



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 27.01.1999
COM(1999)23 final

Proposal for a

COUNCIL DECISION

**concerning the setting of ecological criteria for the award of the Community eco-label
to detergents for dishwashers
(Text with EEA relevance)**

(presented by the Commission)

EXPLANATORY MEMORANDUM

1. In accordance with Article 7 (2) of Council Regulation (EEC) No 880/92 of 23 March 1992⁽¹⁾ on a Community eco-label award scheme, the Commission submitted to the Regulatory Committee on 23 October 1998 a Proposal for a Commission Decision establishing the ecological criteria for the award of the Community eco-label to dishwashing detergents. The Proposal had been established according to Article 6 which foresees consultation of the principal interest groups within a Consultation Forum.
2. The Regulatory Committee was unable to approve the Proposal by qualified majority. Only Belgium, Luxembourg, Portugal, Finland, Sweden, Denmark the Netherlands, Ireland and Italy voted in favour.
3. The lack of a favourable majority was due to differences of opinion with regard to the level of chlorinated compounds to be allowed in eco-labelled dishwashing detergents. Certain scientific studies indicate that these substances are harmful to the natural environment. Following the precautionary principle, the Commission proposes a strict limit of 0.1% of active chlorinated compounds which, without totally excluding them, strongly limits their use.
4. Spain, France, Greece and the United Kingdom voted against the Proposal as they wished the limit on chlorinated compounds to be either dropped or made less severe. These Member States consider that there is not sufficient scientific evidence to show that chlorinated compounds are harmful when released into the natural environment.
5. Germany voted against the Proposal because they wished chlorinated compounds to be totally excluded. Germany considers that there is sufficient scientific evidence to justify a total exclusion of chlorinated compounds.
6. Austria abstained because they wished a more severe restriction on chlorinated compounds.
7. According to Article 7 (4) of Council Regulation (EEC) No 880/92, the Commission shall, without delay, submit to the Council the Proposal for a Council Decision establishing the ecological criteria for the award of the Community eco-label to dishwashing detergents.

(1) OJ N° L99, 11.4.1992, p.1

Proposal for a
COUNCIL DECISION

**concerning the setting of ecological criteria for the award of the Community eco-label
to detergents for dishwashers
(Text with EEA relevance)**

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community,

Having regard to Council Regulation (EEC) N° 880/92 of 23 March 1992 on a Community eco-label award scheme¹, and in particular the second subparagraph of Article 5 (1) thereof,

Whereas the first subparagraph of Article 5 (1) of Regulation (EEC) N° 880/92 provides that the conditions for the award of the Community eco-label shall be defined by product group;

Whereas Articles 10 (2) of Regulation (EEC) N° 880/92 states that environmental performance of a product shall be assessed by reference to the specific criteria for product groups;

Whereas Article 4 (2) (a) of Regulation (EEC) N°880/92 states that an eco-label shall not be awarded to products which are substances or preparations classified as dangerous in accordance with Council Directive 67/548/EEC² as last amended by Commission Directive 98/73/EC³ and Council Directive 88/379/EEC⁴, as last amended by Commission Directive 96/65/EEC⁵, but it may be awarded to products containing such substances or preparations in so far as they meet the objectives of the Community eco-label award scheme;

Whereas detergents for dishwashers contain substances or preparations classified as dangerous in accordance with the above mentioned Directives;

Whereas the ecological criteria established by this Decision include, in particular, hurdles and scores limiting to a minimum the content of substances and preparations classified as dangerous in the detergents which may be awarded an eco-label;

Whereas detergents complying with these criteria have therefore a reduced environmental impact and meet the objectives of the Community eco-label award scheme;

Whereas in accordance with the Article 6 of Regulation (EEC) N° 880/92 the Commission has consulted the principal interest groups within a consultation forum;

Whereas the Committee set up by Article 7 of Regulation (EEC) N° 880/92 has not delivered an opinion on the measures laid down in a draft Commission decision,

¹ OJ N° L 99, 11.4.1992, p. 1

² OJ N° 196, 16.8.1967, p. 1

³ OJ N° L 305, 16.11.1998, p.01-24

⁴ OJ N° L 187, 16.7.1988, p. 14.

⁵ OJ N° L 265, 18.10.1996, p. 15-17

HAS ADOPTED THIS DECISION:

Article 1

The product group “**detergents for dishwashers**” means all detergents which are intended to be used exclusively in automatic domestic dishwashers”.

Article 2

The environmental performance and the fitness for use of the product group, as defined in Article 1, shall be assessed by reference to the specific ecological and performance criteria set out in the Annex and Appendix IA, I.B., II, III and IV.

Article 3

The definition of the product group and the specific ecological criteria for the product group shall be valid for a period of three years from the first day of the month following the adoption of the criteria.

Article 4

For administrative purposes the product group code number assigned to this product group shall be "15".

Article 5

This Decision is addressed to the Member States.

Done at Brussels,

For the Council

ANNEX

FRAMEWORK

The general requirements established by Regulation (EEC) N° 880/92 on a Community eco-label award scheme and the specific criteria of this annex shall apply for the awarding of an eco-label to detergents for dishwashers.

These criteria aim at promoting:

- ◆ The reduction of water pollution both by reducing the quantity of detergent used and by limiting the quantity of harmful ingredients
- ◆ The minimisation of waste production by reducing the amount of primary packaging and promoting its re-usability and/or recyclability
- ◆ The reduction of energy use by promoting low temperature detergents

Additionally, the criteria enhance the consumers' environmental awareness.

1. FUNCTIONAL UNIT AND REFERENCE DOSAGE

1.1 Functional Unit

The functional unit shall be the quantity of product required to wash 12 place settings with a standard soil (as defined by DIN or ISO standards).

1.2 Reference Dosage

The dosage recommended by the manufacturer to consumers for normally soiled dishes and 12 place settings is taken as a reference dosage under standard conditions.

2. KEY CRITERIA

2.1 Ecological criteria on ingredients

Key parameters

The following parameters are considered:

- ◆ Total chemicals
- ◆ Critical Dilution Volume, toxicity (CDVtox)
- ◆ Phosphates (as STPP)⁽¹⁾
- ◆ Non-biodegradable organics (aerobic) (NBDO aerobic)
- ◆ Non-biodegradable organics (anaerobic) (NBDO anaerobic)

Appendix II presents the definition of the parameters used in the calculations. These parameters are calculated and expressed as g/wash or l/wash, where appropriate. They are aggregated and assessed as a whole, according to the approach presented in this document.

⁽¹⁾ Inclusion of this provisional criterion is aimed at taking into account the potential of certain detergents to contribute to eutrophication. Consideration will be given to replace this criterion with an impact based criterion when revising this decision, in the light of future developments in scientific knowledge, availability of relevant data and the factual situation.

Scoring/weighting factors

The following table summarises the selected criteria, their exclusion hurdles, their weighting factors and the maximum achievable scoring result. The scoring system formulae to be used to calculate the score in respect of each criterion are presented in point 2.3.

<input type="checkbox"/> Detergents for dishwashers' scoring/weighting calculation system								
Score	4	3	2	1	Excl. Hurdle	Weight. Factor	Sum	
Criterion								
Total chemicals	16.5	18	19.5	21	22.5	3	12	
Critical Dilution Volume, tox	60	120	180	240	250	8	32	
Phosphates (as STPP)	0	3	6	9	10	2	8	
Non-biodegradable organic (aerobic)	0	0.05	0.10	0.15	1	1	4	
Non-biodegradable organic (anaerobic)	0	0.05	0.10	0.15	0.2	1.5	6	
TOTAL								62
Minimum score required	26							

Notes:

All values are expressed in g/wash, except the CDV_{tox} value which is expressed in l/wash.

W_{factor} = weighting factor H_{EXCL} = hurdle.

2.2 Pass/fail level for awarding an eco-label

The sum of the scores related to the 5 criteria concerning the ingredients shall be equal to or greater than 26.

The exclusion hurdle value should not be exceeded on any criterion. The product shall also be in compliance with the criteria set out in other parts of this Annex.

2.3 Calculations related to ecological criteria on ingredients

Detergent Ingredient database (DID-list)

Appendix I.A presents the Detergent Ingredients Database (DID-list) which shall be used for calculations concerning the ingredient criteria. Data on loading factor, toxicity, non-biodegradability (aerobic) non-biodegradability (anaerobic) are listed for the major ingredients in Appendix I.A and these data must be used for the calculation concerning these ingredients.

The criteria:

- total chemicals
- non biodegradable (aerobic/anaerobic)
- phosphates (as STPP)

are calculated for each ingredient by considering the dosage per wash, water content and mass percentage in the formulation and they are added up for each product formulation.

The criterion on critical dilution volume toxicity is calculated for each ingredient by the equation:

CDV_{tox} :

$$CDV_{tox} = \frac{\text{dosage} * \text{loading factor}}{\text{long term effect}} * 1000$$

Procedure for the calculation of criteria and scores

For the calculation of scores, the following equations are used:

Total chemicals (TC):

If	$TC > 22.5$ g/wash	then	EXCLUSION
If	$TC \leq 21$ g/wash	then	Score = $15 - TC/1.5$
If	$22.5 \geq TC > 21$ g/wash	then	Score = 0
If	$TC \leq 16.5$ g/wash	then	Score = 4

Maximum score = 4

Critical Dilution Volume toxicity (CDV_{tox}):

If	$CDV_{tox} > 250$ l/wash	then	EXCLUSION
If	$CDV_{tox} \leq 240$ l/wash	then	Score = $5 - CDV_{tox}/60$
If	$250 \geq CDV_{tox} > 240$ l/wash	then	Score = 0
If	$CDV_{tox} \leq 60$ l/wash	then	Score = 4

Maximum score = 4

Phosphates (P):

If	$P > 10$ g/wash	then	EXCLUSION
If	$P \leq 9$ g/wash	then	Score = $4 - P/3$
If	$10 \geq P > 9$ g/wash	then	Score = 0

Maximum score = 4

Aerobic Non Biodegradable Organics (aNBDO):

If	$aNBDO > 1$ g/wash	then	EXCLUSION
If	$aNBDO \leq 0.15$ g/wash	then	Score = $4 - aNBDO/0.05$
If	$1 \geq aNBDO > 0.15$ g/wash	then	Score = 0

Maximum score = 4

Anaerobic Non Biodegradable Organics (anNBDO):

If	$anNBDO > 0.2$ g/wash	then	EXCLUSION
If	$anNBDO \leq 0.15$ g/wash	then	Score = $4 - anNBDO/0.05$
If	$0.2 \geq anNBDO > 0.15$ g/wash	then	Score = 0

Maximum score = 4

New chemical additional ingredients

(a) In the case of new chemicals or additional ingredients which are not listed in the detergent ingredient database the approach described here in Appendix I.B shall be followed.

Experimental data have to be submitted by the applicant to the Competent Body.

The data on anaerobic biodegradability (ECETOC test No 28, June 1988) have to be provided.

All the available documentation has to be provided concerning the data which are presented on biodegradation, removal, long-term effects (NOEC data) on fish, *daphnia magna*, algae.

The reference for the relevant tests shall be the appropriate Annexes of Council Directive 67/548/EEC.⁽¹⁾

The provisions of Appendix I.B. shall apply, as appropriate.

(1) OJ N° L 196, 16.8.1967, p.1

In particular, if complete data concerning long-term effects (NOEC) are not available, the relevant simplified procedures described in Appendix I.B, may be applied.

(b) A different approach may be followed if it is recognised by the Commission to be equivalent to the one referred to above, for the specific objectives of assessing compliance with the relevant criteria, at the request of a Competent Body or an interest group represented in the eco-label Consultation Forum (Article 6 of Regulation (EEC) No 880/92).

2.4 Other ecological criteria related to ingredients

Certain specific ingredients shall not exceed a maximum content in the detergent formulation or are excluded as specified below:

(a) the surfactant alkylphenoxylate (APEO), the perfumes containing the aromatic nitro compounds referred to in Appendix II, the complex formation agent EDTA and ingredients⁽¹⁾ classified as carcinogenic, mutagenic or teratogenic as defined in Directives 67/548/EEC and 88/379/EEC are excluded;

(b) phosphonates shall not exceed 0.2 g/wash;

(c) total chlorine compounds shall not exceed 0.1%.⁽²⁾

2.5 Ecological criteria on product packaging

Only primary packaging is considered. The packaging may not exceed 2.5 grams per functional unit. The packaging should be made of re-usable and/or recyclable materials. The cardboard packaging shall be 80% recycled material and the plastic packaging shall be labelled according to ISO 1043.

3. PERFORMANCE CRITERIA

The product shall have a satisfactory washing performance at the recommended dosage according to the standard test developed by IKW. It should work best at 55°C or at lower temperature. This has to be documented by the manufacturer.

4. TESTING

4.1 Test on purity of enzymes to verify the absence of production organisms

A test on the purity of enzymes has to be performed on enzymes that are produced by biotechnological processes and used in detergents for dishwashers applying for the eco-label. It is the aim of this test to ensure that production organisms are not contained in the final enzyme preparation.

The growth of micro-organisms is tested together with specific antibiotics. The test procedure on purity must ensure that no production organism is detected in a 20-ml standard test sample of the final enzyme product.

4.2 Testing laboratories

The testing shall be performed at the expense of the applicant by laboratories that meet the general requirements laid out in the EN 45001 standards or any equivalent systems.

(1) "Ingredients" means either substances or preparations.

(2) On the occasion of the future revision of the criteria, particular attention will be given to the issue of chlorine compounds with a view to considering their ultimate exclusion.

5. CONSUMER INFORMATION

5.1 Information on the packaging

The following information shall appear on the product:

"As a general rule:

- use detergents that work at temperatures lower than 65°C,
- select low temperature washing cycles on the dishwasher,
- wash full loads,
- do not exceed the recommended dosage.
- this will minimise both energy and water consumption and reduce water pollution".

"This product has been awarded the European Union eco-label because it helps to reduce water pollution, waste production and energy consumption".

For more information about the EU eco-label, contact the European Commission:

On internet: <http://europa.eu.int/ecolabel>

By mail: European Commission DGXI E4

Rue de la Loi 200, B-1049 Bruxelles/Wetstraat 200, B-1049 Brussel-Belgium

5.2 Dosage instructions

Dosage instructions shall appear on the product packages. The recommended dosages must be specified for "normally" and "heavily" soiled dishes. The instructions shall specify how to make best use of the product according to the soil.

5.3 Information and labelling of ingredients

Commission recommendation 89/542/EEC of 13 September 1989 concerning the labelling of detergents and cleaning agents⁽¹⁾ must be applied:

The following groups of ingredients shall be labelled:

- Enzymes: indication of the type of enzymes
- Preservation agents: characterisation and labelling according to IUPAC nomenclature
- If the product contains perfume, it shall be indicated on the packaging.

⁽¹⁾ OJ N° L291, 10.10.1989, p.55.

DETERGENT INGREDIENTS DATABASE AND APPROACH TO BE FOLLOWED FOR INGREDIENTS NOT LISTED IN THE DATABASE

A. The data given below on the most commonly used detergent ingredients are to be used for the calculation of the ecological criteria (see following table):

Y = Yes

CF = correction factor, to be applied to the dosage
expressed in g/wash

O = not to be used

NOEC = Non Observed Measured Concentration

LTE = Long Term Effect

THOD = Theoretical Oxygen Demand

DETERGENT INGREDIENTS DATABASE

DID N°	INGREDIENTS	Toxicity		Loading Factor	Anaerobic Non Biodegradable	Aerobic Non Biodegradable	Soluble Inorganics	Insoluble Inorganics	THOD
		NOEC measured	LTE						
ANIONIC SURFACTANTS									
1	C 10-13 LAS (NA O 11.5-11.8, C 14 < 1 %)	0,3	0,3	0,05	Y, CF = 0,75	0	0	0	2,3
2	Other LAS (C14 > 1 %)	0,12	0,12	0,05	Y, CF = 1,5	0	0	0	2,3
3	C 14/17 Alkylsulfonate	0,27	0,27	0,03	Y, CF = 0,75	0	0	0	2,5
4	C8 /10 Alkylsulphate	EC50=2,9	0,15	0,02	0	0	0	0	1,9
5	C 12/15 AS	0,1	0,1	0,02	0	0	0	0	2,2
6	C 12/18 AS	LC50 = 3	0,15	0,02	0	0	0	0	2,3
7	C 16-18 FAS	0,55	0,55	0,02	0	0	0	0	2,5
8	C12/15 A 1-3 EO sulfate	0,15	0,15	0,03	0	0	0	0	2,1
9	C 16/18 A 3-4 EO sulfate	no valid data	0,1	0,03	0	0	0	0	2,2
10	C8-Dialkylsulfosuccinate	LC50 = 7,5	0,4	0,5	Y, CF = 1,5	0	0	0	2
11	C 12/14 sulpho-fat.-acid methylester	EC50=5	0,25	0,05	Y, CF = 0,75	0	0	0	2,1
12	C 16/18 sulpho-fat.-acid methylester	0,15	0,15	0,05	Y, CF = 0,75	0	0	0	2,3
13	C 14/16 alpha olefine sulphonate	LC50=2,5	0,13	0,05	Y, CF = 0,75	0	0	0	2,3
14	C 14-18 alpha olefine sulphonate	LC50=1,4	0,07	0,05	Y, CF = 2,0	0	0	0	2,4
15	C12-22 SOAPS	ECO=1,6	1,6	0,05	0	0	0	0	2,9
NON IONIC SURFACTANTS									
16	C 9/11 A > 3-6 EO lin. or mono br.	EC50=3,3	0,7	0,03	0	0	0	0	2,4
17	C 9/11 A > 6-9 EO lin. or mono br.	EC50=5,4	1,1	0,03	0	0	0	0	2,2
18	C 12-15 A 2-6 EO lin. or mono br.	0,18	0,18	0,03	0	0	0	0	2,5
19	C 12-15 (Avg. C<14) A > 6-9 EO lin. or mono br.	0,24	0,24	0,03	0	0	0	0	2,3
20	C 12-15 (Avg. C>14) A > 6-9 EO lin. or mono br.	0,17	0,17	0,03	0	0	0	0	2,3
21	C 12-15 A > 9-12 EO	LC50=0,8	0,3	0,03	0	0	0	0	2,2
22	C 12-15 A > 20-30 EO	EC50=13	0,65	0,05	0	0	0	0	2
23	C 12-15 A > 30 EO	LC50=130	6,5	0,75	0	Y	0	0	0*
24	C 12/18 A 0-3 EO	no data	0,01	0,03	0	0	0	0	2,9
25	C 12-18 A 9 EO	0,2	0,2	0,03	0	0	0	0	2,4

DID N°	INGREDIENTS	Toxicity		Loading Factor	Anaerobic Non Biodegradable	Aerobic Non Biodegradable	Soluble Inorganics	Insoluble Inorganics	THOD
		NOEC measured	LTE						
26	C 16/18 A 2-6 EO	0,03	0,03	0,03	0	0	0	0	2,6
27	C 16/18 A > 9-12 EO	LC50 = 0,5	0,05	0,03	0	0	0	0	2,3
28	C 16/18 A 20-30 EO	EC50=18	0,36	0,05	0	0	0	0	2,1
29	C 16/18 A > 30 EO	LC50=50	2,5	0,75	0	Y	0	0	0*
30	C 12/14 Glucose Amide	4,3	4,3	0,03	0	0	0	0	2,2
31	C 16/18 Glucose Amide	0,116	0,116	0,03	0	0	0	0	2,5
32	C 12/14 Alkylpolyglucoside	1	1	0,03	0	0	0	0	2,3
AMPHOTERIC SURFACTANTS									
33	C 12-15 Alkyldimethylbetaine	0,03	0,03	0,05	Y, CF = 2,5	0	0	0	2,9
34	Alkyl (C 12-18) amidopropylbetaine	0,03	0,03	0,05	Y, CF = 2,5	0	0	0	2,8
SUD CONTROLLERS									
35	Silicone	EC50=241	4,82	0,4	Y, CF = 0,75	Y	0	0	0,0
36	Paraffin	no data	100	0,4	0	Y	0	0	0*
FABRIC SOFTENING									
37	Glycerol	LC50>5-10 gl	1000	0,13	0	0	0	0	1,2
BUILDERS									
38	Phosphate as STPP		1000	0,6	0	0	Y	0	0,0
39	Zeolite A	120	120	0,05	0	0	0	Y	0,0
40	Citrate	EC50 = 85	85	0,07	0	0	0	0	0,6
41	Polycarboxylates and related derivates	124	124	0,4	Y, CF = 0,1	Y	0	0	0*
42	Clay		1000	0,05	0	0	0	Y	0,0
43	Carbonate/Bicarbonate	LC50=250	250	0,8	0	0	Y	0	0,0
44	Fatty acid (C >= 14)	EC0=1,6	1,6	0,05	0	0	0	0	2,9
45	Silicate/Disilicate	EC50>1000	1000	0,8	0	0	Y	0	0,0
46	NTA	19	19	0,13	0	0	0	0	0,6
47	Polyaspartic acid, Na salt	125	12,5	0,13	Y,CF = 0,1	0	0	0	1,2
BLEACHING									
48	Perborate mono (as borate)	1-10	6	1	0	0	Y	0	0,0
49	Perborate tetra (as borate)	1-10	6	1	0	0	Y	0	0,0
50	Percarbonate (see carbonate)	LC50=250	250	0,8	0	0	Y	0	0,0
51	TAED	EC0=500	EC0 = 500	0,13	0	0	0	0	2,0
SOLVENTS									
52	C 1 - C 4 alcohols	LC50=8000	100	0,13	0	0	0	0	2,3
53	Monoethanolamine	0,78	0,78	0,13	0	0	0	0	2,7
54	Diethanolamine	0,78	0,78	0,13	0	0	0	0	2,3
55	Triethanolamine	0,78	0,78	0,13	0	0	0	0	2

DID N°	INGREDIENTS	Toxicity		Loading Factor	Anaerobic Non Biodegradable	Aerobic Non Biodegradable	Soluble Inorganics	Insoluble Inorganics	THOD
		NOEC measured	LTE						
MISCELLANEOUS									
56	Polyvinylpyrrolidon (PVP/PVNO/PVPVT)	EC50>100	100	0,75	Y, CF = 0,1	Y	0	0	0*
57	Phosphonates	7,4	7	0,4	Y, CF = 0,5	Y	0	0	0*
58	EDTA	LOEC=11	11	1	Y, CF = 0,1	Y	0	0	0*
59	CMC	LC50>250	250	0,75	Y, CF = 0,1	Y	0	0	0*
60	Na Sulphate	EC50 = 2460	1000	1	0	0	Y	0	0,0
61	Mg Sulphate	EC50=788	800	1	0	0	Y	0	0,0
62	Na Chloride	EC50=650	650	1	0	0	Y	0	0,0
63	Urea	LC50>10000	100	0,13	0	0	0	0	2,1
64	Maleic acid	LC50=106	2,1	0,13	0	0	0	0	0,8
65	Malic acid	LC50=106	2,1	0,13	0	0	0	0	0,6
66	Ca formiate		100	0,13	0	0	0	0	2,0
67	Silica		100	0,05	0	0	0	Y	0,0
68	High MW polymers PEG > 4000		100	0,4	0	Y	0	0	0*
69	Low MW polymers PEG < 4000		100	0,13	0	0	0	0	1,1
70	Cumene sulphonate	LC50=66	6,6	0,13	Y, CF = 0,25	0	0	0	1,7
71	Xylene sulphonate	LC50=66	6,6	0,13	Y, CF = 0,25	0	0	0	1,6
72	Toluene sulphonate	LC50=66	6,6	0,13	Y, CF = 0,25	0	0	0	1,4
73	Na-/Mg-/KOH		100	1	0	0	Y	0	0,0
74	Enzymes	LC50=25	25	0,13	0	0	0	0	2,0
75	Perfumes mixtures as used	LC50=2-10	0,02	0,1	Y, CF = 3,0	Y	0	0	0*
76	Dyes	LC50=10	0,1	0,4	Y, CF = 3,0	Y	0	0	0*
77	Starch	no data	250	0,1	0	0	0	0	0,97
78	Zn Phtalocyanine sulphonate	NOEC=0,16	0,016	0,07**	Y, CF = 2,5	Y	0	0	0*
79	Anionic Polyester (Soil Release Polyester)	NOEC=310	310	0,4	Y, CF = 0,1	Y	0	0	0*
80	Iminodisuccinate	23	2,3	0,13	Y, CF = 0,25	0	0	0	1,1
OPTICAL BRIGHTENERS = FWA									
81	FWA 1 *	LC0=10	1,0	0,4	Y, CF = 1,5	Y	0	0	0*
82	FWA 5 *	3,13	3,13	0,4	Y, CF = 0,5	Y	0	0	0*
ADDITIONAL INGREDIENTS									
83	Alkyl Aminoxides (C 12-18)	EC0=0,08	0,08	0,05	Y, CF = 2,5	0	0	0	3,2
84	Glycereth (C 6 - 17) EO cocoate	EC50=32	1,6	0,05	0	0	0	0	2,1
85	Phosphate esters (C 12-18)	EC50=38	1,9	0,05	Y, CF = 0,25	0	0	0	2,3

* FWA 1 = Disodium 4,4'-bis (4-anilino-5-morpholino-1,3,5-triazin-2-yl) amino stilbene-2,2'-disulphonate

* FWA 2 = Disodium 4,4'-bis (2-sulfostyryl) biphenyl

0* = ThOD for aerobic non degradable organic substances is set to zero.

** = Rapid photodegradation

B. The following approach applies, as appropriate in the case of ingredients that are not listed on the DID-list

Aquatic toxicity

The lowest validated long-term effect (LTE) data on fish, *daphnia magna* or algae should be considered for the calculation of the critical dilution volume criterion (toxicity).

In cases where data on homologues and/or QSARs (Quantitative Structure Activity Relationships) are used, a correction could be considered for the finally selected LTE data.

In the absence of LTE data the following procedure has to be applied in order to estimate the LTE data by using the specified uncertainty factor (UF) on the data of the most sensitive species:

Non surfactants

DATA AVAILABLE	UF TO BE USED
At least 2 acute LC ₅₀ on fish or <i>daphnia</i> or algae	100
1 NOEC on fish or <i>daphnia</i> or algae	10
2 NOEC on fish or <i>daphnia</i> or algae	5
3 NOEC on fish, <i>daphnia</i> or algae	1
	Take lowest validated NOEC

Deviation from this rule may be admitted if evidence can be provided that lower factors or data can be scientifically justified.

Surfactants

DATA AVAILABLE	UF TO BE USED
At least 2 NOECs on fish or <i>daphnia</i> or algae	1 (lowest NOEC)
1 NOEC on fish or <i>daphnia</i> or algae	1 (NOEC-if species is most sensitive in acute toxicity) 10 (NOEC-if species is not the most sensitive in acute toxicity)
3 LC ₅₀ on fish or <i>daphnia</i> or algae	20 (lowest LC ₅₀)
At least 1 LC ₅₀ on fish, <i>daphnia</i> or algae	50 (lowest LC ₅₀) or 20 in specific cases (see below)

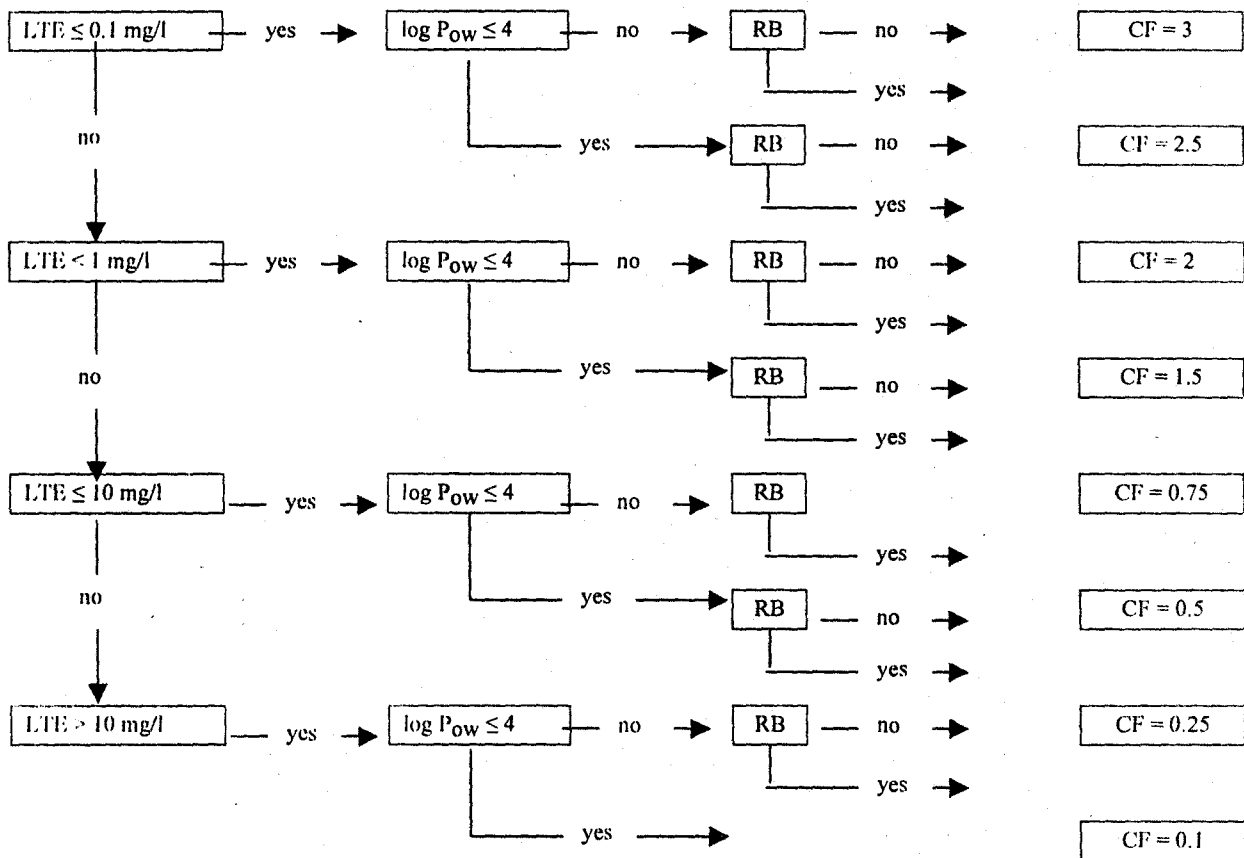
In the last case referred to above, an uncertainty factor of 20 may be used instead of 50 only if 1-2 L(E)C₅₀ (LC₅₀ in case of fish toxicity, EC₅₀ in case of *daphnia* or algal toxicity) data are available and if it can be concluded from the information for other compounds that the most sensitive species have been tested. Such a rule can be applied only within a group of homologues. It should be emphasised that the LTEs (long-term effects) used must be consistent within a group of homologues with respect to the influence of e.g. length of alkyl chain for LAS (linear alkylbenzene sulphonate) or number of EO (ethoxy groups) for alcohol-ethoxylate if such QSARs can be established.

Any deviation from the above described scheme has to be well-reasoned for the specific chemical.

Loading factors

Loading factors shall be established according to Commission Directive 93/67/EEC⁽¹⁾ of 20 July 1993 laying down the principles for assessment of risk to man and the environment of substances notified in accordance with Council Directive 67/548/EEC and to Council Regulation (EEC) No 793/93⁽²⁾.

Non-biodegradable organics (anaerobic): flow diagram to define correction factors (CF)⁽³⁾



RB: ready aerobic biodegradability
 LTE: long-term effect
 CF: correction factor

(1) OJ No L 227, 8.9.1993, p.9

(2) OJ No L 84, 5.4.1993, p.1

(3) The correction factors are to be established on the basis of the ingredient properties and applied to the dosage expressed in g/wash.

DEFINITIONS RELATED TO THE ECOLOGICAL CRITERIA

1. Total chemicals

Total chemicals are the dosage minus water content in g/wash.

2. Critical Dilution Volume toxicity (CDV_{tox})

The CDV_{tox} is calculated for each ingredient i in the formulation according to the respective data for loading factors (LF) and long-term effects (LTE) in the DID-list in l/wash:

$$CDV_{TOX}(\text{ingredient } i) = \frac{\text{weight / wash}(i) * LF(i) * 1000}{LTE(i)}$$

The CDV_{tox} of the product is the sum of all ingredients CDV_{tox} in l/wash

3. Phosphates (as STPP)

Weight per wash of all inorganic phosphates expressed as STPP, in g/wash.

4. Non-biodegradable organics (aerobic)

Weight per wash of all ingredients which are aerobically non-biodegradable organics (see DID-list) in g/wash.

5. Non-biodegradable organics (anaerobic)

Weight per wash of all ingredients which are anaerobically non-biodegradable using respective correction factors (see DID-list) in g/wash.

6. Nitro musk

Musk xylene: 5-tert-butyl-2,4,6-trinitro-m-xylene

Musk ambrette: 4-tert-butyl-3-methoxy-2,6-dinitrotoluene

Muskene: 1,1,3,3,5-pentamethyl-4,6-dinitroindan

Musk tibetine: 1-tert-butyl-3,4,5-trimethyl-2,6-dinitrobenzene

Musk ketone: 4'-tert-butyl-2',6'-dimethyl-3',5'-dinitroacetaphenone

Data and information to be required from the applicant by the competent body receiving the application for an eco-label

1.1. Declaration of product formulation and calculation of criteria

The competent body shall require from the manufacturer applying for the eco-label submission of:

- the exact formulation of the product,
- the exact chemical description of ingredients (e.g. identification according to IUPAC, CAS No, sum and structural formulae, purity, type and percentage of impurities, additives; for mixtures, e.g. surfactants: DID number, composition and spectrum of distribution homologues, isomers, and trade names); analytical evidence of the composition of surfactants,
- the exact tonnage of product which is put on the market (reporting on 1 March, related to the year before);
- the detailed calculation of the criteria,
- a summary test report on the purity of enzymes according to point 4 of the Annex to this Decision and a certification on the non-content of production organisms has to be provided,
- A declaration that:
 - The product does not contain the surfactant alkylphenoxylate (APEO), the perfumes containing the aromatic nitro compounds referred to in Appendix II, the complex formation agent EDTA and ingredients classified as carcinogenic, mutagenic or teratogenic as defined in Directives 67/548/EEC and 88/379/EEC.
 - Phosphonates do not exceed 0.2g/wash.

1.2 Washing performance test

The applicant shall submit the results of the washing performance test to the Competent Body.

1.3 Dosage equipment, packaging and consumer information

In order to prove compliance with the above-mentioned requirements, the packages of the product and dosage device shall be required by the competent body from the applicant for the product considered.

In case of differences with respect to different national markets, and different packaging sizes, all these data will be required.

1.4 Application for the eco-label on detergents

The national competent body may audit the applying company on site and visit the production and packaging facilities.

The competent body itself shall ensure that applications are presented according to the relevant requirements of Regulation (EEC) No 880/92 and the procedural requirements.

TABLE OF ABBREVIATIONS

APEO:	Alkyl phenol ethoxylates
BCF:	Bio-concentration factors in fish
CDV _{tox} :	Critical Dilution Volume (toxicity)
CEN:	European Standards Organisation
CF:	Correction factor
DIN	Deutsches Institut für Normung
EOs:	Ethoxy groups
EC ₅₀ :	Effect concentration (concentration at which 50% of the organisms show an effect in defined time)
ECETOC:	European Centre for Ecotoxicology and Toxicology of Chemicals
EDTA:	Ethylene diamine tetra acetate
EN:	European Standard
H _{EXCL} :	Exclusion Hurdle
IUPAC:	International Union of Pure and Applied Chemistry
ISO:	International Standards Organisation
LF	Loading Factor
LC ₅₀ :	Lethal concentration (concentration at which 50% of test organisms show lethal effect in defined time)
LTE:	Long-term effect
NOEC:	No Observed Effect Concentration (in a chronic test)
P _{ow}	Partition Coefficient Octanol/water
QSARs:	Quantitative structure activity relationships
RB:	Ready biodegradability
STPP:	Sodium tripolyphosphate
THOD:	Theoretical oxygen demand
UF:	Uncertainty factor
WF:	Weighting factor

IMPACT ASSESSMENT SHEET

IMPACT OF THE PROPOSAL ON BUSINESSES AND, IN PARTICULAR, SMALL AND MEDIUM-SIZED BUSINESSES (SMB)

Title of the proposal: Proposal for a Council Decision laying down ecological criteria for awarding of the European ecological label to dishwasher detergents.

Document reference No:

The proposal

1. In view of the subsidiarity principle why is Community legislation needed in this area and what are its principal aims?

Council Regulation (EEC) No 880/92 which establishes a Community system for the awarding of ecological labels enables consumers to identify the most environmentally-friendly consumer products throughout Europe. By introducing a single label throughout the Union the European eco-label is able to assure manufacturers that their products will be recognised throughout Europe.

Impact on businesses

2. Who will be affected by the proposal?
 - Which business sectors?: **dishwasher detergent manufacturers;**
 - What company sizes (share taken by small and medium-sized companies)?: **medium-sized (generally less than 200 employees), and large companies**
 - Are such companies located in any particular geographical areas within the Community?: **no**
3. What action will companies have to take in order to comply with the proposal? **IF THEY WISH to receive the European eco-label companies will have to meet the ecological and performance criteria.**
4. What economic effects is the proposal likely to have:
 - on jobs? **none**
 - on investments and the creation of new companies? **Possible expansion of new investment in more environmental processes**
 - on company competitiveness?: **possible boost to competitiveness.**
5. Does the proposal contain any activities that are likely to take account of the specific situation as regards small and medium-sized businesses (lesser or different requirements, etc.)? **The ecological criteria and tests required in order to obtain**

the label are defined in such a way that SMBs may obtain the eco-label without incurring prohibitive costs.

Consultation

6. List of the bodies having been consulted on the proposal, and description of the basic features of their attitudes.

(1) Environment: EEB: European Environmental Bureau

The EEB has generally expressed a favourable view on the proposal but would like total exclusion of chlorinated compounds and a regular updating of the list of ingredients (DID list).

(2) Trade: ETUC

Request for biennial revision of the list of ingredients (DID list).

(3) Consumers: COFACE

COFACE is generally in favour of the proposal but asks for the total exclusion of chlorinated compounds and specific treatment for allergy risks.

(4) Industry: UNICE, CEFIC

The chemicals industry (suppliers of raw materials) is not in favour of the proposal since it considers that the threshold for chlorinated compounds is too stringent.

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DOCUMENTS

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