

EN

COMMISSION DECISION

of

establishing revised ecological criteria for the award of the Community eco-label to laundry detergents and amending Decision 1999/476/EC

(Text with EEA relevance)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Regulation (EC) No 1980/2000 of the European Parliament and of the Council of 17 July 2000 on a revised Community eco-label award scheme¹, and in particular the second subparagraph of Article 6(1) thereof,

Whereas:

- (1) Under Regulation (EC) No 1980/2000 the Community eco-label may be awarded to a product possessing characteristics which enable it to contribute significantly to improvements in relation to key environmental aspects.
- (2) Regulation (EC) No 1980/2000 provides that specific eco-label criteria are to be established according to product groups.
- (3) It also provides that the review of the eco-label criteria, as well as of the assessment and verification requirements related to the criteria, is to take place in due time before the end of the period of validity of the criteria specified for each product group.
- (4) It is appropriate to revise the ecological criteria that were established by Commission Decision 1999/476/EC of 10 June 1999 establishing ecological criteria for the award of the Community eco-label to laundry detergents² in order to reflect the developments in the market. At the same time, the period of validity of that Decision as extended by Decision 2002/172/EC³ and the definition of the product group should be modified.
- (5) A new Decision should be adopted establishing the specific ecological criteria for this product group, which will be valid for a period of 5 years.

¹ OJ L 237, 21.9.2000, p. 1.

² OJ L 187, 20.7.1999, p. 52

³ OJ L 56, 27.2.2002, p. 32.

- (6) It is appropriate that, for a limited period of not more than eighteen months, both the new criteria and the criteria established by Decision 1999/476/EC should be valid concurrently, in order to allow sufficient time for companies that have been awarded or that have applied for the award of the eco-label for their products prior to the date of application of this Decision to adapt those products to comply with the new criteria.
- (7) The measures provided for in this Decision are based on the draft criteria developed by the European Union Eco-Labeling Board established under Article 13 of Regulation (EC) No 1980/2000.
- (8) The measures provided for in this Decision are in accordance with the opinion of the Committee instituted by Article 17 of Regulation (EC) No 1980/2000,

HAS ADOPTED THIS DECISION:

Article 1

In order to be awarded the Community eco-label under Regulation (EC) No 1980/2000, a laundry detergent must fall within the product group “laundry detergents” as defined in Article 2, and must comply with the ecological criteria set out in the Annex to this Decision.

Article 2

The product group “laundry detergents” comprises laundry detergents, fabric softeners and pre-treatment stain removers in powder, liquid or any other form. The products shall be used for washing of textiles, and are intended to be used principally in household machines, but not excluding the use in laundrettes and common laundries. With regard to stain removers, the product group comprises stain removers used for direct spot treatment of textiles (before washing in the machine) and does not comprise stain removers dosed in the washing machine.

The ecolabel criteria distinguish between heavy-duty detergents and low-duty detergents. *Heavy-duty detergents* are defined as detergents used for ordinary washing of white and coloured textiles at any temperature. *Low-duty detergents* are defined as detergents promoting special fabric care: e.g. low temperature wash, use for delicate fabrics such as wool and silk, use for delicate colours.

The product group does not comprise products that are dosed via carriers such as sheets, cloths or other materials. The product group does not comprise other washing auxiliaries that are primarily used without subsequent washing, such as stain removers for carpets, furniture upholstery, etc.

Article 3

For administrative purposes the product group code number assigned to this product group shall be “6”.

Article 4

Article 3 of Decision 1999/476/EC is replaced by the following:

“Article 3

The product group definition and the specific ecological criteria for the product group shall be valid until XX YY 20XX.”

Kommentar [TTA1]: Correct dates to be inserted

Article 5

This Decision shall apply from XX YY 20XX until XX YY 20XX.

Kommentar [TTA2]: Correct dates to be inserted

Producers of products falling within the product group “laundry detergents” which have already been awarded the eco-label before XX YY 20XX may continue to use that label until XX YY 20XX.

Kommentar [TTA3]: Correct dates to be inserted

Producers of products falling within the product group “laundry detergents” which have already applied for the award of the eco-label before XX YY 20XX may be awarded the eco-label under the terms Decision 1999/476/EC. In these cases the label may be used until XX YY 20XX.

Kommentar [TTA4]: Correct dates to be inserted

Article 6

This Decision is addressed to the Member States.

Done at Brussels,[]

For the Commission
Margot WALLSTRÖM
Member of the Commission

ANNEX**FRAMEWORK****The aims of the criteria**

These criteria aim in particular at promoting:

- Reduction of water pollution by reducing the volume of chemicals used and by limiting the quantity of harmful ingredients
- Savings on energy resources by promoting low-temperature and coldwater detergents
- Savings of transport and energy by promoting compact laundry detergents
- Minimisation of waste production by reducing the amount of primary packaging.

Additionally, the criteria enhance the consumers' environmental awareness. The criteria are set at levels that promote the labelling of laundry detergents that have a low environmental impact.

Assessment and verification 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, it is understood that these may originate from the applicant and/or his supplier(s) and/or their supplier(s), et cetera, as appropriate.

Where possible, the testing should be performed by laboratories that meet the general requirements of EN ISO 17025 or equivalent.

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

Appendix I makes reference to the detergent ingredient database (DID list) which contains the most widely used ingredients used in detergent 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 ingredients. For substances not present on the DID list, guidance is given on how to calculate or extrapolate the relevant data. The DID list is available from the EU Ecolabel website or via the websites of the individual competent bodies. The DID list adopted at January 2007 or later versions will apply for calculation of the ecological criteria.

Where appropriate, Competent Bodies may require supporting documentation and may carry out independent verifications.

The Competent Bodies are recommended to take into account the implementation of recognised environmental management schemes, such as EMAS or ISO14001, when assessing applications and monitoring compliance with the criteria (*note: it is not required to implement such management schemes.*).

FUNCTIONAL UNIT AND REFERENCE DOSE

The functional unit is expressed in g/kg wash (grams per kilo wash). The dosage recommended by the manufacturer to consumers for the water hardness of 2.5 mmol CaCO₃/l (14 ° dH) and 'normally soiled' textiles is taken as the reference dosage for the calculation of the ecological criteria, and for the testing of washing performance. For heavy-duty detergents this is related to the dosage per 4.5 kg load (dry textiles) and for low-duty detergents to the dosage per 2.5 kg load (dry textiles) in the washing machine. If the recommended dosage is stated for other wash load sizes, the reference dosage used for calculation of the ecological criteria must, however, correspond to the average load size. If the water hardness of 2.5 mmol CaCO₃/l (14 ° dH) is not relevant in the Member States in which the detergent is marketed, the applicant shall specify the dosage used as the reference.

Assessment and verification: The full formulation comprising trade name, chemical name, CAS no., DID no., ingoing quantity including and excluding water and function of all the ingoing ingredients (regardless of concentration) in the product must be submitted to the Competent Body.

Material safety data sheets for each ingredient in accordance with Regulation EC No 1907/2006 must be submitted to the Competent Body.

DID no. is the number of the ingredient on the DID list ("Detergent Ingredient Database" list), and is used in calculating the chemical requirements. See Appendix I. The DID list can be found on the EU Ecolabel website: http://ec.europa.eu/environment/ecolabel/product/pg_did_list_en.htm.

ECOLOGICAL CRITERIA

The concentration of ingoing substances in the product, which implies a requirement for documentation of compliance with the ecological criteria, is generally defined at ≥ 0.010 % by weight of the preparation. For preservatives, colouring agents and fragrance compliance with the ecological criteria is required regardless of their concentration except for requirement no. 4b on excluded or limited substances and mixtures. Ingoing substances are defined as all substances in the product including additives (e.g. preservatives or stabilizers) in the ingredients. Pollutants from the raw material production, which are present in concentrations ≥ 0.010 % by weight of the final formulation also have to comply with the criteria.

If the dosage instruction on the package has specifications for both prewash and subsequent wash (in addition to a normal, single wash), the total dosage (prewash + wash) also has to comply with the ecological criteria.

1. Total chemicals (TC) and maximum dosage

Total chemicals correspond to the recommended dosage in g/kg wash minus the water content. In addition to TC, a maximum dosage (incl. water content) is given for liquid products, ensuring that the level of compaction is equivalent to that of powders. The

The total chemicals shall not exceed the following amounts:

Product type	TCmax, powder	TCmax, liquid	Max dose, liquid
Heavy-duty laundry detergent	17.0 g/kg wash	9.0 g/kg wash	17 ml/kg wash
Low-duty laundry detergent	17.0 g/kg wash	9.0 g/kg wash	17 ml/kg wash
Stain remover (pre-treatment only)	Not applicable	Not applicable	(2.7 ml/kg wash)*
Fabric softener	Not applicable	0.85 g/kg wash	5.6 ml/kg wash

* Estimated average dose to be used in CDV calculations. Actual dosing will depend on number of stains in any given wash-load. The estimated dose is based on a dosage of 2 ml per application and 6 applications per wash-load of 4.5 kg (liquid stain remover).

Assessment and verification: Calculation of the TC of the product. The density (g/ml) must be stated for all products. A spreadsheet for calculation of the TC is available at the EU Ecolabel Website.

2. Toxicity to aquatic organisms: Critical Dilution Volume (CDV)

The critical dilution volume of the product must not exceed the following limits (CDV_{chronic}):

Product type	CDV _{chronic} , powder	CDV _{chronic} , liquid
Heavy-duty laundry detergent (powder, liquid, tablet, other)	45,000 l/kg wash	30,000 l/kg wash
Low-duty laundry detergent (powder, liquid, tablet, other)	18,000 l/kg wash	12,000 l/kg wash
Stain remover (pre-treatment only)	3,500 l/kg wash	3,500 l/kg wash*
Fabric softener	Not applicable	7,500 l/kg wash

* CDV limit based on an estimated dosage of 2 ml per application and 6 applications per wash-load of 4.5 kg for a liquid stain remover. Products dosed as e.g. powder or paste shall comply with the same CDV limit.

The critical dilution volume toxicity (CDV_{chronic}) is calculated for all ingredients (i) in the product using the following equation:

$$CDV_{\text{chronic}} = \sum CDV_{(i)} = \frac{\text{weight}_{(i)} \cdot DF_{(i)}}{TF_{\text{chronic}(i)}} \cdot 1,000$$

where

weight (i) = the weight of the ingredient per recommended dose

DF = the degradation factor

TF = the chronic toxicity factor of the substance as stated in the DID list.

The values of the DF and TF parameters shall be as given in the detergent ingredient database list (DID list). If the substance is not found on the DID list, the parameters must be calculated using the guidelines contained in part B of the DID list and the associated documentation must be attached. Preservatives, colouring agents and fragrance present in the product must also be included in the CDV calculation even if the concentration is lower than 0.010% (100 ppm).

Assessment and verification: Calculation of the CDV_{chronic} of the product. A spreadsheet for calculation of the CDV value is available at the EU Ecolabel website.

Reference to the DID list is made in the calculation. If the substance is not found on the DID list, the parameters must be calculated using the guidelines contained in part B of the DID list, and the associated documentation must be attached.

3. Biodegradability of organics

The content of organic substances in the product that are

- aerobically non-biodegradable (not readily biodegradable) (aNBO)
- anaerobically non-biodegradable (anNBO)

must not exceed the following limits:

aNBO

Product type	aNBO, powder	aNBO, liquids
Heavy-duty laundry detergent	1.0 g/kg wash	0.55 g/kg wash
Low-duty laundry detergent	0.55 g/kg wash	0.30 g/kg wash
Stain remover (pre-treatment only)*	0.10 g/kg wash	0.10 g/kg wash*
Fabric softener	Not applicable	0.03 g/kg wash

* aNBO limit based on an estimated dosage of 2 ml per application and 6 applications per wash-load of 4.5 kg for a liquid stain remover. The aNBO limit shall comply with the same limit for products dosed as e.g. powder or paste.

anNBO

Product type	anNBO, powder	anNBO, liquids
Heavy-duty laundry detergent	1.3 g/kg wash	0.70 g/kg wash
Low-duty laundry detergent	0.55 g/kg wash	0.30 g/kg wash
Stain remover (pre-treatment only)	0.10 g/kg wash	0.10 g/kg wash*
Fabric softener	Not applicable	0.03 g/kg wash

* anNBO limit based on an estimated dosage of 2 ml per application and 6 applications per wash-load of 4.5 kg for a liquid stain remover. The anNBO limit shall comply with the same limit for products dosed as e.g. powder or paste

Assessment and verification: Calculation of aNBO and anNBO for the product. A spreadsheet for use in calculating aNBO and anNBO values is available at the EU Ecolabel website.

Reference to the DID list. For ingredients 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. Note that TAED should be considered anNBO. See Appendix I.

4. Excluded or limited substances and mixtures**a) Specified excluded ingredients**

The following ingredients must not be included in the product, neither as part of the formulation nor as part of any preparation included in the formulation:

- Phosphates
- EDTA (ethylenediamine tetraacetate)
- NTA (nitrilotriacetic acid)*
- APEO's (alkyl phenol ethoxylates) and derivatives thereof
- Nitromusks and polycyclic musks

* Complexing agents of the type MGDA and GLDA may however contain NTA as impurities in concentrations lower than 1.0% as long as the total concentration in the final product is lower than 0.10%

Assessment and verification: Completed and signed declaration of compliance shall be provided (Appendix xx).

b) Classified ingredients

This criterion applies to all ingredients present in concentrations ≥ 0.010 % (preservatives, colouring agents and fragrances present at concentrations $< 0.010\%$ are not encompassed by this criterion).

No constituent substance must be classified (or release substances classified) with the below designations:

EU Risk Phrase ¹	GHS Hazard Statement ²
CMR substances	
R40	H351: Suspected of causing cancer
R45	H350: May cause cancer
R46	H340: May cause genetic defects
R49	H350: May cause cancer if inhaled
R60	H360: May damage fertility or the unborn child
R61	H360: May damage fertility or the unborn child
R62	H361: Suspected of damaging fertility or the unborn child
R63	H361: Suspected of damaging fertility or the unborn child
R64	H362: May cause harm to breast-fed children
R68	H341: Suspected of causing genetic defects
Sensitizing substances	
R42	H334: May cause allergy or asthma symptoms or breathing
R43	H317: May cause allergic skin reaction
Environmentally hazardous substances	
R50/53	H410: Very toxic to aquatic life with long lasting effects
R51/53	H411: Toxic to aquatic life with long lasting effects

¹ Directive 67/548/EEC with adjustment to REACH according to Directive 2006/121/EC and Directive 1999/45/EC as amended

² Regulation (EC) No 1272/2008 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

Exceptions from the requirement for sensitizing substances are:

- Enzymes
- Fragrance (see 4d for additional requirements)
- Bleach catalysts used in low-temperature and coldwater products

The exception also includes stabilizers and other auxiliary substances in the enzyme-, fragrance- and bleach catalyst ingredients.

Assessment and verification: Completed and signed declaration of compliance shall be provided (Appendix xx). If information on the environmental harmfulness of a constituent substance is not available, it will be regarded as environmentally harmful with R50/53. For fragrances, the Material Safety Data Sheet shall include information of chemical names and concentration ranges of the classified substances present in the fragrance mixture.

c) Specified limited ingredients - phosphonates

The total amount of phosphonates that are not readily biodegradable (aerobically) shall not exceed 0.10 g/kg wash at the recommended dosage.

Assessment and verification: Completed and signed declaration of compliance shall be provided (Appendix xx). Documentation showing the biodegradability of any phosphonates used and a calculation showing compliance with this criterion shall be provided.

d) Specified limited ingredients - fragrances

Any ingredients added to the product as a fragrance shall have been manufactured and/or handled following the code of practice of the International Fragrance Association.

Fragrance substances encompassed by the declaration requirement in the Detergents Regulation 648/2004/EEC and its subsequent amendments and (other) fragrance substances classified R43 / H317 (May cause allergic skin reaction) may not be present in quantities \geq 0.010% (\geq 100 ppm).

Assessment and verification: Completed and signed declaration of compliance shall be provided (Appendix xx). Account from the manufacturer for the content of fragrances in the product. Account from the fragrance manufacturer of the content of the relevant substances in the fragrance, specifying the content of each of the fragrance substances listed in Annex III, Part I of Directive 76/768/EEC and its subsequent amendments (the 26 fragrance substances with mandatory declaration) and the content of (other) substances classified R43 / H317.

5. Packaging requirements

a) Weight/utility ratio (WUR)

The weight/utility ratio (WUR) of the product must not exceed the following values:

Product type	WUR
Powders	1.2 g/kg wash
Others (e.g. liquids, tablets, capsules)	1.5 g/kg wash

WUR is calculated only for primary packaging (including caps, stoppers and hand pumps/spraying devices) using the formula below.

$$WUR = \Sigma [(W_i + U_i)/(D_i * r_i)]$$

Where:

W_i = the weight (g) of the packaging component (i) including the label if applicable.

U_i = the weight (g) of non-recycled (virgin) material in the packaging component (i). If the proportion of recycled material in the packaging component is 0% then $U_i = W_i$.

D_i = the number of functional doses contained in the packaging component (i).

r_i = recycling figure, i.e. the number of times the packaging component (i) is used for the same purpose through a return or refill system ($r=1$, if the packaging is not re-used for the same purpose. If the packaging is reused r is set to 5 for plastics and metal and 2 for corrugated board/cardboard unless the applicant can document a higher number.

Exceptions:

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

Packaging is regarded as recycled if the raw material used in the packaging has been collected from packaging manufacturers, the distributive stage or the consumer stage. If the raw material is industrial waste from the material manufacturer's own production process, then the material will not be regarded as recycled.

Assessment and verification: Calculation of the WUR of the product. A spreadsheet for use in this calculation is available at the EU Ecolabelling website. Account on the content for recycled material in the packaging. For approval of refill packaging, the applicant and/or retailer must document that the refills will available for purchase by the customer.

b) Labelling of plastic 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.

Assessment and verification: Completed and signed declaration of compliance shall be provided (Appendix xx). Correct labelling should be documented either by photo documentation or provision of a sample of the packaging for the competent body. Alternatively correct labeling may be controlled at the production site.

c) Plastic packaging

The use of phthalates in plastic packaging is not allowed.

Assessment and verification: Completed and signed declaration of compliance shall be provided (Appendix xx).

6. Washing performance (fitness for use)**a) Heavy-duty and Low-duty Detergents**

The product shall be compared in its washing performance with a reference detergent according to the EU eco-detergents performance test “Award of the EU eco-label to laundry detergents: performance test of household detergents” (*correct reference to be inserted, see background document*).

Assessment and verification: The applicant shall provide a test report indicating that the product fulfils the minimum requirements defined in this test.

b) Stain Removers (pre-treatment)

The performance of the product shall be documented according to the test description for stain removers as described in Appendix II (*see note in background document*).

Assessment and verification: The applicant shall provide a test report indicating that the product fulfils the minimum requirements defined in this test.

c) Fabric Softeners

The performance of the product shall be documented by a relevant test for inhibition of static electricity in synthetic materials or other relevant documentation. The test can be a laboratory test, the applicant’s internal quality test, a consumer test or other comparative test with a corresponding product. If a washing test is performed, the washing temperature shall be max. 40 °C and the water hardness shall be 2.5 mmol CaCO₃/l (equivalent to 14 °dH, medium

European water hardness). The general conditions for a consumer test are described in Appendix III.

7. Points

a) Heavy-duty laundry detergents

A minimum of 3 points must be achieved from the matrix below. (The maximum achievable points are 8 points for coldwater products, 7 points for low-temperature products and 6 points for other products).

Climate profile	Coldwater product (washing performance documented at ≤ 20 °C)	2 P
	Low-temperature product (washing performance documented at > 20 °C to ≤ 30 °C)	1 P
TC	Heavy-duty powder, $TC \leq 14$ g/kg wash <i>or</i>	2 P
	Heavy-duty liquid, $TC \leq 7.5$ g/kg wash and dosage ≤ 14 ml/kg wash	
	Heavy-duty powder, $TC \leq 16$ g/kg wash <i>or</i>	1 P
	Heavy-duty liquid, $TC \leq 8.5$ g/kg wash and dosage ≤ 16 ml/kg wash	
CDV	Heavy-duty powder, $CDV_{\text{chronic}} < 30,000$ l/kg wash	2 P
	Heavy-duty liquid, $CDV_{\text{chronic}} < 20,000$ l/kg wash	
	Heavy-duty powder, CDV_{chronic} between 30,000 to 37,500 l/kg wash	1 P
	Heavy-duty liquid, CDV_{chronic} between 20,000 to 25,000 l/kg wash	
aNBO	$aNBO \leq 75\%$ of limit value	1 P
anNBO	$anNBO \leq 75\%$ of limit value	1 P
<i>Minimum points to be achieved for Flower labelled products</i>		<i>3 P</i>

b) Low-duty laundry detergents

A minimum of 3 points must be achieved from the matrix below. (The maximum achievable points are 8 points for coldwater products, 7 points for low-temperature products and 6 points for other products).

Climate profile	Coldwater product (washing performance documented at ≤ 20 °C)	2 P
	Low-temperature product (washing performance documented at > 20 °C to ≤ 30 °C)	1 P
TC	Low-duty powder, TC ≤ 14 g/kg wash <i>or</i>	2 P
	Low-duty liquid, TC ≤ 7.5 g/kg wash and dosage ≤ 14 ml/kg wash	
	Low-duty powder, TC ≤ 16 g/kg wash <i>or</i>	1 P
	Low-duty liquid, TC ≤ 8.5 g/kg wash and dosage ≤ 16 ml/kg wash	
CDV	Low-duty powder, CDV _{chronic} $< 12,000$ l/kg wash	2 P
	Low-duty liquid, CDV _{chronic} $< 8,000$ l/kg wash	
	Low-duty powder, CDV _{chronic} between 12,000 to 15,000 l/kg wash	1 P
	Low-duty liquid, CDV _{chronic} between 8,000 to 10,000 l/kg wash	
aNBO	aNBO $\leq 75\%$ of limit value	1 P
anNBO	anNBO $\leq 75\%$ of limit value	1 P
<i>Minimum points to be achieved for Flower labelled products</i>		<i>3 P</i>

Assessment and verification: Calculation of the sum of points achieved for the product. A spreadsheet for use in calculating the values is available at the EU Ecolabel website.

8. Consumer information**a) Dosage instructions**

The dosage recommendations shall follow the requirements in the Detergents Regulation 648/2004/EEC and its subsequent amendments.

Dosage recommendations per wash in ml, number of tablets, measuring spoons or other dosing device shall appear clearly and readable on the product packaging.

The recommended dosages shall be specified for ‘normally’ and ‘heavily’ soiled textiles and the various water hardness ranges relevant for the countries concerned and referred as appropriate to the weight of textile. The water hardness must be stated in German degrees of hardness (°dH). (Not applicable for stain removers and fabric softeners).

The difference between the dosage recommendations for the lowest water hardness range (soft) for normally soiled textiles and the highest water hardness range (hard) for heavily

soiled textiles may not differ by more than a factor of 2. (Not applicable for stain removers and fabric softeners).

The reference dosage used for the washing performance test and for assessment of compliance with the ecological criteria on ingredients shall be the same as the recommended dosage on the package for 'normally soiled' and the water hardness corresponding to 2.5 mmol CaCO₃/l (14 °dH).

If only water hardness lower than 2.5 mmol CaCO₃/l (14 °dH) are included in the recommendations, the maximum dosage recommended for 'normally soiled' shall be lower than the reference dosage used in the washing performance test (water hardness 2.5 mmol CaCO₃/l).

b) Information on the packaging

The following washing advices (or equivalent) shall appear on the packaging of all eco-labelled products within the product group. The washing advices may be present either as text or symbols:

- "Wash at the lowest possible temperature
- Always wash with full load
- Dose according to soil and water hardness, follow the dosing instructions (*)
- If you are allergic to house dust, always wash bedding at 60° C. Increase wash temperature to 60° C in case of infectious diseases (*)

Using this eco-labelled product according to the dosage instructions will contribute to the reduction of water pollution, waste production and energy consumption. For more information visit the EU eco-label website:

http://ec.europa.eu/environment/ecolabel/index_en.htm.”

** Not applicable for stain removers and fabric softeners*

c) Claims on the packaging

In general, claims on the packaging shall be documented either through performance testing or other relevant documentation (e.g. claims of efficiency at low temperatures, claims of removal of certain stain types, claims of benefits for certain types or colors of textile or other claims of specific properties / benefits of the product).

- E.g. if a product is claimed as being a coldwater product, the efficiency test must be performed at ≤ 20°C.

- E.g. if a product is claimed as being a low-temperature product, the efficiency test must be performed at >20°C - ≤ 30°C.

- E.g. if a product claims to be efficient on certain stain types, this must be documented in the efficiency test

d) Information on the packaging – additional requirements for stain removers

The removal of stains for which no performance test has been conducted, must not be claimed on the product

Assessment and verification (a-e): *The applicant shall provide a sample of the label, together with a declaration of compliance with this criterion. Product claims shall be documented through appropriate test reports or other relevant documentation.*

e) Information on the packaging – additional requirements for fabric softeners

The following text (or equivalent) shall appear on the packaging:

- “Counteracts static electricity in synthetic materials and softens the textiles
- Should not be used for towels, tea towels and other textiles used for absorption of water”

9. Information appearing on the eco-label

Box 2 of the eco-label shall contain the following text:

- Reduced impact on aquatic ecosystems
- Restricted hazardous substances
- Documented washing performance

Assessment and verification: *The applicant shall provide a sample of the label, together with a declaration of compliance with this criterion.*

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 as of how to establish 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 generic source of information and substances present on the DID list are not automatically approved for use in ecolabelled products. The specific requirements for a certain product type are specified in the ecolabel criteria documents. The DID list (part A and B) can be found on the EU ecolabel website.

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 ecolabel license. Alternatively, a worst case approach should be applied, using the parameters below:

Worst case approach:

Ingredient	Acute toxicity			Chronic toxicity			Degradation		
	EC/LC50	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 that case TF(chronic) is defined as equal to TF(acute)

Documentation of ready biodegradability

The test methods for ready biodegradability shall be as referred to in the existing regulation regarding classification and labeling of substances:

Until 1. December 2010 and during transition period from 1. December 2010 to 1. December 2015:

- 1) Council Directive 67/548/EEC of 27 June 1967 on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances⁴, and its subsequent amendments, in particular the methods detailed in Annex V.C4, or their equivalent OECD 301 A-F test methods, or their equivalent ISO tests. The 10 days window principle shall not apply for surfactants. The pass levels shall be 70% for the tests referred to in Annex V.C4-A and C4-B of Directive 67/548/EEC (and their equivalent OECD 301 A and E tests and ISO equivalents), and shall be 60% for tests C4-C, D, E and F (and their equivalent OECD 301 B, C, D and F tests and ISO equivalents).

⁴ OJ L 196, 16.8.1967

After 1. December 2015 and during transition period from 1. December 2010 to 1. December 2015:

- 2) Regulation (EC) No 1272/2008 of 16 December 2008⁵ 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.

Documentation of anaerobic biodegradability

The reference test for anaerobic degradability shall be 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

The following approach may be used to provide the necessary documentation of anaerobic degradability in the case of ingredients that are not listed in the DID-list:

1) Apply reasonable extrapolation. Use test results obtained with one raw material to extrapolate the ultimate anaerobic degradability of structurally related surfactants. If 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). If 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 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 ¹⁴C measurements or chemical analyses. Testing at low dosages may be performed by use of OECD 308 (August 2000) or an equivalent method.

⁵ OJ L 353/1, 31.12.2008

APPENDIX II**Test description for stain removers**

This appendix contains a description of how the performance of stain removers is to be documented. The test is for use on products used as stain removers for clothing, for soaking, as a wash enhancer or for pre-washes or other equivalent functions. The products are used with subsequent washing in a washing machine (or by hand).

1. Summary of the performance test

The performance test is based on the principles in EN 60456 and is measured after 5 washing cycles. The purpose of the test is to document that the stain remover has a positive contribution to the overall washing result. This is achieved by performing a wash test for a standard reference (IEC-A) compared with the result of an equivalent wash test for the standard reference (IEC-A) with a stain remover (test product) added.

The wash test must be passed for all stain types that the product is claimed to have an effect on. If no specific types of stains are specified on the product, at least four different stain types must be tested and the relevant reasons for the choice of stains must be stated. In the absence of suggestions for stains, the following may be used without further justification: red wine (aged), tea, olive oil and cocoa.

2. Washing machines

Programmable electronic washing machines with connection to drainage outlet, set at medium performance programme as Miele Novotronic W375. Other models of Miele, e.g. WM918, WM986 or later versions may be used.

If more than one machine is used the wash cycles must be run on different machines in order to prevent effects caused by specific differences between the washing machines, however the same machine model has to be used for the same test.

3. Wash programmesCleaning programme:

Wash programme for cotton at 60°C. Wash with reference detergent without bleach: 19 g IEC-A/kg.

Washing test:

Wash programme for a normal cotton wash at 40°C. Products with coldwater or low-temperature claims (claims of efficiency at temperatures lower than 40°C) should be tested at the lowest temperature claimed on the package.

4. Wash water

Water with a hardness of 2.5 ± 0.1 mmol CaCO₃/l shall be used (medium European hardness, equivalent to 14 °dH \pm 0.5). The temperature of the supply water should be 15 °C \pm 2 and pH must be 7-9.

5. Materials

The fronts of the test strip must be marked before washing. Test materials must be handled and stored in accordance with the manufacturer's recommendations.

Test materials from the same batch must be used in all washes (this is particularly important for test strips).

Laundry

The laundry load comprises: test strips (see below), artificial stains (see below), two sheets, six pillowcases and sufficient towels and control strips Wfk 11A (test products only) to make up a 4.5 kg load of washing. The ballast (sheets, pillowcases and towels) must be handled in accordance with EN 60456, Section 6.

Test strips and control strips

The cleaning effect is determined by using test strips comprising samples of soiled standard textiles.

Test strips (artificial stains) have to be standardized – of the types sold by WfK, Empa, CFT or similar companies. This means that the test strips have good sensitivity, a wide measuring area and are reproducible. It must be proven if test strips are not used from Empa, WfK or CFT.

Standard cotton:

100% pure cotton, bleached
(Tristimulus Y>85)

Weave plain 1/1

Weight (ISO 12127) 170 ± 10 g/m²

Thread count

Warp 7 ± 2 threads/cm

Weft 7 ± 2 threads/cm

Yarn count (ISO 2060)

Warp 29.5 ± 1 Tex

Weft 29.5 ± 1 Tex

Standard polyester/cotton:

Polyester/cotton 65/35, heat treated,
bleached (Tristimulus Y>85)

Weave plain 1/1

Weight (ISO 12127) 170 ± 10 g/m²

Thread count

Warp 7 ± 2 threads/cm

Weft 7 ± 2 threads/cm

Yarn count (ISO 2060)

Warp 29.5 ± 1 Tex

Weft 29.5 ± 1 Tex

Each of the test strips measures 100x100 mm \pm 5 mm and they are stitched together so that they make a full test strip. Four whole test strips must be included in each wash, each stitched onto the long side of a towel.

At least four different artificial stain types must be selected with relevant reasons given for the choice of stains. If a product is claimed to remove specific types of stains, then these must be included in the test - irrespective of number. In the absence of suggestions for stains the following may be used without further justification: red wine (aged), tea, olive oil and cocoa.

The reference detergent

Specification for the reference detergent for heavy-duty and colour safe detergents (IEC-A) is given in EN 60456, Annex F:

The reference detergent, IEC-A, is delivered in three separate parts consisting of the basic powder, perborate and TAED. If the function relates to a detergent containing a bleaching agent, the reference detergent's basic powder must be added perborate and TAED in the described quantity (quantity is given in the paragraph below). Detergents not containing bleaching agents are tested against the reference detergent basic powder without the addition of perborate and TAED, see paragraph below.

Dosage for the reference detergent (4.5 kg load)

Reference detergent with bleaching agent (basic powder added perborate and TAED) consisting of: 91 g IEC-A* (basic powder), 24 g perborate and 3.5 g TAED.

Reference detergent without bleaching agent: 91 g IEC-A* (basic powder)

Sampling

The manufacturer must ensure that the samples of the test product are selected in a representative way, in other words the product must be selected/purchased from three different batches and mixed to produce a representative sample.

Test product

The test detergents consist of the reference detergent with a stain remover added. The stain remover may be applied directly onto the textile. The reference detergent is dosed as described above; the stain remover is dosed in accordance with the dosage instructions provided on the product. If the product performs several functions, the test must be conducted on the primary function and on the function with the lowest dosage.

6. Procedure

Wash

The reference detergent, test product and - if applicable - water are tested in the following order: First the test product, then the reference product and finally water (5 wash cycles). A cleaning programme is run after each wash cycle.

Cleaning effect

Washes are performed with the test product, reference detergent and water alone. The wash cycles are run at least five times with each detergent using new test strips each time. Washes with the test product, reference detergent and water are performed five times each.

After treatment

After washing the test strips and control strips must be dried by pressing them at a temperature of between 130°C and 150°C. Press between two layers of materials to prevent the test strips or the control strip from becoming shiny or miscoloured. The load is tumble-dried after each wash.

7. Evaluation

The reflectance of the washed test strips, equivalent to the measured result Y in the CIE system, is measured after washing using a colorimeter or spectrophotometer with the following instrument settings: D-65, 10° Observer, Tristimulus Y value. Prior to each measurement the instrument must be calibrated in accordance with the manufacturer's instructions. Measurements must be taken on the front of the test strip (as marked, cf. the beginning of Section 5).

Measurements are performed by placing the test strips on top of each other in four layers and measuring each stain in at least three places. When using an instrument with a measurement opening of 20 mm diameter, four measurements must be taken (EN 60456: 2005, Section 8.3.4, figure 2).

The mean value (Y) for the above measurements is taken for each test strip, in other words for each stain type attached to the test strip. In this case, with a measurement opening of 20 mm in diameter, Y is the average of four measurements per test strip per stain type. The mean value must be specified to one decimal place. The normalised wash result is achieved by subtracting the result for water from both the reference product and the test product. The following table provides an example of how the test results can be presented. The figures in the table are an average of the four measurements registered with a 20 mm measuring instrument.

Detergent	Wash cycle	Lipstick	Motor oil/ Pigment	Tea	Chocolate	Olive oil	Cocoa
Clean water (v)	1	27.3	40.0	37.0	58.0	21.0	41.4
	2	27.5	41.2	37.6	57.3	22.2	41.0
	3	28.3	43.3	36.4	58.9	21.6	42.3
	4	26.4	39.7	38.1	57.2	21.4	40.9
	5	27.5	40.2	37.2	59.4	21.3	41.6
Mean value (Y_v)		27.4	40.9	37.3	58.2	21.5	41.4
Reference detergent (r)	1	41.6	46.0	55.2	67.0	38.0	56.0
	2	41.2	46.8	56.0	68.1	37.5	55.5
	3	42.3	47.5	56.2	67.9	38.3	56.4
	4	40.0	45.3	54.3	66.9	37.3	55.7
	5	41.4	46.2	54.1	67.4	38.5	56.1
Mean value (Y_r)		41.3	46.4	55.2	67.5	37.9	55.9
Test product (t)	1	42.8	61.2	61.4	68.0	42.2	57.6
	2	48.3	63.9	60.4	68.6	40.5	58.2
	3	47.1	66.8	62.3	69.5	44.2	60.1
	4	45.9	64.7	62.0	67.9	41.9	58.3
	5	46.1	62.9	61.8	69.4	42.7	58.9
Mean value (Y_t)		46.0	63.9	61.6	68.7	42.3	58.6
Normalised		134%	236%	140%	113%	127%	119%

result							
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8. *Limit values*

The product will be considered to have a satisfactory performance at 40°C (or below temperatures) if it achieves the following results:

The normalised cleaning effect must be greater than 110% for each stain type compared to the reference detergent and the result for all stain types must be better than for water.

9. *Report*

The test report must contain the following:

- References to this appendix
- The washing machine used for testing
- Wash programmes
- Water quality and hardness and the reason for choice of water hardness
- The dosage of the reference detergent
- Description of the test product
- Dosage of test product
- Opening diameter of measuring instrument when measuring reflectance
- Number of measuring points
- Evaluation in accordance with the example in Section 6 or in a comparable way
- Limit values according to the requirement in R38 in the criteria document or Section 7 of the appendix or a comparable method
- Any deviation from the specified standards and/or this appendix must be stated and explained

APPENDIX III**Consumer testing of fabric softeners**

This appendix describes the way in which a consumer test is to be performed. The purpose of the test is to demonstrate whether or not the test product is evaluated as being as good as or better than a comparative product.

Test persons:

The test must be performed by a minimum of 10 users. The test users must represent a random selection of the targeted sales area. Employees at the manufacturing company must not participate in the test.

Comparative product:

The test product must be compared with the product normally used by the user. The comparative product must not be the same as the test product. The test product and the comparative products may be produced by the same manufacturer.

Performance of the test:

The dose used must be the dose recommended by the manufacturer as specified on the dosing instruction. This dosage shall comply with the maximum limits given for Total Chemicals and Maximum dosage (requirement No. 1) and be equivalent to the dosage used for calculation of the chemical requirements (requirement No. 2). The duration of the test period must be sufficient for the test product to be used for at least five washes by the test user.

Evaluation form

Each test user must complete one form per test product. The form specifies the factors that **MUST** be considered when assessing the test product. Please note that in order for the form to be approved as part of the test, **ALL** questions on the form must be completed by the test user.

A draft form is available for presenting the results of the consumer testing of wash effectiveness. The incoming answers are entered in a table which shows the number of respondents and their answers.

Quality requirements

At least 80% of the test users must state that their overall impression of the test product is that it is better than or as good as the comparative product.

The following documentation must be submitted to the Competent Body assessing the application:

- A description of the way in which the test users were selected
- All reply forms received from the test users (please remember that all questions must be answered)
- The overall result/all replies received on the wash effectiveness of the user test specified in a table/a form
- The formulation of the test product must be attached to the overall result of the user test

Evaluation form – comparative consumer test for fabric softeners

One form must be completed for each product and ALL questions must be answered. At least 5 washes should be conducted with the test product.

Information about the test

Name of test person: _____

Name of test product: _____

Dosing of test product (ml per wash): _____

Name of comparative product (product normally used): _____

Dosing of comparative product (ml per wash): _____

Types of fabric on which the test product is used, specify material

- Synthetic fibres
- Cotton
- Mixed synthetic fibers/cotton
- Other (indicate which): _____

Test period

Start date: _____ End date: _____

How many times was the test product used (no. of washes)? _____

How long have you been using the comparative product? _____

How frequently (approximately) do you use the comparative product? _____

Evaluation of test product

Test product	worse than the comparative product	equally as good as the comparative product	better than the comparative product
The ability to reduce static electricity			
The ability to soften the textiles			
Overall evaluation of the test product's performance relative to the comparative product			

Fragrance:

Is the presence of fragrance or nature of the fragrance contributing to your perception of the performance of the product (YES / NO)? _____

Other comments (if any): _____