22 February 2005

A.I.S.E. Guideline on Implementation of the Detergent Regulation

Biodegradability of Surfactants

and

Annex VII (Labelling and Ingredient Datasheet)

Regulation (EC) No. 648/2004 of the European Parliament and of the Council of 31 March 2004 on Detergents.

(Published in the Official Journal of the European Union, L 104, 8 April 2004)

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APPENDIXES

1. Background

The Detergent Regulation was published on the 8 April 2004 and enters into force in 8 October 2005. As a regulation, it is directly applicable law in all Member States and not open to interpretation by them. The Regulation includes provisions relating to:

- Ultimate biodegradability requirements (both the level and methodologies used) for all surfactant (Anionic, Non-ionic, Cationic and Amphoteric) used in detergents.
- The provision of information provided to the consumer via the labelling of ingredients and websites.
- Information to be held by manufacturers and to be supplied to Medical Professionals and competent authorities on request,
- A review of phosphate by April 2007 with a view to reduce usage.
- An evaluation of the anaerobic biodegradability of surfactants and of the biodegradability of non-surfactant organic detergent ingredients by April 2009.

Although all efforts have been made to try to ensure that the advice and interpretation given in these guidelines is correct, A.I.S.E. emphasizes that it can accept no liability for any errors or omissions or for any loss or damage of any kind arising from their use.

2. Entry into force

The provisions of the Regulation apply to all detergent products placed on the market as of 8 October 2005. In Article 2 of the Regulation, 'Placing on the Market' is defined as "introducing onto the Community market, thereby making available to third parties, whether in exchange for payment or not. Import into the Community customs territory shall be deemed to be placing on the market." It was decided at *Ad Hoc* Working Group meeting on 8 October 2004 that this should be interpreted to mean the moment when the ownership of the detergent changes from the manufacturer to the customer. This means that any product leaving the control (ownership) of the manufacturer on or after 8 October 2005 must comply with the Regulation. However, manufacturers are advised to check with their National Association that this interpretation is accepted at the local National level.

3. Detergent 'Scope'

The term "detergents" can be summarised as applying to all products to clean textiles or to clean hard surfaces, in other words, any 'detergent / cleaning product' claiming a cleaning function.

Inter alia the following terms are defined in Article 2 of the Regulation:

'Detergent' *means any substance or preparation containing soaps and/or other surfactants intended for washing and cleaning processes. Detergents may be in any form (liquid, powder, paste, bar, cake, moulded piece, shape, etc.) and marketed for or used in household, or institutional or industrial purposes.*

Other products to be considered as detergents are:

- *'**Auxiliary washing preparation'**, intended for soaking (pre-washing), rinsing or bleaching clothes, household linen, etc.;*
- ***'Laundry fabric-softener'**, intended to modify the feel of fabrics in processes which are to complement the washing of fabrics;*
- ***'Cleaning preparation'**, intended for domestic all purposes cleaners and/or other cleaning of surfaces (e.g.: materials, products, machinery, mechanical appliances, means of transport and associated equipment, instruments, apparatus, etc.);*
- ***'Other cleaning and washing preparations'**, intended for any other washing and cleaning processes.*

'Washing' *means the cleaning of laundry, fabrics, dishes and other hard surfaces.*

'Cleaning' *has the meaning defined by EN ISO 862.*

'Surfactant' *means any organic substance and/or preparation used in detergents, which has surface-active properties and which consists of one or more hydrophilic and one or more hydrophobic groups of such a nature and size that it is capable of reducing the surface tension of water, and of forming spreading or adsorption monolayers at the water-air interface, and of forming emulsions and/or microemulsions and/or micelles, and of adsorption at water-solid interfaces.*

4. Biodegradability of Surfactants (used in detergents)

4.1. Fundamental changes

The Detergents Regulation introduces two fundamental changes regarding the biodegradability of surfactants used in detergent products:

- In future proof of **ultimate aerobic biodegradation** will be required for surfactants used in detergents.
- The degradability criteria apply **also to cationic and amphoteric** surfactants.

(Previously requirements relating only to the primary biodegradability of anionic and non-ionic surfactants were specified).

Preferably the test methods listed in **Annex III A** are to be used. The criterion for ultimate biodegradability is 60% mineralisation ("ultimate biodegradation" into carbon dioxide, water and mineral salts) within 28 days. *"If appropriately justified"* a method listed in **Annex III B** may be used **on application**.

In accordance with Article 4 (2) a **derogation** may be requested for surfactants in detergents used in **special industrial or institutional sectors** that do not fulfil the criterion of ultimate biodegradation within the stipulated period.

- For this purpose it must be proven i.e. that the level of primary biodegradability of surfactants within the given period is at least 80%. Methods for the testing of primary biodegradability of surfactants in detergents are listed in **Annex II**. As regards the biodegradability of anionic and non-ionic surfactants this corresponds to the standard applicable prior to the Detergents Regulation.
- For this derogation tests according to Annex IV are to be conducted, following a *"tiered approach"*. Technical guidance in respect of the tiered approach is to be developed at the latest in time for the entry into force of the Regulation.

4.2. Exemption for surfactants used as biocidal active substances

The following applies according to Article 3 (1) of the Detergents Regulation:

"Surfactants that are also active substances within the meaning of Directive 98/8/EC (Biocidal Products Directive) *and that are used as disinfectants are exempt from the provisions of Annexes II, III, IV and VIII of this Regulation."*
However, such surfactants must be:

- Listed as Biocidal active under Annex I & IA of the Biocidal Product Directive,
- Constituents of a Biocidal product authorised under the Biocidal Product Directive or of a Biocidal Product allowed under the 10-year transitional measure of the Biocidal Product Directive.

If the biocidal product is also a detergent within the meaning of the Detergents Regulation, for the other surfactants contained in the preparation, and also for labelling, the provisions of the Detergents Regulation apply.

4.3. Guidance for manufacturers placing detergent products on the market

Manufacturers placing detergent products on the market should now, in respect to the biodegradability of surfactants used in these products:

- Obtain from their surfactant suppliers, within the EU and from outside the EU, **written confirmation** (on Material Safety Data Sheet or on a specific document) that the surfactants used may be placed on the market without further limitation due to their ultimate biodegradability, in accordance with Article 4(1).

- If the criteria for ultimate biodegradability are not fulfilled, derogations are possible only for certain surfactants in detergents used ***in industrial or institutional sectors*** in applications more closely defined in Article 6 (1). For this purpose
  - Written confirmation must be obtained that surfactants fulfil the pass criterion of 80% for primary biodegradability pursuant to Annex II;
  - A derogation issued by a competent public authority must be available for the surfactant in question.

5. Labelling of Ingredients

5.1. What are the changes?

Labelling of ingredients in detergents and cleaning products according to Recommendation 89/542/EEC is largely adopted and is bindingly prescribed in the Detergents Regulation. **In addition** the following particulars are required:

- **"Optical brighteners"** and **"perfumes"** are added as further substance groups that must be listed irrespective of their concentration.
- **Preservation agents** must be listed irrespective of their concentration, where possible using their **INCI name** (INCI: International Nomenclature of Cosmetic Ingredients)
- **Certain fragrance ingredients** in concentrations exceeding 0.01 % by weight must be listed on the packaging of detergents, using their INCI name.

5.2. Which ingredients must be listed in labelling?

Provisions on the labelling of detergents are laid down in **Article 11** in conjunction with **Annex VII A**, which reads:

"*The following provisions on labelling shall apply to the packaging of detergents sold to the general public. The following weight percentage ranges:*
— less than 5 %,
— 5 % or over but less than 15 %,
— 15 % or over but less than 30 %,
— 30 % and more,
shall be used to indicate the content of the constituents listed below where they are added in a concentration above 0,2 % by weight:
— phosphates,
— phosphonates,
— anionic surfactants,
— cationic surfactants,
— amphoteric surfactants,
— non-ionic surfactants,
— oxygen-based bleaching agents,
— chlorine-based bleaching agents,
— EDTA and salts thereof,
— NTA (nitrilotriacetic acid) and salts thereof,
— phenols and halogenated phenols,
— paradichlorobenzene,
— aromatic hydrocarbons,
— aliphatic hydrocarbons,
— halogenated hydrocarbons,
— soap,
— zeolites,
— polycarboxylates.

The following classes of constituent, if added, shall be listed irrespective of their concentration:

— enzymes,
— disinfectants,
— optical brighteners,
— perfumes.

If added, preservation agents shall be listed, irrespective of their concentration, using where possible the common nomenclature established under Article 8 of Council Directive 76/768/EEC of 27 July 1976 on the approximation of laws of the Member States relating to cosmetic products.
If added, as such, at concentrations exceeding 0,01 % by weight, the allergenic fragrances that appear on the list of substances in Annex III, Part 1 of Directive 76/768/EEC, as a result of its amendment by Directive 2003/15/EC of the European Parliament and of the Council to include the allergenic perfume ingredients from the list first established by the Scientific Committee on Cosmetics and Non Food Products (SCCNFP) in its opinion SCCNFP/0017/98, shall be listed using the nomenclature of that Directive, as shall any other fragrances that are subsequently added to Annex III, Part 1 of Directive 76/768/EEC by adaptation of that Annex to technical progress.
If individual risk-based concentration limits for the fragrance allergens are subsequently established by the SCCNFP, the Commission shall propose the adoption, in accordance with Article 12(2), of such limits to replace the limit of 0,01 % mentioned above.
For detergents intended to be used in the industrial sector, and not made available to members of the general public, the abovementioned requirements do not have to be fulfilled if the equivalent information is provided by means of technical data sheets, safety data sheets, or in a similar appropriate manner."

5.3. Ingredient Labelling Guidance

For the purposes of this Regulation, 'package' refers to the individual product package purchased and handled by the consumer. It does not imply labelling of the outer package delivered to the retailer – nor does it imply labelling of the individual unit (unless it is, for example, a free standing sample) or its immediate packaging, e.g. the flow wrap on a tablet or the cage of a rim block, in the case of products supplied in unit dose format. Labelling of the package is required at the product production stage, i.e. ex factory.

It is recommended that the package constituent labelling is done in an easy to identify, easy to read and therefore in a standardised way. To meet these objectives, it is recommended that the following conventions be followed:

- The constituent, or chemical class names, as specified above must always be used.
- The agreed list is intended to communicate the presence of ingredients and not their absence.
- Explanatory information regarding the purpose/function of constituents should not be included in the specified list but can be given in a distinguishably different part of the listing or the package.
- If any of the four specified concentration ranges contain no constituents, then that/ those concentration range/ranges can be omitted from the label to avoid using unnecessary label space.
- The print size used should be as easily readable as other advisory statements on the package.
- Where it is known that a constituent is supplied at, say, 60% active, then the concentration of the active constituent present in the product should be communicated. Similarly, concentration should refer to anhydrous ingredients and not their hydrates.

- Phosphates should be expressed % P multiplied by 4, where P is the phosphorous derived from the inorganic phosphates present in the product. In effect this convention is equivalent to expressing phosphate content as though it is all present in the form of sodium tripolyphosphate.
- Salts of EDTA and NTA should be expressed as the acids EDTA or NTA, as appropriate.
- "Polycarboxylates" should be interpreted as referring to homo and co-polymers of acrylic acid and expressed as the sodium salt.
- To satisfy the requirements of this Regulation, manufacturers will need to ascertain if any of the allergenic fragrances that appear on the list of substances in Annex III, Part 1 of Directive 76/768/EEC are present in any perfume, including essential oils, added to the detergent product. The list is reproduced in Appendix 1 to this document. If yes, then the resultant added concentration of each specified allergenic fragrance exceeding 0.01% by weight must be listed using the INCI nomenclature. Listings of typical constituents of essential oils are available from perfume suppliers or EFFA.
- The Regulation requires that preservation agents, if added, shall be listed, irrespective of their concentration. Thus, manufacturers, through the specification and/or the Material Safety Data Sheet provided, will need to ascertain if any preservatives have been added to a constituent, e.g. surfactant, or a preparation by its producer/supplier, and subsequently included in the detergent product, regardless of the inclusion level. Preservatives at trace levels will need to be labelled as ingredients unless the preparation manufacturer can demonstrate that these traces are technically unavoidable and technologically ineffective and do not cause adverse effects to human health even for sensitised persons.
  The INCI nomenclature should be used in listing preservation agents. A list of INCI names for preservation agents notified as Product Type 6 according to the Regulation (EC) No. 2032/2003 is provided in Appendix 2 to this document. If there is no INCI name (as yet) for a particular preservative it can be applied for by suppliers. As a temporary solution the name of the substance in Annex I to the Dangerous Substances Directive 67/548/EEC can be used.
- The constituent 'nominal' concentration, as specified in the product manufacturing specification, should be used to identify the weight percentage range into which the constituent is placed.
- Any biocidal active substance (within the meaning of Directive 98/8/EC) incorporated in a product formulation specifically intended to produce disinfectant effects must be labelled as a disinfectant.

- **Institutional & Industrial Products:**

  For detergents intended to be used in the industrial sector, and not made available to members of the general public, the abovementioned product labelling requirements do not have to be fulfilled if the equivalent information is provided by means of technical data sheets, safety data sheets, or in a similar appropriate manner.

  Professional/Institutional products that can go through wholesales for professionals (e.g. Cash & Carry), should be considered as Institutional/Industrial and this should be reinforced by writing on the label "*For professional use only*". Manufacturers must however be alert in those cases, where these products can end up in the hands of the general public (for instance in those countries where access to Cash & Carry is open to non-professionals). In those cases, manufacturers shall include additional information on the label to ensure appropriate consumer protection.

  If an Institutional/Industrial product is intended to reach also the general public, the packs intended for consumers should be labelled fully in accordance to the "domestic" provisions of the Regulation.

6. Labelling of dosage information for laundry detergents

Annex VII B of the Detergent Regulation lays down rules for the labelling of packaging of textile detergents sold to the general public:

"As prescribed in Article 11(4), the following provisions on labelling shall apply to the packaging of detergents sold to the general public. The packaging of detergents sold to the general public intended to be used as laundry detergents shall bear the following information:
— The recommended quantities and/or dosage instructions expressed in millilitres or grams appropriate to a standard washing machine load, for soft, medium and hard water hardness classes and making provision for one or two cycle washing processes;
— For heavy-duty detergents, the number of standard washing machine loads of 'normally soiled' fabrics, and, for detergents for delicate fabrics, the number of standard washing machine loads of lightly-soiled fabrics, that can be washed with the contents of the package using water of medium hardness, corresponding to 2,5 millimoles CaCO3/l;
— The capacity of any measuring cup, if provided, shall be indicated in millilitres or grams, and markings shall be provided to indicate the dose of detergent appropriate for a standard washing machine load for soft, medium and hard water hardness classes.

The standard washing machine loads are 4,5 kg dry fabric for heavy-duty detergents and 2,5 kg dry fabric for low-duty detergents in line with the definitions of Commission Decision 1999/476/EC of 10 June 1999 establishing the Ecological Criteria for the award of the Community eco-label to Laundry Detergents[1]*. A detergent shall be considered to be a heavy duty detergent unless the claims of the manufacturer predominantly promotes fabric care i.e. low temperature wash, delicate fibres and colours."*

6.1. Dosage Information Labelling Guidance

- Recommended quantities and/or dosage instructions for a standard machine load for soft, medium and hard water hardness classes are required. To ensure consistency of interpretation the following definitions should be used:

Soft Water:	<150ppm $CaCO_3$ (1.5 millimoles - 150 mg per litre)
Medium Water:	150 ppm $\leq$ $CaCO_3$ $\leq$250 ppm
Hard Water:	>250ppm $CaCO_3$

  On the actual label, the soft/medium/hard water classes can be indicated without the additional $CaCO_3$ range definitions.
- Additional recommended dosage information may be communicated to cater for particularly heavily or lightly soiled or small or large loads. For dosage matrix examples please see Appendix 3.

[1] OJ L 187,20.7.1999, p. 52. Decision as last amended by Decision 2003/200/EC (OJ L 76, 22.3.2003, p.25)

- "Making provision for one or two cycle washing processes…" should be interpreted as referring to "main wash" and "prewash + mainwash".
- The number of standard washing machine loads that can be washed with the contents of a package using water of medium hardness (2.5 millimoles $CaCO_3$/l) distinguishes between heavy-duty (using 'normally soiled' fabrics) and light-duty products (using 'lightly soiled' fabrics). It will usually be apparent from the package labelling whether or not the product is intended to function as a heavy-duty laundry product, designed for the whole laundry, or as a light-duty product, designed for 'delicate fabrics'. The claims made for, and the presentation of, the product will normally be sufficient to identify if the product is 'heavy-duty' or 'light-duty'.

  In the former case the primary claims on the package label may contain phrases indicating suitability for all fabrics (except wool and silk), tough stain removal, all temperatures, etc. whilst in the latter case the primary claims on the package label will contain phrases indicating suitability, for example, for delicate fabrics, wool and silk, the fine wash or lower temperature wash cycles.

  If there is any doubt about the primary intention or purpose of the product, i.e. is it a 'heavy-duty' or a 'light-duty' or 'both heavy and light-duty' product, then the product should be assumed to be 'heavy-duty' for the indication of the number of standard washing machine loads that can be washed.

  The number of standard washing machine loads that can be washed with the contents of a package using water of medium hardness (2.5 millimoles $CaCO_3$/l) must be declared. The water hardness of 2.5 millimoles $CaCO_3$/l is a pragmatic figure established in the Detergent Regulation for use across the EU in line with what is indicated in the Commission Decision 1999/476/EC of 10 June 1999 establishing the Ecological criteria for the award of the Community eco-label to Laundry Detergents. It is recognized that in some Member States 2.5 millimoles $CaCO_3$/l may not be the prevalent water hardness for consumers within that Member State. However the use of this common base across all Member States on all packs will help to promote transparency between brands and pack sizes in the EU market place.

  The number of standard washes should be clearly identified, preferably prominent on the front of the package, and may be associated with an appropriate icon/logo, e.g. a wash basket (see Appendix 3).

- Measuring cups (if provided) should have a dosing scale (in ml) with sufficiently small subdivisions (e.g. by 20ml) to allow consumers to dose accurately for standard washing machine loads for soft, medium and hard water hardness classes. For powders, a ml to g equivalence should be shown on the pack.

- **Institutional & Industrial Products:**

  For detergents intended to be used in the industrial sector, and not made available to members of the general public, the abovementioned product dosage labelling requirements are not required.

7. Additional labelling elements according to the Detergents Regulation

Article 11 (2) of the Detergents Regulation requires that the following information must appear in legible, visible and indelible characters on the packaging in which the detergents are put up for sale to the consumer:

- the name and trade name of the product
- the name or trade name or trademark (of the company) and full address and telephone number of the party responsible for placing the product on the market
- the address, email address, where available, and telephone number from which the datasheet referred to in Article 9(3) can be obtained.

The same information must appear on all documents accompanying detergents transported in bulk.

Although not specifically required by the current text of the Regulation, in view of a foreseen future amendment that will be discussed after its entry into force, it is recommended to show on the packaging also the website address where (annex VIID, see point 8.3 of this document) the manufacturer will post a simplified version of the ingredient data sheet.

A manufacturer responsible for carrying out a blind trial must keep a record of the quantities and the length of time involved and be ready to provide this information to the Authorities upon request.

8. Information obligations

8.1. Existing practice

For many years companies placing detergents and cleaning products on the market in Europe have been notifying, on a voluntary basis, details of their products to nationally based poison information centres. Poison information centres provide treatment recommendations in cases of accidents or misuse. Since this system is well established, it is recommended that the practice should be maintained, irrespective of additional obligations under the Detergents Regulation as described hereinafter.

8.2. New Ingredient Datasheet for Medical Personnel

Article 9(3) requires that manufacturers placing Detergent products on the market shall, upon request, make available without delay and free of charge, to any medical personnel, an ingredient

datasheet as stipulated in Annex VII C, to be used for medical purposes only. Annex VII(C) reads:

"The following provisions shall apply to the listing of ingredients on the datasheet referred to in Article 9(3).
The datasheet shall list the name of the detergent and of the manufacturer.
All ingredients shall be listed; in order of decreasing abundance by weight, and the list shall be sub-divided into the following weight percentage ranges:

— 10 % or more,
— 1 % or over, but less than 10 %,
— 0,1 % or over, but less than 1 %,
— less than 0,1 %.
Impurities shall not be considered to be ingredients.
The common chemical name or IUPAC[2]) name, the CAS number, and, where available, the INCI[3] name, and the European Pharmacopoeia name, shall be given for each ingredient."

Additionally Article 11.2 requires that information required to locate the source of the ingredient datasheet appears "on the packaging in which the detergents are put up for sale to the consumer".

8.2.1. Ingredient Datasheet Guidance

- The 'Consumer' should be considered as the 'User' and the required information is thus required on both the packaging of products sold to the general public and to Institutional & Industrial products.
- The ingredient datasheet should list all ingredients, except impurities, present in the marketed product. The ingredients will normally be those added by the manufacturer to produce the final product. However, where it is known that interactions between ingredients occur during the manufacture of the product, then any resultant chemicals should be taken into account and identified in the list of ingredients.
- The inclusion of ingredients such as perfumes and colorants in a product should be listed in the datasheet as such, i.e. their presence should be indicated by the terms "perfume" and/or "colorant(s)". Any of the allergenic fragrances that are subject to package labelling requirements under Annex VII.A (i.e. if at concentrations exceeding 0,01% by weight) should also be listed in the ingredient datasheet if they are included in the product.
- It should be emphasised that the obligation to provide an ingredient datasheet to medical personnel is intended to provide product information for medical purposes only. 'Medical personnel' is defined as meaning 'a registered medical practitioner, or a person working under the direction of a registered medical practitioner, acting to provide patient care, make a diagnosis or administer treatment, and who is bound by professional confidentiality'.
- The manufacturer is entitled to require evidence confirming the medical credentials of the requesting party. Whilst credentials are checked, the manufacturer will supply the publicly available data (See 8.3.1).
- Making available 'without delay' should be interpreted as making available as quickly as is practically possible.

8.3. Publication of list of ingredients

[2] International Union of Pure and Applied Chemistry
[3] International Nomenclature Cosmetic Ingredient

Annex VII (D) requires that;

"Manufacturers shall make available on a website the ingredient datasheet mentioned above except for the following information:
— weight percentage ranges
— constituents of perfumes and essential oils,
— constituents of colouring agents.
This obligation shall not apply to industrial or institutional detergents containing surfactants, or to surfactants for industrial or institutional detergents, for which a technical data sheet or safety data sheet is available."

8.3.1. Ingredient Publication Guidance:

- The manufacturer is required to make available to the public at large, on a website, a simplified version of the ingredient datasheet, as described above. In this case it is recommended that ingredients be listed in the order of their concentration in the product, e.g. highest to lowest ingredient concentration. Any allergenic fragrances that are subject to package labelling requirements under Annex VII.A (i.e. if at concentrations exceeding 0,01% by weight) should also be listed on the website if they are included in the product.
- For each ingredient listed the INCI name should be given, if available. Where not available, then the European Pharmacopoeia name, if available, should be given. If neither name is available, then the common chemical or the IUPAC name should be used.
  (This guidance assumes a future amendment to the current wording of Annex VII D).
- Manufacturers must make available on a website the public list of ingredients. The location of the website is not prescribed and the manufacturer is free to choose. It is recommended that the choice is made on the basis of logical access, e.g. via a website dedicated to the product or the manufacturer. The manufacturer can also consider making joint arrangements with other manufacturers, e.g. via their trade association, with a view to producing a general detergent product ingredient database website.
- A website is required and not optional. Its address should appear on the label. This last point is not strictly required at this stage, but it is strongly recommended in view of a foreseen future amendment along those lines that will be discussed after entry into force of this regulation. The information on the website must be kept up-to-date. However, when a website is in the course of development or being upgraded, consumers should be able to acquire the information by enquiring from the telephone number that is on the label.
- That manufacturers must 'make available' on a website should be interpreted as 'display' on a website (free of charge) the public list of ingredients.
- In view of a foreseen future amendment to the current wording of Annex VII D that will be discussed after entry into force of the Regulation and that will confirm the possibility to use only the INCI names for each ingredient, a link must be provided to the Commission's website on cosmetics that provides a correspondence table between INCI names and CAS numbers. This website address is: http://pharmacos.eudra.org/F3/inci/index.htm.
- Information regarding a product should be retained on the website for two years following the last production of that product. The manufacturer should also consider the means by which products and their variants will be linked to the website information.

Appendix 1. Allergenic fragrances ingredients

These ingredients appear on the list of substances in Annex III, Part 1 of Directive 76/768/EEC (INCI names in brackets).

- Amyl cinnamal (AMYL CINNAMAL)
- Benzyl alcohol (BENZYL ALCOHOL)
- Cinnamyl alcohol (CINNAMYL ALCOHOL)
- Citral (CITRAL)
- Eugenol (EUGENOL)
- Hydroxycitronellal (HYDROXYCITRONELLAL)
- Isoeugenol (ISOEUGENOL)
- Amylcinnamyl alcohol (AMYLCINNAMYL ALCOHOL)
- Benzyl salicylate (BENZYL SALICYLATE)
- Cinnamal (CINNAMAL)
- Coumarin (COUMARIN)
- Geraniol (GERANIOL)
- 4-(4-Hydroxy-4-methylpentyl)-3-cyclohexenecarboxaldehyde (HYDROXYISOHEXYL 3-CYCLOHEXENE CARBOXALDEHYDE)
- Anisyl alcohol (ANISE ALCOHOL)
- Benzyl cinnamat (BENZYL CINNAMATE)
- Farnesol (FARNESOL)
- 2-(4-*tert*-Butylbenzyl)-propionaldehyde (BUTYLPHENYL METHYLPROPIONAL)
- Linalool (LINALOOL)
- Benzyl benzoate (BENZYL BENZOATE)
- Citronellol (CITRONELLOL)
- Hexyl cinnam-aldehyde (HEXYL CINNAMAL)
- D-Limonene (LIMONENE)
- Methyl heptin carbonate (METHYL 2-OCTYNOATE)
- 3-Methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one (ALPHA-ISOMETHYL IONONE)
- Oak moss extract (EVERNIA PRUNASTRI EXTRACT)
- Treemoss extract (EVERNIA FURFURACEA EXTRACT)

Appendix 2. INCI-names of preservatives commonly used in cleaning products.

Part A: Notified as product type 6 according to the Regulation (EC) No. 2032/2003: The notified substance and their CAS number can be found in Annex II of EC 2032/2003 (http://europa.eu.int/eur-lex/pri/en/oj/dat/2003/l_307/l_30720031124en00010096.pdf)

Chemical name (in German) according to Annex II, Regulation (EC) No. 2032/2003	*CAS Number*	*INCI-name*
Ameisensäure	64-18-6	FORMIC ACID
N-(3-Aminopropyl)-*N*-dodecyl-propan-1,3-diamin	2372-82-9	LAURYLAMINE DIPROPYLENEDIAMINE
1,2-Benzisothiazol-3(2*H*)-on	2634-33-5	BENZISOTHIAZOLINONE
Benzoesäure	65-85-0	BENZOIC ACID
2-Benzyl-4-chlorphenol	120-32-1	CHLOROPHENE
Benzyloxymethanol	14548-60-8	BENZYLHEMIFORMAL
1,3-Bis-(hydroxymethyl)-5,5-dimethyl-2,4-imidazolidin-2,4-dion	6440-58-0	DMDM HYDANTOIN
2-Brom-(2-brommethyl)pentandinitril; {1,2-Dibrom-2,4-dicyanobutan}	35691-65-7	METHYLDIBROMO GLUTARONITRILE
2-Brom-2-nitropropan-1,3-diol	52-51-7	2-BROMO-2-NITROPROPANE-1,3-DIOL
Calciumsorbat	7492-55-9	CALCIUM SORBATE
Captan	133-06-2	CAPTAN
Cetylpyridiniumchlorid	123-03-5	CETYLPYRIDINIUM CHLORIDE
5-Chlor-2-(4-chlorphenoxy)-phenol		HYDROXYDICHLORODIPHENYL ETHER
5-Chlor-2-methyl-3(2*H*)-isothiazolinon	26172-55-4	METHYLCHLOROISOTHIAZOLINONE
4-Chlor-3,5-dimethylphenol	88-04-0	CHLOROXYLENOL
4-Chlor-*m*-kresol	59-50-7	p-CHLORO-m-CRESOL
2-Chloracetamid	79-07-2	CHLOROACETAMIDE
2,4-Dichlorbenzylalkohol	1777-82-8	DICHLOROBENZYL ALCOHOL
Dichlorophen	97-23-4	DICHLOROPHENE
Didecyldimethylammoniumchlorid	7173-51-5	DIDECYLDIMONIUM CHLORIDE
Dikaliumdisulfit	16731-55-8	POTASSIUM METABISULFITE
4,4-Dimethyloxazolidin; {4,4-Dimethyl-1,3-oxazolidin}	51200-87-4	DIMETHYL OXAZOLIDINE
Dinatriumdisulfit	7681-57-4	SODIUM METABISULFITE
2,2'-Dithiobis[*N*-methylbenzamid]	2527-58-4	DITHIOMETHYLBENZAMIDE
Ethanol	64-17-5	ALCOHOL
Ethyldihydro-1*H*,3*H*,5*H*-oxazolo-[3,4-c]oxazol; 7a-{5-Ethyl-3,7-dioxa-1-azabicyclo[3.3.0]octan}	7747-35-5	7-ETHYLBICYCLOOXAZOLIDINE
Formaldehyd	50-00-0	FORMALDEHYDE

	Chemical name (in German) according to Annex II, Regulation (EC) No. 2032/2003	*CAS Number*	*INCI-name*
	{Methanal}		
	Gemisch aus 5-Chlor-2-methyl-2*H*-isothiazol-3-on und 2-methyl-2*H*-isothiazol-3-on	26172-55-4	METHYLCHLOROISOTHIAZOLINONE, METHYLISOTHIAZOLINONE
D-	Gluconsäure Verbindung mit *N*,*N*''-Bis(4-chlorphenyl)-3,12-diimino-2,4,11,13-tetraazatetradecandiamidin; {1,1'-Hexamethylenbis[5-(4-chlorphenyl)-biguanidium]digluconat}	18472-51-0	CHLORHEXIDINE DIGLUCONATE
	Glyoxal	107-22-2	GLYOXAL
2,4-	Hexadiensäure	110-44-1	SORBIC ACID
	Hydroxyl-2-pyridon	822-89-9	HYDROXYPYRIDINONE
3-	Iod-3-propinylbutylcarbamat	55406-53-6	IODOPROPYNYL BUTYLCARBAMATE
	Kalium-*o*-phenylphenolat	13707-65-8	POTASSIUM o-PHENYLPHENATE
	Kalium-(*E*,*E*)-hexa-2,4-dienoat; {Kaliumsorbat}	24634-61-5	POTASSIUM SORBATE
	Kaliumsulfit	10117-38-1	POTASSIUM SULFITE
	Methanamin-3-chlorallylchlorid; {1-(3-Chlorallyl-3,5,7-triaza-1-azonia-adamantanchlorid}	4080-31-3	QUATERNIUM-15
2-	Methyl-3(2*H*)-isothiazolinon	2682-20-4	METHYLISOTHIAZOLINONE
L-(+)-	Milchsäure	50-21-5	LACTIC ACID
	Natriumbenzoat	532-32-1	SODIUM BENZOATE
	Natrium-*p*-chlor-*m*-kresolat	59-50-7	SODIUM p-CHLORO-m-CRESOL
	Natriumhydrogensulfit	7631-90-5	SODIUM BISULFITE
	Natrium-*N*-hydroxymethyl-aminoacetat	70161-44-3	SODIUM HYDROXYMETHYLGLYCINATE
	Natrium-*o*-phenylphenolat	132-27-4	SODIUM o-PHENYLPHENATE
	Natriumsulfit	7757-83-7	SODIUM SULFITE
	Nitromethylidintrimethanol	126-11-4	TRISHYDROXYMETHYL NITROMETHANE
2-	Octyl-2*H*-isothiazol-3-on	26530-20-1	OCTYLISOTHIAZOLINONE
1,5-	Pentandial	111-30-8	GLUTARAL
2-	Phenoxyethanol	122-99-6	PHENOXYETHANOL
o-	Phenylphenol	90-43-7	o-PHENYLPHENOL
	Pyridin-2-thiol-1-oxid, Natriumsalz	3811-73-2	SODIUM PYRITHIONE
	Pyrithionzink	13463-41-7	ZINC PYRITHIONE
	Quaternäre Ammoniumverbindungen, Benzyl-C12-14-alkyldimethyl-, Chloride	8001-54-5	BENZALKONIUM CHLORIDE
	Quaternäre Ammoniumverbindungen,	8001-54-5	BENZALKONIUM

Chemical name (in German) according to Annex II, Regulation (EC) No. 2032/2003	*CAS Number*	*INCI-name*
Benzyl-C12-16-alkyldimethyl-, Chloride		CHLORIDE
Quaternäre Ammoniumverbindungen, Benzyl-C12-18-alkyldimethyl-, Chloride	8001-54-5	BENZALKONIUM CHLORIDE
Quaternäre Ammoniumverbindungen, [2-[[2-[(2-Carboxyethyl)(2-hydroxyethyl)amino]ethyl]amino]-2-oxoethyl]kokosalkyl-dimethyl, Hydroxide, Innere Salze	100085-64-1	COCOBETAINAMIDO AMPHOPROPIONATE
Quaternäre Ammoniumverbindungen, Di-C8-10-alkyldimethyl-, Chloride	68424-95-3	DICAPRYL/DICAPRYLYLDIMONIUM CHLORIDE
Salicylsäure	69-72-7	SALICYLIC ACID
Silberchlorid	7783-90-6	SILVER CHLORIDE
Thiabendazol	148-79-8	THIABENDAZOLE
Tosylchloramidnatrium	127-65-1	CHLORAMINE T
Wasserstoffperoxid	7722-84-1	HYDROGEN PEROXIDE

Part B. List of examples of INCI-names of biocidal actives, identified according to the Regulation (EC) Nr. 2032/2003.

These may only be used as preservatives for detergents until 31 August 2006:

Chemical name (in German)	*CAS number*	*INCI-name*
Benzotriazol	95-14-7	BENZOTRIAZOL
Benzylalkohol	100-51-6	BENZYL ALCOHOL
5- Brom-5-nitro-1,3-dioxan	30007-47-7	5-BROMO-5-NITRO-1,3-DIOXANE
3-(*p*- Chlorphenoxy)1,2-propandiol	104-29-0	CHLORPHENESIN
Ethanol, 2,2'-Iminobis-, *N*-Kokosalkylderivate	61791-31-9	COCAMIDE DEA
Farnesol	4602-84-0	FARNESOL
Hexadecyltrimethylaminiumbromid	57-09-0	CETRIMONIUM BROMIDE
Hexadecyltrimethylaminiumchlorid	112-02-7	CETRIMONIUM CHLORIDE
1,1'- Hexamethylenbis[5-(4-chlorphenyl)-biguanidium]diacetat	56-95-1	CHLORHEXIDINE DIACETATE
1,1'- Hexamethylenbis[5-(4-chlorphenyl)-biguanidium]dihydrochlorid	003697-42-5	CHLORHEXIDINE DIHYDROCHLORIDE
p- Hydroxybenzoesäure-ethylester	120-47-8	ETHYLPARABEN
p- Hydroxybenzoesäure-isobutylester	4247-02-3	ISOBUTYLPARABEN
p- Hydroxybenzoesäure-methylester	99-76-3	METHYLPARABEN
Kaliumbenzoat	582-25-2	POTASSIUM BENZOATE
Natriumformiat	141-53-7	SODIUM FORMATE
Natriumpropionat	137-40-6	SODIUM PROPIONATE
Natriumsalicylat	54-21-7	SODIUM SALICYLATE
Quaternäre Ammoniumverbindungen, (hydriertes Talg-alkyl)trimethyl-, Chloride	61788-78-1	HYDROGENATED TALLOWTRIMONIUM CHLORIDE
Quaternäre Ammoniumverbindungen,	61789-18-2	COCOTRIMONIUM

Chemical name (in German)	*CAS number*	*INCI-name*
Kokosalkyltrimethyl-, Chloride		CHLORIDE
Quaternäre Ammoniumverbindungen, Di-kokosalkyldimethyl-, Chloride	61789-77-3	DICOCODIMONIUM CHLORIDE
Quaternäre Ammoniumverbindungen, Bis(hydrierte Talg-alkyl)dimethyl-, Chloride	61789-80-8	QUATERNIUM-18
Quaternäre Ammoniumverbindungen, Trimethylsojaalkyl-, Chloride	61790-41-8	SOYTRIMONIUM CHLORIDE
Propionsäure	79-09-4	PROPIONIC ACID

A table of correspondence with CAS number and INCI names can also be found on http://pharmacos.eudra.org/F3/home.html

Updates to the INCI inventory have recently been adopted by the SCCNFP. These updates are available on the following Web page:

http://europa.eu.int/comm/health/ph_risk/committees/sccp/sccp_opinions_en.htm

Appendix 3. Dosage matrix - Examples

1. Water hardness:

Recommended quantities and/or dosage instructions for a standard machine load for soft, medium and hard water hardness classes are required. To ensure consistency of interpretation the following definitions should be used:

Soft Water: <150ppm $CaCO_3$ (1.5 millimoles - 150 mg per litre, 15°F[4])
Medium Water: 150 ppm (15°F) $\leq$ $CaCO_3 \leq$250 ppm (25°F)
Hard Water: >250ppm $CaCO_3$ (25°F)

On the actual label, the soft/medium/hard water classes can be indicated without the additional $CaCO_3$ range definitions.

These ranges are used as references for dosage calculation but on the dosage matrix, only the words “soft”, “medium” and “hard” would normally appear (see below).

2. Examples of dosage matrices

Heavy duty detergents – laundry load 4.5 kg

- Three soil levels

	T- shirt one stain	T- shirt two stains	T- shirt three stains
Soft			
Medium		xx ml (1 Scoop)	
Hard			

- Two soil levels

	T- shirt two stains	T- shirt three stains
Soft		
Medium	xx ml (1 Scoop)	
Hard		

[4] Equivalence between French and German degrees of water hardness: 1°F = 0.56 DH

Light duty detergents – laundry load 2.5 Kg

- Two soil levels

	Delicate fabric one stain	Delicate fabric two stains
Soft		
Medium	xx ml (1 Scoop)	
Hard		

- One soil level

	Delicate fabric one stain
Soft	
Medium	xx ml (1 Scoop)
Hard	

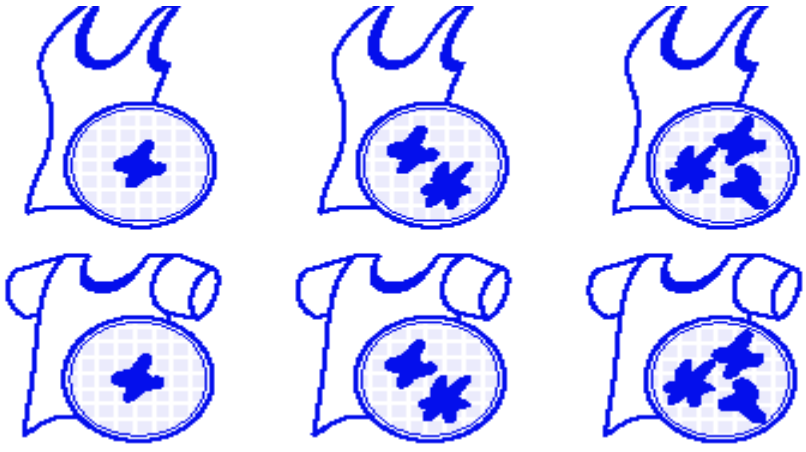
Cell content: amount of product expressed in ml. For powders, the ml/gr equivalence should be indicated somewhere on the pack.

NB: The use of the scoop to represent the dosage in addition to the volume expressed in ml is optional. If used, it could be replaced by a liquid dosage device, pre-dosed products icons (powder or liquids)

3. Soil and fabric representation:

Levels of soil will be represented by 1, 2 or 3 stains. Representation of the fabric for heavy duty detergents and light duty detergents will be differentiated (form). The actual design execution is left to companies to decide.

Examples of differentiation of type of fabric:



4. Representation of the number of wash loads on the front pack

The number of standard washing machine loads that can be washed with the content of a package using water of medium hardness (2.5 millimoles $CaCO_3$/l) must be declared. The water hardness of 2.5 millimoles $CaCO_3$/l is a pragmatic figure established in the Detergent Regulation for use across the EU in line with what is indicated in the Commission Decision 1999/476/EC of 10 June 1999 establishing the Ecological criteria for the award of the Community eco-label to Laundry Detergents. It is recognized that in some Member States 2.5 millimoles $CaCO_3$/l may not be the prevalent water hardness for consumers within that Member State. However the use of this common base across all Member States on all packs will help to promote transparency between brands and pack sizes in the EU market place.

The number of standard washes should be clearly identified, preferably prominent on the front of the package, and may be associated with an appropriate icon/logo, e.g. a wash basket.

Basket icon designs: (where 00 is the number of standard washes for that pack)

The decision which of the icons is used is left to the company.

In view of the very soft water conditions in some Nordic countries and the already established practice there to indicate the number of loads that can be washed in soft water, rather than at medium hardness, there should be on the front of the package an indication of both the number of washes in soft water and the number of European standard washes for that pack.