

COMMISSION DECISION

of 27 June 2001

establishing the ecological criteria for the award of the Community eco-label to all-purpose cleaners and cleaners for sanitary facilities

(notified under document number C(2001) 1670)

(Text with EEA relevance)

(2001/523/EC)

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 scheme ⁽¹⁾, and in particular Articles 3, 4 and 6 thereof,

Whereas:

- (1) Article 3 of Regulation (EC) No 1980/2000 provides that the 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) Article 4 of Regulation (EC) No 1980/2000 provides that specific eco-label criteria shall be established according to product groups.
- (3) The measures set out in this Decision have been developed and adopted under the procedures for the setting of eco-label criteria as laid down in Article 6 of Regulation (EC) No 1980/2000.
- (4) The measures set out in this Decision are in accordance with the opinion of the committee set up under Article 17 of Regulation (EC) No 1980/2000,

HAS ADOPTED THIS DECISION:

Article 1

The product group 'all-purpose cleaners and cleaners for sanitary facilities' (hereinafter referred to as 'the product group') shall be subdivided into two subgroups, which are defined as follows:

all-purpose cleaners: detergent products intended for the routine cleaning of floors, walls, ceilings and other fixed surfaces, and which are dissolved or diluted in water prior to use,

cleaners for sanitary facilities: detergent products intended for the routine removal (including by scouring) of dirt and/or deposits in sanitary facilities, such as laundry rooms, bath-

rooms, showers, toilets and kitchens. Products which are automatically used when a toilet is flushed, for example 'self-dosing-products' such as toilet blocks, or products for use in a toilet's cistern, are not included. Products which have no cleaning effects other than calcium carbonate (scale) removal are not included. Disinfectants are not included.

Products for more specific cleaning uses, such as oven or window cleaners, floor-strippers, polishes, drain cleaners, etc. are not included.

The product group includes not only products which can be used by private consumers but also those products which can be used professionally.

Article 2

The environmental performance and the fitness for use of the product group shall be assessed by reference to the criteria set out in the Annex and its appendix.

Article 3

The product group definition and the criteria for the product group shall be valid for three years from the date on which this Decision takes effect. If revised ecological criteria have not been adopted before the end of this period, their validity shall be extended for a further year.

Article 4

For administrative purposes the code number assigned to the product group shall be '020'.

Article 5

This Decision is addressed to the Member States.

Done at Brussels, 27 June 2001.

For the Commission

Margot WALLSTRÖM

Member of the Commission

⁽¹⁾ OJ L 237, 21.9.2000, p. 1.

ANNEX

FRAMEWORK

In order to qualify for the eco-label, an all purpose cleaner or a cleaner for sanitary facilities (hereinafter referred to as 'the product') must fall within the product group as defined in Article 1, and must comply with the criteria of this Annex, with tests carried out on application as indicated in the criteria and the technical appendix. Where appropriate, other test methods may be used if their equivalence is accepted by the Competent Body or Bodies assessing the application (hereinafter referred to as the 'Competent Body'). Competent Bodies should recognise tests and verification performed by bodies which are accredited under the standards of EN 45 000 series or equivalent international standards. Where no tests are mentioned, or are mentioned as being for use in verification or monitoring, Competent Bodies should rely as appropriate on declarations and documentation provided by the applicant and/or independent verifications. Where it is indicated that specific documentation and/or declarations are required, these shall be provided by the applicant and/or the manufacturer(s) and/or the supplier(s) as appropriate. Where ingredients are referred to, this includes substances and preparations.

The Competent Bodies are recommended to take into account the implementation of recognised environmental management schemes, such as EMAS or ISO 14001, when assessing applications and monitoring compliance with the criteria in this Annex (Note: it is not required to implement such management schemes.)

These criteria aim at promoting:

- the reduction of environmental impact by limiting the quantity of harmful ingredients, by reducing the quantity of detergent used and by reducing packaging waste,
- the reduction or prevention of risks for the environment and for human health related to the use of hazardous substances,
- information that will enable the consumer to use the product in the way that is efficient and minimises environmental impact.

The criteria are set at levels that promote the labelling of all-purpose cleaners and sanitary cleaners that have a low environmental impact.

FUNCTIONAL UNIT

For all purpose cleaners the functional unit (used in the criteria below) is the dosage in grams of the product recommended by the manufacturer for 1 litre of suds (washing water).

For cleaners for sanitary facilities, no functional unit is defined (the relevant criteria below being calculated in relation to 100 g of the product).

ECOLOGICAL CRITERIA

1. Eco-toxicity and biodegradability

The critical dilution volume toxicity (CDV_{tox}) is calculated for each ingredient (i) using the following equation:

$$CDV_{tox}(\text{ingredient } i) = \frac{\text{weight } (i) \times LF (i)}{LTE (i)} \times 1\,000$$

where weight (i) is the weight of the ingredient per functional unit (for all purpose cleaners) or per 100 g of product (cleaners for sanitary facilities), LF is the loading factor and LTE is the long-term toxicity effect concentration of the ingredient. The values of the LF and LTE parameters shall be as given in the detergent ingredient database list (DID list) in point A of the appendix. If the ingredient in question is not included in the DID list, the applicant shall estimate the values following the approach described in point B of the appendix. The CDV_{tox} is summed for each ingredient, making the CDV_{tox} for the product.

For all-purpose cleaners, the CDV_{tox} for the product shall not exceed 400 l/functional unit.

For cleaners for sanitary facilities, the CDV_{tox} for the product shall not exceed 4000 l/100 g product.

The exact formulation of the product shall be provided to the Competent Body, together with the details of the CDV_{tox} calculations showing compliance with this criterion.

2. Phosphorus and phosphonates

The total quantity of elemental phosphorous in the product shall be calculated per functional unit (for all purpose cleaners) or per 100 g of product (cleaners for sanitary facilities) taking into account all ingredients containing phosphorus.

For all-purpose cleaners, the total phosphorus content (P) shall not exceed 0,2 g/functional unit.

For cleaners for sanitary facilities, the total phosphorus content (P) shall not exceed 2 g/100 g of product

Phosphonates (calculated as P) shall not exceed 0,02 g/functional unit in all-purpose cleaners and shall not exceed 0,2 g/100 g of product in cleaners for sanitary facilities.

The exact formulation of the product shall be provided to the Competent Body, together with the details of the calculations showing compliance with this criterion.

3. Anaerobic biodegradability of surfactants

Each surfactant used in the product shall be biodegradable under anaerobic conditions.

The exact formulation of the product shall be provided. The DID list (see point A of the appendix) indicates whether a specific surfactant is anaerobically biodegradable or not (i.e. those that have an entry of 'Y' in the column on anaerobic biodegradability shall not be used). For surfactants which are not included in the DID list, the relevant information from literature or other sources, or appropriate test results, showing that they are anaerobically biodegradable shall be provided. The reference test for anaerobic degradability shall be ISO 11734, ECETOC No 28 (June 1988) or equivalent test method, with the requirement of a minimum of 60 % degradability under anaerobic conditions.

4. Dangerous, hazardous or toxic substances or preparations

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

- alkylphenoethoxylates (APEOs)
- nitromusks and polycyclic musks, including for example:
 - musk xylene: 5-tert-butyl-2,4,6-trinitro-m-xylene
 - musk ambrette: 4-tert-butyl-3-methoxy-2,6-dinitrotoluene
 - moskene: 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
 - HHCB: 1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylcyclopenta(g)-2-benzopyran
 - AHTN: 6-Acetyl-1,1,2,4,4,7-hexamethyltetralin
- EDTA (ethylene-diamine-tetra-acetate)
- NTA (nitrilo-tri-acetate)
- quaternary ammonium compounds
- glutaraldehyde.

The exact formulation of the product shall be provided to the Competent Body, together with a declaration that none of the above substances have been included in the product, either as individual ingredient or as part of any preparation included in the formulation.

(b) No ingredient shall be included in the product that is classified as:

- R31 (contact with acid liberates toxic gas),
- R40 (limited evidence of a carcinogenic effect),
- R45 (may cause cancer),
- R46 (may cause heritable genetic damage),
- R49 (may cause cancer by inhalation),
- R68 (possible risks of irreversible effects)
- R50+53 (very toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment),
- R 51+53 (toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment),
- R59 (dangerous to the ozone layer),

- R60 (may impair fertility),
 R61 (may cause harm to the unborn child),
 R62 (possible risk of impaired fertility),
 R63 (possible risk of harm to the unborn child),
 R64 (may cause harm to breastfed babies),

or any combination thereof, according to 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 substances ⁽¹⁾, and its subsequent amendments, or according to Directive 1999/45/EC of the European Parliament and of the Council of 31 May 1999 concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations ⁽²⁾, and its subsequent amendments.

Each ingredient of any preparation used in the formulation that exceeds 0,1 % by weight of the preparation shall also meet the above requirement.

Biocides that are used to preserve the product (as allowed under the criterion on biocides below), and that are classified as R50 + 53 or R51 + 53 are nevertheless permitted, but only if they are not potentially bio-accumulative. In this context, a biocide is considered to be potentially bio-accumulative if the $\log P_{ow}$ (log octanol/water partition coefficient) $\geq 3,0$ (unless the experimentally determined BCF ≤ 100).

The exact formulation of the product shall be provided to the Competent Body, together with copies of the material safety data sheets of each ingredient which shall indicate the classification or lack thereof of each ingredient, and a declaration that none of the above substances have been included in the product.

Similarly the suppliers of any preparation used in the formulation shall provide a declaration that their preparation complies with the above requirements.

5. Volatile organic compounds

The product shall not contain more than 10 % (by weight) of volatile organic compounds with a boiling point lower than 150 °C.

The exact formulation of the product shall be provided, together with copies of the material safety data sheets of each organic ingredient and a declaration of compliance with this criterion.

6. Dyes or colouring agents

Any dyes or colouring agents used in the product must be permitted by Council Directive 76/768/EEC of 27 July 1976 on the approximation of the laws of the Member States relating to cosmetic products ⁽³⁾ and its subsequent amendments.

A declaration of compliance with this criterion shall be provided to the Competent Body, together with a full list of all dyes or colouring agents used shall be provided.

7. Fragrances

(a) The product shall not contain perfumes containing nitro-musks or polycyclic musks, as specified in the criterion above.

(b) If the product contains one or more of the following fragrances, this shall be clearly indicated on the packaging, mentioning the name or names of the fragrances concerned:

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

⁽¹⁾ OJ 196, 16.8.1967, p. 1.

⁽²⁾ OJ L 200, 31.5.1999, p. 1.

⁽³⁾ OJ L 262, 27.9.1976, p. 169.

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

A declaration of compliance with each part of this criterion shall be provided to the Competent Body.

8. Sensitising substances

The product shall not be classified as R42 (may cause sensitisation by inhalation) and/or R43 (may cause sensitisation by skin contact) according to Directive 1999/45/EC.

The exact formulation of the product shall be provided to the Competent Body, together with copies of the material safety data sheets of each ingredient which shall indicate the relevant classification or lack thereof of each ingredient, and also a declaration of compliance with this criterion.

9. Biocides

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

The exact formulation of the product shall be provided, together with copies of the material safety data sheets of any preservatives added, as well as information on the dosage necessary to preserve the product. A declaration of compliance with this criterion shall also be provided.

- (b) It is prohibited to claim or suggest on the packaging or by any other communication that the product has an antimicrobial action.

The texts and layouts used on each type of packaging and/or an example of each different type of packaging shall be provided to the Competent Body, together with a declaration of compliance with this criterion.

10. Packaging requirements

- (a) For all-purpose cleaners, the water content shall be $\leq 90\%$ (w/w) (in order to minimise packaging material).

- (b) Sprays containing propellants may not be used.

- (c) Plastics shall be marked according to Directive 94/62/EC of the European Parliament and of the Council of 20 December 1994 on packaging and packaging waste⁽¹⁾, or DIN 6120 Parts 1 and 2 in connection with DIN 7728 part 1.

- (d) If the primary packaging is made of recycled material, any indication of this on the packaging shall be in conformity with the ISO 14021 standard 'Environmental labels and declarations — Self declared claims (type II environmental labelling)'.

- (e) The primary packaging parts shall be easily separable into mono-material parts.

The exact formulation of the product shall be provided to the Competent Body, together with a sample of the product packaging, including the label. A declaration of compliance with each part of this criterion shall also be provided.

FITNESS FOR USE

11. Fitness for use

The product shall be fit for use, meeting the needs of the consumers.

All relevant data shall be provided to the Competent Body. These shall at least include the results of a performance test comparing the product (at the recommended dosage) with water and with at least one other product (commonly available in the area where the eco-labelled product is to be marketed, and at its recommended dosage). The choice of the reference product(s) and test protocol used for these comparisons shall be justified. The comparative performance shall be assessed for one or more typical surfaces for which the product is promoted. The test parameters and soiling used should reflect realistic conditions, such as the use of aged fat-soil when testing kitchen cleaners and the inclusion of the parameter lime soap dispersing capacity when testing bathroom cleaners. For acidic toilet cleaners, the applicant may use, for example, the IKW test for acidic toilet cleaners published in SÖFW Journal 126 (11/2000). For all purpose cleaners the applicant may use, for example, the test method entitled 'Washing of tiled floors and grease removal from kitchen surfaces' established by CTTN-IREN.

⁽¹⁾ OJ L 365, 31.12.1994, p. 10.

CONSUMER INFORMATION**12. Information on the packaging****(a) Dosage instructions**

For all purpose cleaners, an exact dosage recommendation including a pictogram (such as a 5 l tub and number of caps with ml) shall appear on the packaging.

In the case of a concentrated cleaner for sanitary facilities, it shall be clearly indicated on the packaging that only a small quantity of the product is needed compared to normal (i.e. unconcentrated) products.

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

'Proper dosage saves costs and minimises environmental impacts'.

(b) Safety advice

The following safety advice (or equivalent text) shall appear on the product (in both text form and with an equivalent pictogram):

'Keep away from children'

'Do not mix different cleaners'

'Do not inhale the sprayed product' (Note: only for products that are packaged as sprays).

(c) Information and labelling of ingredients

Commission Recommendation 89/542/EEC of 13 September 1989 for the labelling of detergents and cleaning products ⁽¹⁾ shall be applied.

If the product contains perfumes, this shall be indicated on the packaging.

(d) Information about the eco-label

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

'For more information visit the EU eco-label web-site: <http://europa.eu.int/ecolabel>'.

A sample of the product packaging, including the label, shall be provided to the Competent Body, together with a declaration of compliance with each part of this criterion.

13. Information appearing on the eco-label

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

- reduced impact on aquatic life
- clear dosage instructions.

14. Professional training

For detergents which are used by professional users, the producer, its distributor or a third party has to offer training or training materials for cleaning staff. These shall include step-by-step instructions for proper dilution, use, disposal and the use of equipment.

A sample of training material and/or a description of training courses shall be provided to the Competent Body.

⁽¹⁾ OJ L 291, 10.10.1989, p. 55.

DETERGENTS 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 shall be used for the calculation of the ecological criteria

(Note: the parameters NBO, SI, II, THOD as well as the CF-factors for an NBO are not used within this product group)

Detergent ingredients database (DID-list; version 29.9.1998)

DID-No	Ingredients	Toxicity		Loading factor (LF)	Anaerobic non-biodegradable (a NBO)	Aerobic non-biodegradable (a NBO)	Soluble inorganics (SI)	Insoluble inorganics (II)	THOD
		NOEC measured	LTE						
	Anionic surfactants								
1	C 10-13 LAS (Na Ø 11,5-11,8, C14 < 1 %)	0,3	0,3	0,05	Y, CF = 0,75	O	O	O	2,3
2	other LAS (C 14 > 1 %)	0,12	0,12	0,05	Y, CF = 1,5	O	O	O	2,3
3	C 14/17 Alk. sulphonate	0,27	0,27	0,03	Y, CF = 0,75	O	O	O	2,5
4	C 8/10 Alkylsulphate	EC50 = 2,9	0,15	0,02	O	O	O	O	1,9
5	C 12-15 AS	0,1	0,1	0,02	O	O	O	O	2,2
6	C 12-18 AS	LC50 = 3	0,15	0,02	O	O	O	O	2,3
7	C 16/18 FAS	0,55	0,55	0,02	O	O	O	O	2,5
8	C 12-15 A 1-3 EO sulphate	0,15	0,15	0,03	O	O	O	O	2,1
9	C 16/18 A 3-4 EO sulphate	no valid data	0,1	0,03	O	O	O	O	2,2
10	C 8 Dialkylsulphosuccinate	LC50 = 7,5	0,4	0,5	Y, CF = 1,5	O	O	O	2
11	C 12/14 sulpho-fat.-acid methylester	EC50 = 5	0,25	0,05	Y, CF = 0,75	O	O	O	2,1
12	C 16/18 sulpho-fat.-acid methylester	0,15	0,15	0,05	Y, CF = 0,75	O	O	O	2,3
13	C 14/16 alpha olefine sulphonate	LC50 = 2,5	0,13	0,05	Y, CF = 0,75	O	O	O	2,3
14	C 14-18 alpha olefine sulphonate	LC50 = 1,4	0,07	0,05	Y, CF = 2,0	O	O	O	2,4
15	Soaps (C 12-22)	EC0 = 1,6	1,6	0,05	O	O	O	O	2,9

DID-No	Ingredients	Toxicity		Loading factor (LF)	Anaerobic non-biodegradable (a NBO)	Aerobic non-biodegradable (a NBO)	Soluble inorganics (SI)	Insoluble inorganics (II)	THOD
		NOEC measured	LTE						
	Nonionic surfactants								
16	C 9/11 A > 3-6 EO lin. or mono br.	EC50 = 3,3	0,7	0,03	O	O	O	O	2,4
17	C 9/11 A > 6-9 EO lin. or mono br.	EC50 = 5,4	1,1	0,03	O	O	O	O	2,2
18	C 12-15 A 2-6 EO lin. or mono br.	0,18	0,18	0,03	O	O	O	O	2,5
19	C 12-15 (Avg. C < 14) A > 6-9 EO lin. or mono br.	0,24	0,24	0,03	O	O	O	O	2,3
20	C 12-15 (Avg. C > 14) A > 6-9 EO	0,17	0,17	0,03	O	O	O	O	2,3
21	C 12-15 A > 9-12 EO	LC50 = 0,8	0,3	0,03	O	O	O	O	2,2
22	C 12-15 A 20-30 EO	EC50 = 13	0,65	0,05	O	O	O	O	2
23	C 12-15 A > 30 EO	LC50 = 130	6,5	0,75	O	Y	O	O	0 (*)
24	C 12/18 A 0-3 EO	no data	0,01	0,03	O	O	O	O	2,9
25	C 12-18 A 9 EO	0,2	0,2	0,03	O	O	O	O	2,4
26	C 16/18 A 2-6 EO	0,03	0,03	0,03	O	O	O	O	2,6
27	C 16/18 A > 9-12 EO	LC50 = 0,5	0,05	0,03	O	O	O	O	2,3
28	C 16/18 A 20-30 EO	EC50 = 18	0,36	0,05	O	O	O	O	2,1
29	C 16/18 A > 30 EO	LC50 = 50	2,5	0,75	O	Y	O	O	0 (*)
30	C 12/14 Glucose amide	4,3	4,3	0,03	O	O	O	O	2,2
31	C 16/18 Glucose amide	0,116	0,116	0,03	O	O	O	O	2,5
32	C 12/14 Alkylpolyglucoside	1	1	0,03	O	O	O	O	2,3
	Amphoteric surfactants								
33	C 12-15 Alkyl dimethylbetaine	0,03	0,03	0,05	Y, CF = 2,5	O	O	O	2,9
34	C 12-18 Alkyl amidopropylbetaine	0,03	0,03	0,05	Y, CF = 2,5	O	O	O	2,8
	Suds controllers								
35	Silicone	EC0 = 241	4,82	0,4	Y, CF = % 0,75	Y	O	O	0,0
36	Paraffin	no data	100	0,4	O	Y	O	O	0 (*)
	Fabric softening								
37	Glycerol	LC50 > 5-10 gl	1 000	0,13	O	O	O	O	1,2

DID-No	Ingredients	Toxicity		Loading factor (LF)	Anaerobic non-biodegradable (a NBO)	Aerobic non-biodegradable (a NBO)	Soluble inorganics (SI)	Insoluble inorganics (II)	THOD
		NOEC measured	LTE						
Builders									
38	Phosphate as Sodium-tri-polyphosphate (STPP)		1 000	0,6	O	O	Y	O	0,0
39	Zeolite A	120	120	0,05	O	O	O	Y	0,0
40	Citrate	EC50 = 85	85	0,07	O	O	O	O	0,6
41	Polycarboxylates and related derivates	124	124	0,4	Y, CF = 0,1	Y	O	O	0 (*)
42	Clay		1 000	0,05	O	O	O	Y	0,0
43	Carbonate/bicarbonate	LC50 = 250	250	0,8	O	O	Y	O	0,0
44	Fatty acid (C ≥ 14)	EC0 = 1,6	1,6	0,05	O	O	O	O	2,9
45	Silicate/disilicate	EC50 > 1 000	1 000	0,8	O	O	Y	O	0,0
46	NTA	19	19	0,13	O	O	O	O	0,6
47	Polyaspartic acid. Na salt	125	12,5	0,13	Y, CF = 0,1	O	O	O	1,2
Bleaching									
48	Perborate mono (as borate)	1-10	6	1	O	O	Y	O	0,0
49	Perborate tetra (as borate)	1-10	6	1	O	O	Y	O	0,0
50	percarbonate (see carbonate)	LC50 = 250	250	0,8	O	O	Y	O	0,0
51	TAED	EC0 = 500	EC0 = 500	0,13	O	O	O	O	2,0
Solvents									
52	C 1-C 4 alcohols	LC50 = 8 000	100	0,13	O	O	O	O	2,3
53	Monoethanolamine	0,78	0,78	0,13	O	O	O	O	2,4
54	Diethanolamine	0,78	0,78	0,13	O	O	O	O	2,3
55	Triethanolamine	0,78	0,78	0,13	O	O	O	O	2
Miscellaneous									
56	Polyvinylpyrrolidon (PVP/PVNO/PVPVI)	EC50 > 100	100	0,75	Y, CF = 0,1	Y	O	O	0 (*)
57	Phosphonates	7,4	7	0,4	Y, CF = 0,5	Y	O	O	0 (*)
58	EDTA	LOEC = 11	11	1	Y, CF = 0,1	Y	O	O	0 (*)

DID-No	Ingredients	Toxicity		Loading factor (LF)	Anaerobic non-biodegradable (a NBO)	Aerobic non-biodegradable (a NBO)	Soluble inorganics (SI)	Insoluble inorganics (II)	THOD
		NOEC measured	LTE						
59	CMC	LC50 > 250	250	0,75	Y, CF = 0,1	Y	O	O	0 (*)
60	Na Sulphate	EC50 = 2 460	1 000	1	O	O	Y	O	0,0
61	Mg Sulphate	EC50 = 788	800	1	O	O	Y	O	0,0
62	Na Chloride	EC50 = 650	650	1	O	O	Y	O	0,0
63	Urea	LC50 > 10 000	100	0,13	O	O	O	O	2,1
64	Maleic acid	LC50 = 106	2,1	0,13	O	O	O	O	0,8
65	Malic acid	LC50 = 106	2,1	0,13	O	O	O	O	0,6
66	Ca formiate		100	0,13	O	O	O	O	2,0
67	Silica		100	0,05	O	O	O	Y	0,0
68	High MW polymers PEG > 4 000		100	0,4	O	O	O	O	0 (*)
69	Low MW polymers PEG < 4 000		100	0,13	O	O	O	O	1,1
70	Cumene sulphonate	LC50 = 66	6,6	0,13	Y, CF = 0,25	O	O	O	1,7
71	Xylene sulphonate	LC50 = 66	6,6	0,13	Y, CF = 0,25	O	O	O	1,6
72	Toluene sulphonates	LC50 = 66	6,6	0,13	Y, CF = 0,25	O	O	O	1,4
73	Na-/Mg-/KOH		100	1	O	O	Y	O	0,0
74	Enzymes	LC50 = 25	25	0,13	O	O	O	O	2,0
75	Perfume formulation as used	LC50 = 2-10	0,02	0,1	Y, CF = 3,0	Y	O	O	0 (*)
76	Dyes	LC50 = 10	0,1	0,4	Y, CF = 3,0	Y	O	O	0 (*)
77	Starch	no data	250	0,1	O	O	O	O	0,97
78	Zn Phthalocyanine sulphonate	0,16	0,016	0,074 (**)	Y, CF = 2,5	Y	O	O	0 (*)
79	Anionic Polyester (soil release polymer)	EC50 = 310	310	0,4	Y, CF = 0,1	Y	O	O	0 (*)
80	Iminodisuccinate	23	2,3	0,13	Y, CF = 0,25	O	O	O	1,1

DID-No	Ingredients	Toxicity		Loading factor (LF)	Anaerobic non-biodegradable (a NBO)	Aerobic non-biodegradable (a NBO)	Soluble inorganics (SI)	Insoluble inorganics (II)	THOD
		NOEC measured	LTE						
	Optical brighteners = (FWA)								
81	FWA 1 ⁽¹⁾	LC0 = 10	1,0	0,4	Y, CF = 1,5	Y	O	O	0 (*)
82	FWA 5 ⁽²⁾	3,13	3,13	0,4	Y, CF = 0,5	Y	O	O	0 (*)
	Additional ingredients								
83	Alkyl aminoxides (C 12-18)	0,08	0,08	0,05	Y, CF = 2,5	O	O	O	3,2
84	Glycereth (6-17EO) cocoate	EC50 = 32	1,6	0,05	O	O	O	O	2,1
85	Phosphate esters (C 12-18)	EC50 = 38	1,9	0,05	Y, CF = 0,25	O	O	O	2,3

⁽¹⁾ FWA 1 = 4.4-bis (4-anilino-5-morpholino-1,3,5-triazin-2-yl)amino-stilbene-2.2-disulphonate.

⁽²⁾ FWA 5 = Disodium 4.4-bis(2-sulfostryryl)biphenyl.

(*) THOD for aerobically non degradable organic substances is set to zero.

(**) rapid photodegradation.

Notes

Y = yes, criterion applies.

O = no, criterion does not apply.

LTE = long-term effect concentration.

NOEC = non-observed effect concentration.

CF = correction factor for anaerobic non-degradable organic substances.

THOD = theoretical oxygen demand.

B. Approach for ingredients which are not included in the DID-list

For ingredients which are not included in the DID-list, the applicant shall, under his own responsibility, find the appropriate values for the relevant parameters. The reference for the relevant test methods shall be the appropriate annexes of Council Directive 67/548/EC⁽¹⁾.

The approach for estimating long-term-toxicity effect concentration (LTE) and loading factors (LF) is given below.

1. HOW TO ESTIMATE LONG-TERM-TOXICITY-EFFECT CONCENTRATION (LTE)

As LTE the lowest validated long-term toxicity concentration for fish, *daphnia magna* or algae shall be considered.

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. If long-term toxicity data (such as NOEC) for one or more of the three species are missing, or only short-term toxicity data (such as LC50) are available, the following uncertainty factors (UF) shall be used:

1.1. Uncertainty factors (UF) for non-surfactants

Data available	UF to be used
3 NOEC on fish, daphnia or algae	1 (take lowest validated NOEC)
2 NOEC on fish or daphnia or algae	5
1 NOEC on fish or daphnia or algae	10
At least 2 acute LC50 on fish or daphnia or algae	100

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

1.2. Uncertainty factors (UF) for surfactants

Data available	UF to be used
At least 2 NOEC on fish or daphnia or algae	1 (lowest NOEC)
1 NOEC on fish or daphnia or algae	1 (if species is most sensitive in acute toxicity) 10 (if species is not the most sensitive in acute toxicity)
3 LC50 on fish or daphnia or algae	20 (lowest LC50)
At least 1 LC50 on fish, daphnia or algae	50 (lowest LC50) or 20 in specific cases (*)

(*) 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 for fish toxicity, EC50 for *daphnia magna* and algae 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 is emphasised that the LTEs used must be consistent within a group of homologues with respect to the influence of, for example length of alkyl chain for LAS (linear alkylbenzene sulphonate) or number of EOs (ethoxy groups) for alcohol-ethoxylate. Any deviation from the scheme described above shall be well reasoned for the specific chemical.

2. HOW TO ESTIMATE LOADING FACTORS (LF)

The loading factors (LF) for calculating the critical dilution volume toxicity (CDV_{tox}) reflect the percentage of the substance which passes the sewage treatment system and depends on bio-degradability and sorption tendency of the substance.

2.1. Loading factors for organic substances

Degradability of substance	Sorption	Loading factor (LF)
Ready biodegradable	Low	0,13
	Medium	0,1
	High	0,07

⁽¹⁾ OJ 196, 16.8.1967, p. 1.

Degradability of substance	Sorption	Loading factor (LF)
Inherent biodegradable	Low	0,6
	Medium	0,5
	High	0,3
Non-biodegradable	Low	1
	Medium	0,75
	High	0,4

Note:

Sorption can be estimated by $\log P_{ow}$ (partition coefficient octanol/water), where $P_{ow} < 2$ is considered as 'low sorption', $P_{ow} < \times < 4$ is 'medium sorption' and $P_{ow} > 4$ is 'high sorption'. Where no sorption data are available, low sorption is assumed.

2.2. *Special approach for readily degradable surfactants*

Type of surfactant	Loading factor (LF) to be used
Readily degradable surfactants in general	0,05
Alcohol ethoxylates (EO < 20) and alcohol ethoxysulphates	0,03
Alcohol sulphates	0,02

2.3. *Special approach for inorganic substances*

Type of inorganic substance	loading factor (LF) to be used
Soluble inorganic substances	1
Insoluble inorganic substances	0,05