of soiling shall be included. Information on the impact of water hardness on dosing and indications of the most prevalent water hardness in the area where the product is intended to be marketed or where this information can be found shall be provided.

(b) Resource saving measures

The applicant shall recommend washing at the lowest temperature the product claims effectiveness, which shall not be higher than 30C, and washing with full loads.

(c) Packaging disposal information

The primary packaging shall include information on the reuse, recycling and/or correct disposal of packaging.

(d) Environmental information

The following text should appear on the primary packaging: "All detergents have an effect on the environment. For maximum effectiveness always use the correct dose and, the lowest recommended temperature. This will minimize both energy and water consumption and reduce water pollution".

Assessment and verification: the applicant shall provide a declaration of compliance together with a sample of the product packaging, including the label.

Criterion 9 - Information appearing on the EU Ecolabel

The logo should be visible and legible. The EU Ecolabel registration/licence number must appear on the product and it must be legible and clearly visible. Optional label with text box shall contain the following text:

— Harm to aquatic life is limited

— Amount of hazardous substances is restricted

— Tested for wash performance

Assessment and verification: the applicant shall provide a sample of the product label or an artwork of the packaging where the EU Ecolabel is placed, together with a signed declaration of compliance.

Appendix I

Detergents Ingredients Database (DID) list

The DID list (Part A) is a list containing information of the aquatic toxicity and biodegradability of ingredients typically used in detergent formulations. The list includes information on the toxicity and biodegradability of a range of substances used in washing and cleaning products. The list is not comprehensive, but guidance is given in Part B of the DID list concerning the determination of the relevant calculation parameters for substances not present on the DID list (e.g. the Toxicity Factor (TF) and degradation factor (DF), which are used for calculation of the critical dilution volume). The list is a generic source of information and substances present on the DID list are not automatically approved for use in EU Ecolabel products.

Part A and Part B of the DID list can be found on the EU Ecolabel website at:

http://ec.europa.eu/environment/ecolabel/documents/did_list/didlist_part_a_en.pdf

http://ec.europa.eu/environment/ecolabel/documents/did_list/didlist_part_b_en.pdf

For substances with no data regarding aquatic toxicity and degradability, structure analogies with similar substances may be used to assess the TF and DF. Such structure analogies shall be approved by the competent body granting the EU Ecolabel license. Alternatively, a worst case approach shall be applied, using the parameters below:

Worst case approach:

	Acute toxicity			Chronic toxicity			Degradation		
Ingoing substance	LC50/EC50	$SF_{(acute)}$	$TF_{(acute)}$	NOEC*	$SF_{(chronic)}$*	$TF_{(chronic)}$	DF	Aerobic	Anaerobic
"Name"	1 mg/l	10,000	0.0001			0.0001	1	P	N

* If no acceptable chronic toxicity data are found, these columns are empty. In this case, $TF_{(chronic)}$ is defined as equal to $TF_{(acute)}$.

Documentation of ready biodegradability

The test methods for ready biodegradability provided for in Regulation (EC) No 1272/2008 shall be used.

Documentation of anaerobic biodegradability

The reference test for anaerobic degradability shall be EN ISO 11734, ECETOC No 28 (June 1988), OECD 311 or an equivalent test method, with the requirement of 60% ultimate degradability under anaerobic conditions. Test methods simulating the conditions in a relevant anaerobic environment may also be used to document that 60% ultimate degradability has been attained under anaerobic conditions.

Extrapolation for substances not listed in the DID-list

Where the ingoing substances are not listed in the DID-list, the following approach may be used to provide the necessary documentation of anaerobic biodegradability:

(1) Apply reasonable extrapolation. Use test results obtained with one raw material to extrapolate the ultimate anaerobic degradability of structurally related surfactants. Where anaerobic biodegradability has been confirmed for a surfactant (or a group of homologues) according to the DID-list, it can be assumed that a similar type of surfactant is also anaerobically biodegradable (e.g., C12-15 A 1-3 EO sulphate [DID No 8] is anaerobically biodegradable, and a similar anaerobic biodegradability may also be assumed for C12-15 A 6 EO sulphate). Where anaerobic biodegradability has been confirmed for a surfactant by use of an appropriate test method, it can be assumed that a similar type of surfactant is also anaerobically biodegradable (e.g., literature data confirming the anaerobic biodegradability of surfactants belonging to the group alkyl ester ammonium salts may be used as documentation for a similar anaerobic biodegradability of other quaternary ammonium salts containing ester-linkages in the alkyl chain(s)).

(2) Perform screening test for anaerobic degradability. If new testing is necessary, perform a screening test by use of EN ISO 11734, ECETOC No 28 (June 1988), OECD 311 or an equivalent method.

(3) Perform low-dosage degradability test. If new testing is necessary, and in the case of experimental problems in the screening test (e.g. inhibition due to toxicity of test substance), repeat testing by using a low dosage of surfactant and monitor degradation by ^{14}C measurements or chemical analyses. Testing at low dosages may be performed by use of OECD 308 (August 2000) or an equivalent method.

Appendix II User test

1. Responses must be obtained from at least five test centres representing a selection of customers

2. The procedure and dosage must conform to the manufacturer's recommendations.

3. The test period must continue for at least four weeks.

4. Every test centre must assess the serviceability of the product or multi-component system, dosability, compressibility, rinsing and solubility.

5. Every test centre must assess the effectiveness of the product or multi-component system by answering questions relating to the following aspects (or similar formulations):

a) ability to launder lightly, moderately or heavily soiled articles to be washed;

b) an assessment of primary laundering effects such as dirt removal, stain removal capacity and bleaching effect must be rated;

c) assessment of secondary laundering effects such as greying of white washing and colour-fastness and staining of coloured washing;

d) assessment of the effect of the rinsing agent on drying, ironing or mangling of the articles to be washed;

e) how satisfied;

f) the test subject is with customer visiting arrangements.

6. The response must be rated on a scale comprising at least three levels, for example, ‘insufficiently effective’, ‘sufficiently effective’ or ‘very effective’. With regard to how satisfied the test centre is with visit reporting arrangements, the categories must be ‘not satisfied’, ‘satisfied’ and ‘very satisfied’.

7. At least five test centres must submit responses. At least 80 % must rate the product as sufficiently effective or very effective on all points (see point 4 and be satisfied or very satisfied with customer visiting arrangements)

8. All raw data from the test must be specified. The test procedure must be described in detail.