COMMISSION DECISION

of 14 November 2012

establishing the ecological criteria for the award of the EU Ecolabel for Industrial and Institutional Automatic Dishwasher Detergents

(notified under document C(2012) 8054)

(Text with EEA relevance)

(2012/720/EU)

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) The new criteria, as well as the related assessment and verification requirements, should be valid for four years from the date of adoption of this Decision.

(4) 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 Automatic Dishwasher Detergents' shall comprise single and multi-component dishwasher detergents, rinse and pre-soaks, designed for use in professional dishwashers.

The following products are excluded from the scope of this product group: consumer automatic dishwasher detergents, detergents intended to be used in washers of medical devices or in special machines for cleaning industrial equipment, including in special machines for the food industry.

Sprays not dosed via automatic pumps are excluded from this product group.

Article 2

In order to be awarded the EU Ecolabel under Regulation (EC) No 66/2010, an item of automatic dishwasher detergent shall fall within the product group 'Industrial and Institutional Automatic Dishwasher 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 to this Decision.

Article 3

The criteria for the product group 'Industrial and Institutional Automatic Dishwasher Detergents', as well as the related assessment and verification requirements, shall be valid for four years from the date of adoption of this Decision.

Article 4

For administrative purposes the code number assigned to the product group 'Industrial and Institutional Automatic Dishwasher Detergents' shall be '038'.

Article 5

This Decision is addressed to the Member States.

Done at Brussels, 14 November 2012.

For the Commission

Janez POTOČNIK

Member of the Commission

[1] OJ L 27, 30.1.2010, p. 1.

ANNEX

FRAMEWORK

The aims of the criteria

The criteria aim, in particular, at promoting products that have a reduced impact on aquatic ecosystems, contain a limited amount of hazardous substances and whose performance has been tested.

CRITERIA

Criteria are set for each of the following aspects:

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

2. Biodegradability

3. Excluded or limited substances and mixtures

4. Packaging requirements

5. Washing performance (fitness for use)

6. Automatic dosing systems

7. User information — Information appearing on the EU Ecolabel

(1) 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, it is understood that these may originate from the applicant and/or his supplier(s) and/or their supplier(s) etc., 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 ingoing substances 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 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.

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

(b) Measurement thresholds

Compliance with the ecological criteria is required for substances intentionally added, as well as for by-products and impurities from raw materials, the concentration of which equals or exceeds 0,010 % by weight of final formulation.

For biocides and colouring agents compliance with the criteria is required regardless of their concentration.

Substances meeting the threshold limit as listed above are hereby referred to as 'Ingoing substances'.

(2) Functional unit

The functional unit for this product group shall be expressed in g/l washing solution (grams per litre washing solution).

Requirements relating to assessment and verification of the functional unit:

The full formulation indicating trade name, chemical name, CAS No, DID No (*), the ingoing quantity including and excluding water, the function and the form of all the ingoing substances (regardless of concentration) in the product must be submitted to the competent body. A sample of the artwork including dosage recommendations must be submitted to the competent body.

Safety data sheets for each ingoing substance shall be submitted to the competent body in accordance with Regulation (EC) No 1907/2006 of the European Parliament and of the Council ([1]).

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

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

EU ECOLABEL CRITERIA

Criterion 1 — Toxicity to aquatic organisms: Critical Dilution Volume (CDV)

The Critical Dilution Volume ($CDV_{chronic}$) of a single or multi-component system must not exceed the following limits (at the highest recommended dose):

CDV at the highest recommended dosage	Soft	Medium	Hard
Product type	0-6 °dH	7-13 °dH	> 14 °dH
Pre-soaks	2 000	2 000	2 000
Dishwasher detergents	3 000	5 000	10 000
Multi-component system	3 000	4 000	7 000
Rinse aids	3 000	3 000	3 000

The Critical Dilution Volume ($CDV_{chronic}$) is calculated for all ingoing substances (i) in the product using the following equation:

$$CDV_{chronic} = \sum CDV_{(i)} = \sum \frac{weight_{(i)} \times DF_{(i)}}{TF_{chronic(i)}} \times 1\,000$$

Where:

weight = the weight of the ingoing substance per recommended dose

DF = the degradation factor

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

Biocides and colouring agents present in the product shall also be included in the CDV calculation even if the concentration is lower than 0,010 % (100 ppm).

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

— Hydrogen Peroxide (H_2O_2) — not to be included in calculation of CDV,

— Peracetic acid — to be included in the calculation as acetic acid.

Assessment and verification: the applicant shall provide the calculation of the $CDV_{chronic}$ of the product. A spreadsheet for calculation of the CDV value is available on the EU Ecolabel website.

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 shall be calculated using the guidelines in Part B of the DID list and attaching the associated documentation.

(*) DID No is the number of the ingoing substance on the DID list ('Detergent Ingredient Database' list), and is used in determining compliance with criteria 1 and 2.

([1]) OJ L 396, 30.12.2006, p. 1.

Criterion 2 — Biodegradability

(a) Biodegradability of surfactants

All surfactants must be biodegradable under aerobic and anaerobic conditions.

(b) Biodegradability of organic substances

The content of all organic substances in the product that are aerobically non-biodegradable (not readily biodegradable) (aNBO) and anaerobically non-biodegradable (anNBO) shall not exceed the following limits:

aNBO

Product type (g/l washing solution)	Soft 0-6 °dH	Medium 7-13 °dH	Hard > 14 °dH
Pre-soaks	0,4	0,4	0,4
Dishwasher detergents/Multi-component system	0,4	0,4	0,4
Rinse aids	0,04	0,04	0,04

anNBO

Product type (g/l washing solution)	Soft 0-6 °dH	Medium 7-13 °dH	Hard > 14 °dH
Pre-soaks	0,4	0,4	0,4
Dishwasher detergents/Multi-component system	0,6	1,0	1,5
Rinse aids	0,04	0,04	0,04

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 use in calculating aNBO and anNBO values is available on the EU Ecolabel website.

For both surfactants and aNBO and anNBO values reference should 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.

Note that TAED should be considered anaerobically biodegradable.

In the absence of documentation in accordance with the above requirements, a 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 %); or

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

3. Readily degradable and non-bioaccumulating.

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

Criterion 3 — Excluded or limited substances and mixtures

(a) Specified excluded ingoing substances

The following ingoing substances must not be included in the product, neither as part of the formulation nor as part of any mixture included in the formulation:

— EDTA (ethylenediamine tetraacetate),

— Fragrances,

— Reactive chlorine compounds,

— APEO (Alkyl phenol ethoxylates) and APD (Alkylphenols and derivatives thereof).

Assessment and verification: the applicant shall provide a completed and signed declaration of compliance.

(b) Hazardous substances and mixtures

According to the Article 6(6) of Regulation (EC) No 66/2010 on the EU Ecolabel, the product or any component of it shall not contain substances meeting criteria for classification with the hazard statements or risk phrases specified below in accordance with Regulation (EC) No 1272/2008 of the European Parliament and of the Council [1] or Council Directive 67/548/EEC [2] nor shall it contain substances referred to in Article 57 of Regulation (EC) No 1907/2006. The risk phrases below generally refer to substances. However, if information on substances cannot be obtained, the classification rules for mixtures apply.

List of hazard statements:

Hazard Statement [1]	Risk Phrase [2]
H300 Fatal if swallowed	R28
H301 Toxic if swallowed	R25
H304 May be fatal if swallowed and enters airways	R65
H310 Fatal in contact with skin	R27
H311 Toxic in contact with skin	R24
H330 Fatal if inhaled	R23/26
H331 Toxic if inhaled	R23
H340 May cause genetic defects	R46
H341 Suspected of causing genetic defects	R68
H350 May cause cancer	R45
H350i May cause cancer by inhalation	R49
H351 Suspected of causing cancer	R40
H360F May damage fertility	R60
H360D May damage the unborn child	R61
H360FD May damage fertility. May damage the unborn child	R60/61/60-61
H360Fd May damage fertility. Suspected of damaging the unborn child	R60/63
H360Df May damage the unborn child. Suspected of damaging fertility	R61/62
H361f Suspected of damaging fertility	R62
H361d Suspected of damaging the unborn child	R63
H361fd Suspected of damaging fertility. Suspected of damaging the unborn child	R62-63
H362 May cause harm to breast fed children	R64
H370 Causes damage to organs	R39/23/24/25/26/27/28
H371 May cause damage to organs	R68/20/21/22

[1] OJ L 353, 31.12.2008, p. 1.
[2] OJ 196, 16.8.1967, p. 1.

Hazard Statement (1)	Risk Phrase (2)
H372 Causes damage to organs through prolonged or repeated exposure	R48/25/24/23
H373 May cause damage to organs through prolonged or repeated exposure	R48/20/21/22
H400 Very toxic to aquatic life	R50
H410 Very toxic to aquatic life with long-lasting effects	R50-53
H411 Toxic to aquatic life with long-lasting effects	R51-53
H412 Harmful to aquatic life with long-lasting effects	R52-53
H413 May cause long-lasting harmful effects to aquatic life	R53
EUH059 Hazardous to the ozone layer	R59
EUH029 Contact with water liberates toxic gas	R29
EUH031 Contact with acids liberates toxic gas	R31
EUH032 Contact with acids liberates very toxic gas	R32
EUH070 Toxic by eye contact	R39-41
Sensitising substances	
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled	R42
H317: May cause allergic skin reaction	R43

(1) Regulation (EC) No 1272/2008.
(2) Directive 67/548/EEC with adjustment to REACH according to Directive 2006/121/EC and Directive 1999/45/EC as amended.

Note that this criterion also applies to known degradation products such as formaldehyde from formaldehyde releasers.

Substances or mixtures which change their properties through processing (e.g. become no longer bioavailable, or undergo chemical modification in a way that removes the previously identified hazard) are exempted from the above requirement.

The final product must not be labelled according to the hazard statements above.

Derogations

The following substances are specifically exempted from this requirement:

Surfactants < 15 % in the final product	H400: Very toxic to aquatic life	R50
Biocides for preservation purpose (*) (only for liquids with pH between 2 and 12 and maximum 0,10 % w/w of active material)	H331: Toxic if inhaled	R23
	H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled	R42
	H317: May cause allergic skin reaction	R43
	H400: Very toxic to aquatic life	R50

Enzymes (**)	H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled	R42
	H317: May cause allergic skin reaction	R43
	H400: Very toxic to aquatic life	R50
NTA as in impurity in MGDA and GLDA (***)	H351: Suspected of causing cancer	R40

(*) Derogation is only for criterion 3(b). Biocides shall comply with criterion 3(d).
(**) Including stabilisers and other auxiliary substances in the preparations.
(***) In concentrations lower than 1,0 % 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 this criterion by providing a declaration on the non-classification of each ingoing substance into any of the hazard classes associated to the hazard statements referred to in the above list in accordance with Regulation (EC) No 1272/2008, as far as this can be determined, as a minimum, from the information meeting the requirements listed in Annex VII to Regulation (EC) No 1907/2006. This declaration shall be supported by summarised information on the relevant characteristics associated to the hazard statements referred to in the above list, to the level of detail specified in Sections 10, 11 and 12 of Annex II to Regulation (EC) No 1907/2006 (Requirements for the Compilation of Safety Data Sheets).

Information on intrinsic properties of substances may be generated by means other than tests, for instance through the use of alternative methods such as *in vitro* methods, by quantitative structure activity models or by the use of grouping or read-across in accordance with Annex XI to Regulation (EC) No 1907/2006. The sharing of relevant data is strongly encouraged.

The information provided shall relate to the forms or physical states of the substance or mixtures as used in the final product.

For substances listed in Annexes IV and V to REACH, exempted from registration obligations under Article 2(7)(a) and (b) of Regulation (EC) No 1907/2006 REACH, a declaration to this effect will suffice to comply with the requirements set out above.

(c) Substances listed in accordance with Article 59(1) of Regulation (EC) No 1907/2006

No derogation from the exclusion in Article 6(6) of the Regulation (EC) No 66/2010 shall be given concerning substances identified as substances of very high concern and included in the list foreseen in Article 59 of Regulation (EC) No 1907/2006, present in mixtures in concentrations > 0,010 %.

Assessment and verification: the list of substances identified as substances of very high concern and included in the candidate list in accordance with Article 59 of Regulation (EC) No 1907/2006 can be found here: http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp

Reference to the list shall be made on the date of application. The applicant shall provide the exact formulation of the product to the competent body. The applicant shall also provide a declaration of compliance with this criterion, together with related documentation, such as declarations of compliance signed by the material suppliers and copies of relevant Safety Data Sheets for substances or mixtures.

(d) Specified limited ingoing substances — Biocides

(i) The product may only include biocides in order to preserve the product, and in the appropriate dosage for this purpose alone. This does not refer to surfactants, which may also have biocidal properties.

Assessment and verification: the applicant shall provide copies of the material safety data sheets of any biocides added, together with information on their exact concentration in the product. The manufacturer or supplier of the biocides shall provide information on the dosage necessary to preserve the product.

(ii) 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 shall provide the texts and layouts used on each type of packaging and/or an example of each different type of packaging to the competent body.

(iii) The product may contain biocides provided that they are not bioaccumulating. A biocide is not considered bioaccumulating if BCF < 100 or logKow < 3,0. If both BCF and logKow values are available, the highest measured BCF value shall be used.

Assessment and verification: the applicant shall provide copies of the material safety data sheets of any biocide added, together with information on their BCF and/or logKow values.

(e) Colouring agents

Colouring agents allowed in the product must not be bioaccumulating. In the case of colouring agents approved for use in foodstuffs it is not necessary to submit documentation of bioaccumulation potential. A colouring agent is considered not bioaccumulating if BCF < 100 or logKow < 3,0. If both BCF and logKow values are available, the highest measured BCF value shall be used.

Assessment and verification: the applicant shall provide copies of the material safety data sheets of any colouring agents added, or documentation to ensure that the colouring agent is approved for use in foodstuff.

(f) Enzymes

Enzymes must be in liquid form or dust-free granulate. Enzymes must be free from micro-organism remnants from manufacture.

Assessment and verification: the applicant shall provide copies of the material safety data sheets of any enzyme added, together with documentation to ensure that the enzyme is free from micro-organism remnants.

(g) Phosphorous

The total quantity of phosphates and other phosphorous compounds must not exceed the limit values specified in table, calculated in grams of phosphorous per litre water.

The highest recommended dosage shall be used for the phosphorous calculations.

Product type Phosphorous (g P/l water)	Soft 0-6 °dH	Medium 7-13 °dH	Hard > 14 °dH
Pre-soaks	0,08	0,08	0,08
Detergents	0,15	0,30	0,50
Rinse aids	0,02	0,02	0,02
Multi-component systems	0,17	0,32	0,52

Assessment and verification: the applicant shall provide documentation to ensure that the limit in the above table is fulfilled.

Criterion 4 — Packaging requirements

(a) Weight/utility ratio (WUR)

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

Product type	WUR		
	0-6 °dH	7-13 °dH	> 14 °dH
Powders [g/l washing solution]	0,8	1,4	2,0
Liquids [g/l washing solution]	1,0	1,8	2,5

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

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

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 units contained in the packaging component (i). The functional unit = dosage in g/l washing solution.

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 reused for the same purpose. If the packaging is reused r is set to 1 unless the applicant can document a higher number.

Exceptions

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

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.

Assessment and verification: the applicant shall provide the calculation of the WUR of the product. A spreadsheet for this calculation is available on the EU Ecolabel website. The applicant shall provide a completed and signed declaration for the content of recycled or material from renewable origin in the packaging. For approval of refill packaging, the applicant and/or retailer shall document that the refills will be/are available for purchase on the market.

(b) Plastic packaging

Only phthalates that at the time of application have been risk assessed and have not been classified according to criterion 3(b) (and combinations hereof) may be used in the plastic packaging.

In order 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: the applicant shall provide completed and signed declaration of compliance.

Criterion 5 — Washing performance (fitness for use)

The performance and efficiency of the product must be satisfactory. The product must satisfy the requirements for the user test or internal testing in accordance with Appendix II.

Assessment and verification: the applicant shall submit a detailed test report to the Competent Body, including information/documentation. See Appendix II.

Criterion 6 — Automatic dosing systems

Multi-component systems shall be offered together with an automatic and controlled dosing system.

In order to ensure correct dosage in the automatic dosing systems, customer visits must be incorporated as a normal routine for manufacturers/suppliers. These customer visits are performed at all premises at least once a year during the license period; they must include calibration of the dosage equipment. Also, a third party can perform customer visits.

In exceptional cases, customer visits may be dispensed with if the distance and method of delivery makes the visit impracticable.

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

Criterion 7 — User information — Information appearing on the EU Ecolabel

(a) Information on the packaging/product information sheet

The following recommendations must appear on the packaging, and/or on product information sheet or equivalent:

— Dose according to the degree of soil, and the water hardness. Follow the dosing instructions.

— Using this EU Ecolabelled product according to the dosage instructions will contribute to the reduction of water pollution and waste production.

(b) Information appearing on the EU Ecolabel

The logo should be visible and legible. The use of the EU Ecolabel logo is protected in primary EU law. The EU Ecolabel registration/licence number must appear on the product, it must be legible and clearly visible.

The optional label with text box shall contain the following text:

— reduced impact on aquatic ecosystems,

— limited hazardous substances,

— performance tested.

The guidelines for the use of the optional label with text box can be found in the 'Guidelines for use of the Ecolabel logo' on the website: http://ec.europa.eu/environment/ecolabel/documents/logo_guidelines.pdf

Assessment and verification (a-b): the applicant shall provide a sample of the product label and/or product sheet, together with a declaration of compliance with this criterion. Product claims shall be documented through appropriate test reports.

Appendix I

Detergents Ingredients Database (DID) list

The DID list (Part A) is a list containing information of the aquatic toxicity and biodegradability of ingoing substances 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 Ecolabelled products. The DID list (Parts 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 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 that case $TF_{(chronic)}$ is defined as equal to $TF_{(acute)}$.

Documentation of ready biodegradability

The following test methods for ready biodegradability shall be used:

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

The test methods for ready biodegradability provided for in Directive 67/548/EEC, in particular the methods detailed in Annex V.C4 to that Directive, 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 to 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).

(2) After 1 December 2015 and during transition period from 1 December 2010 to 1 December 2015:

The test methods provided for in Regulation (EC) No 1272/2008.

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

Washing performance (fitness for use)

(a) Internal testing

The manufacturer's test laboratory can be approved to conduct testing to document effectiveness if the following additional requirements are met:

— it must be possible for ecolabelling organisations to monitor the performance of testing,

— the ecolabelling organisation must have access to all data on the product,

— performance of the effectiveness test must be described in the quality control system.

The applicant must submit documentation proving that the product has been tested under realistic conditions:

(a) Dishes soiled with spots that are representative for the kind of soiled expected in the areas where the products will be marketed.

(b) Recommended dosage and at the corresponding water hardness at the lowest recommended wash temperature

The applicant must submit documentation proving:

— the product's ability to remove soiling from the dishes,

— the product's ability to dry the dishes.

The test product must be tested against a reference product. The reference product may be a well-established product on the market and the tested product must be at least as effective as the reference.

(b) User test

1. Responses must be obtained from at least five test centres representing a random 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 with at least 400 test cycles.
4. 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):
   — the product's ability to remove soiling from the dishes,
   — the product's ability to dry the dishes,
   — the respondent's satisfaction with the agreement on customer visits.
5. 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'.
6. 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.
7. All raw data from the test must be specified.
8. The test procedure must be described in detail.