

Guidelines on the implementation of the Detergents Regulation



Association Internationale de la Savonnerie, de la Détergence et des Produits d'Entretien
International Association for Soaps, Detergents and Maintenance Products

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Foreword

This document intends to provide guidance on the implementation of 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), as amended by:

- Regulation (EU) No 259/2012 of the European Parliament and of the Council of 14 March 2012 amending Regulation (EC) No 648/2004 as regards the use of phosphates and other phosphorus compounds in consumer laundry detergents and consumer automatic dishwasher detergents;
- Commission Regulation (EC) No 551/2009 of 25 June 2009 amending Regulation (EC) No 648/2004 of the European Parliament and of the Council on detergents, in order to adapt Annexes V and VI thereto (surfactant derogation);
- Regulation (EC) No 1336/2008 of the European Parliament and of the Council of 16 December 2008 amending Regulation (EC) No 648/2004 in order to adapt it to Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures;
- Regulation (EC) No 907/2006 of 20 June 2006 amending Regulation (EC) No 648/2004 of the European Parliament and of the Council on detergents, in order to adapt Annexes III and VII thereto.

It focuses mainly on topics such as:

- Biodegradability of Surfactants;
- Annex VIa (Limitations on the content of phosphates and of other phosphorus compounds); and,
- Annex VII (Labelling and Ingredient Datasheet).

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. emphasises that it can accept no liability for any errors or omissions or for any loss or damage of any kind arising from their use.

History of this document

Date	Publication	Comments
February 2005	A.I.S.E. Guideline on Implementation of the Detergent Regulation – Regulation (EC) No. 648/2004 of the European Parliament and of the Council of 31 March 2004 on Detergents	Original document
February 2011	Addendum to A.I.S.E. Guideline from 11/02/2005	Section 4 – Representation of the number of wash loads on the front pack of Appendix 3 was amended.
June 2013	A.I.S.E. Guidelines on the implementation of the Detergents Regulation v.2.	Publication of v.2. All sections and appendixes of the document have been updated due to the publication of the above mentioned regulations (see Foreword), as well as related legislation, namely on biocidal products. New text, sections (Section 6.2., 6.3) or appendixes (Appendixes 4 and 5) have been added accordingly.

CONTENTS:

1. Background	4
2. Entry into force and application of provisions	4
3. Detergent 'Scope'	5
4. Biodegradability of Surfactants (used in detergents)	6
4.1. Requirements on biodegradability of surfactants	6
4.2. Surfactants also used as biocidal active substances	8
4.3. Guidance for manufacturers placing detergent products on the market	9
5. Labelling of Ingredients	10
5.1. Which ingredients must be listed on the label for detergents sold to consumers?	10
5.2. Ingredient Labelling Guidance	11
5.2.1. Consumer Products	11
5.2.2. Institutional & Industrial Products	13
6. Labelling of dosage information for consumer laundry and automatic dishwasher detergents	13
6.1. Dosage Information Labelling Guidance	14
6.1.1. Consumer laundry detergents	14
6.1.2. Consumer automatic dishwasher detergents	16
6.1.3. Institutional & Industrial Products	16
6.2. Phosphates and other phosphorus compounds restrictions for consumer detergents to be used in washing machines and automatic dishwashers	17
6.3. Summary of provisions on dosage information, number of washing loads and Annex VIa restrictions for main detergents and auxiliaries	18
6.3.1. Consumer laundry detergents	18
6.3.2. Consumer automatic dishwasher detergents	19
7. Additional labelling elements according to the Detergents Regulation	20
8. Information obligations	20
8.1. Existing practice	20
8.2. Ingredient Datasheet for Medical Personnel	20
8.2.1. Ingredient Datasheet Guidance	21
8.3. Publication on a website of a list of ingredients	22
8.3.1. Ingredient Publication Guidance:	22
Appendix 1. Allergenic fragrance ingredients	24
Appendix 2. INCI-names of preservatives commonly used in cleaning products	25
Appendix 3. Dosage matrix – Examples for consumer laundry detergents (CLD) and consumer automatic dishwasher detergents (CADD)	27
Appendix 4. Interpretation of Annex VIa on the limitations on the content of phosphates and of other phosphorus compounds for “consumer laundry detergents” (CLD)	31
Appendix 5. Interpretation of Annex VIa on the limitations on the content of phosphates and of other phosphorus compounds for “consumer automatic dishwasher detergents” (CADD)	32

1. Background

The Detergents Regulation (EC) No 648/2004 was published on the 8 April 2004 and entered into force on the 8 October 2005. As a regulation, it is directly applicable law in all Member States. The Regulation includes provisions relating to:

- Ultimate biodegradability requirements (both the level and methodologies used) for all surfactants (Anionic, Non-ionic, Cationic and Amphoteric) used in detergents;
- The information to be provided to the consumer via the labelling of ingredients and websites;
- The information to be held by manufacturers and to be supplied to Medical Professionals and competent authorities on request.

Since that date some other Regulations have been published amending the Detergents Regulation:

- Regulation (EC) No 907/2006, which adapts Annexes III and VII;
- Regulation (EC) No 1336/2008, in order to adapt Detergents Regulation to CLP Regulation (EC) No 1272/2008;
- Commission Regulation (EC) No 551/2009, which adapts Annexes V and VI (surfactant derogation).

Additionally, as a result of the review on the use of phosphates that was planned under the original document, the Detergents Regulation has been recently amended by Regulation (EU) No 259/2012 as regards the use of phosphates and other phosphorus compounds in consumer laundry detergents and consumer automatic dishwasher detergents.

2. Entry into force and application of provisions

The provisions of Regulation (EC) No. 648/2004 apply to all detergent products placed on the market as of 8 October 2005. In Article 2 of the Regulation, the definition of '**Placing on the Market**' has been amended by Regulation (EU) No 259/2012 and is defined as "the first making available on the Union market. Import into the Union customs territory shall be deemed to be placing on the market."

According to the Commission's Questions and Answers¹ (version 2011) "placing on the market" should be interpreted to mean the moment when the ownership of the detergent changes from the manufacturer to the customer. This has been supported by the inclusion of a new definition in Regulation (EU) No 259/2012 for '**Making available on the market**' as "any supply for distribution, consumption or use on the Union market in the course of a commercial activity, whether in return for payment or free of charge".

The **limitations on the content of phosphates and of other phosphorus compounds**, as defined in Annex VIa of Regulation (EU) No 259/2012, apply to consumer laundry detergents placed on the market as of 30 June 2013 and to

¹ http://ec.europa.eu/enterprise/sectors/chemicals/files/docs/updated_detergents_faq_feb_2011_en.pdf

consumer automatic dishwasher detergents placed on the market as of 1 January 2017.

If not in place already, the new **labelling provisions for consumer automatic dishwasher detergents** (CADD) which are introduced as per Annex VII B of Regulation (EU) No 259/2012 should apply in the next change of labelling and no later than 19th October 2013².

3. Detergent 'Scope'

The term "detergent" applies to all products that are intended for any washing and cleaning process within the meaning of the regulation, such as e.g. products to clean textiles or hard surfaces, claiming a cleaning or fabric softening function. In most cases the claims are a reflection of intent.

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

'Detergent' means any substance or mixture 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 mixture', 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 mixture', 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 mixtures', intended for any other washing and cleaning processes.*

'Consumer laundry detergent' means a detergent for laundry placed on the market for use by non-professionals, including in public laundrettes.

² As stated in the draft minutes of the *Ad Hoc* Working Group meeting on 8 November 2012 "the Commission explained that in the absence of specific transitional arrangements the requirements applied since 19 April 2012. The lack of a transitional period before companies had to apply the new labelling provisions for CADD was a clear oversight during the ordinary legislative procedure. Usually, in other legislation on labelling of chemicals, like CLP, it is common practice to introduce an 18-month transitional period. (...) The Commission added that (...) it had not been the intention of the legislators during the ordinary legislative procedure to request any recall of CADD products that were non-compliant with the new labelling rules. Member States competent authorities should raise the awareness of companies on these new labelling obligations concerning CADD. During their market surveillance activities – and in particular when considering actions in cases of non-compliance – Member States authorities should also take into account the unintended omission of a transitional period. The Commission also called on AISE to swiftly inform its member companies and national members associations to raise awareness about the applicability of this new labelling obligation as well as to update the related section of the A.I.S.E. Guidelines accordingly."

'Consumer automatic dishwasher detergent' means a detergent placed on the market for use in automatic dishwashers by non-professionals.

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

'Cleaning' means the process by which an undesirable deposit is dislodged from a substrate or from within a substrate and brought into a state of solution or dispersion.

Note: Dislodging an undesirable deposit during the cleaning process may also be obtained by chemical/physicochemical actions in addition to bringing it into a state of solution or dispersion e.g. oxygen bleach or enzyme hydrolysis.

'Surfactant' means any organic substance and/or mixture 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. Requirements on biodegradability of surfactants

The Detergents Regulation requires the biodegradability of surfactants used in detergent products i.e.:

- Proof of **ultimate aerobic biodegradation** for surfactants used in detergents.
- The biodegradability criteria apply **to all types of surfactants (anionic, non-ionic, cationic and amphoteric surfactants)**.

Preferably the test methods listed in **Annex III A** are to be used, with the adaptations indicated.

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**.
- For this derogation tests according to **Annex IV** are to be conducted, following a *"tiered approach"*. Technical guidance on the methodology for this tiered

approach has been published³. As of today, one derogation has been granted by Commission Regulation (EC) No 551/2009 for a surfactant used in bottle washing, cleaning-in-place and metal cleaning, until 27 June 2019.

Directive 67/548/EEC, which is referred to in the Detergents Regulation, has been replaced by the Commission Regulation (EC) No 440/2008⁴ laying down test methods pursuant to REACH Regulation. The tables below show the correspondence between the references included in the Detergents Regulation and the methods from Regulation (EC) No 440/2008:

Test method referred to in Annex III A of Regulation (EC) No. 648/2004	Regulation (EC) No 440/2008 Part C: Methods for the determination of ecotoxicity
C.4-C (carbon dioxide (CO ₂) Evolution modified Sturm test)	C.4. Determination of "ready" biodegradability Part IV - CO ₂ Evolution Test (Method C.4-C)
C.4-E (closed Bottle)	C.4. Determination of "ready" biodegradability Part VI - Closed bottle test (Method C.4-E)
C.4-D (manometric respirometry)	C.4. Determination of "ready" biodegradability Part V - Manometric Respirometry Test (Method C.4-D)
C.4-F (MITI: Ministry of International Trade and Industry, Japan)	C.4. Determination of "ready" biodegradability Part VII - M.I.T.I. Test (Method C.4-F)
Test method referred to in Annex III B of Regulation (EC) No. 648/2004	Regulation (EC) No 440/2008 Part C: Methods for the determination of ecotoxicity
C.4-A (dissolved organic carbon DOC die-away)	C.4. Determination of "ready" biodegradability Part II - DOC die-away Test (Method C.4-A)
C.4-B (modified OECD screening-DOC die-away)	C.4. Determination of "ready" biodegradability Part III - Modified OECD Screening Test (Method C.4-B)
Test method referred to in Annex IV of Regulation (EC) No. 648/2004	Regulation (EC) No 440/2008 Part C: Methods for the determination of ecotoxicity
Inherent Biodegradability Tests	
C.12 (Modified SCAS test)	C.12. Biodegradation – Modified SCAS Test
C.9 (Zahn-Wellens).	C.9. Biodegradation – Zahn-Wellens Test
Activated Sludge Simulation Biodegradability Tests	
C.10 (including possible changes in operating conditions as proposed in EN ISO 11733).	C.10. Biodegradation – Activated Sludge Simulation Tests

³ http://ec.europa.eu/enterprise/sectors/chemicals/files/detergents/c2005_5677_en.pdf

⁴ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:2008R0440:20101212:EN:PDF>. Most recent consolidated version and subsequent amendments can be obtained at <http://echa.europa.eu/web/guest/regulations/reach/legislation> under "Implementing legislation".

Effects on organisms	
Fish: C.1 of Directive 67/548/EEC	C.1. Acute Toxicity for Fish
Daphnia: C.2 of Directive 67/548/EEC	C.2. <i>Daphnia sp.</i> Acute Immobilisation Test
Algae: C.3 of Directive 67/548/EEC	C.3. Algal Inhibition Test
Bacteria: C.11 of Directive 67/548/EEC	C.11. Biodegradation – Activated Sludge Respiration Inhibition
Degradation	
Biotic: C.5 of Directive 67/548/EEC	C.5. Degradation – Biochemical Oxygen Demand
Abiotic: C.7 of Directive 67/548/EEC	C.7. Degradation – Abiotic Degradation: Hydrolysis as a function of pH

4.2. Surfactants also used as biocidal active substances

When placed on the market, in addition to complying with the Detergents Regulation, detergents and surfactants for detergents shall comply, where relevant, with:

- Biocidal Product Directive 98/8/EC (BPD) - until 1 September 2013
- Biocidal Products Regulation (EU) No 528/2012 (BPR) - as of 1 September 2013⁵
- any other relevant Community or national legislation.

Biocidal Products Directive 98/8/EC (until 1 September 2013)

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."

For this exemption to apply, such surfactants must be:

- Listed as Biocidal active substances under Annex I & IA of the Biocidal Product Directive, or
- Constituents of a Biocidal product authorised under the BPD, or of a Biocidal Product allowed under the 10-year transitional measures of the BPD (the "Review Programme" in Annex II to Regulation (EC) No 1451/2007).

Note: *to determine if the detergent containing a surfactant biocidal active substance qualifies as a biocidal product, the definition of "biocidal product" from Article 2 of Directive 98/8/EC is to be considered.*

Biocidal Products Regulation (EU) No. 528/2012 (as of 1 September 2013)

By extension, Article 3(1) of the Detergents Regulation will apply in the same way under Regulation (EU) No. 528/2012, as of 1 September 2013.

Similarly, for this exemption to apply, such surfactants must be:

⁵ **BPR Art.96** Without prejudice to Articles 86, 89, 90, 91 and 92 of this Regulation, Directive 98/8/EC is hereby repealed with effect from 1 September 2013. References to the repealed Directive shall be construed as references to this Regulation and read in accordance with the correlation table in Annex VII.

- Listed on the Union list of approved active substances referred to in Article 9(2) of the BPR (which will include substances approved under the Biocidal Products Directive), or listed as a Biocidal active under Annex I of the BPR for products eligible for simplified authorisation, or
- Constituents of a Biocidal product for which provisional authorisation was requested, or of a Biocidal Product for which a BPD dossier has been submitted before 1 September 2013 and which are covered by the transitional measures provided in Article 89 of the BPR.

Note: *as of 1 September 2015, the surfactants that are also active substances must be sourced from a manufacturer or an importer included in the list of "alternative suppliers" referred to in Article 95(2) of the BPR. Stocks purchased from suppliers who were not listed by 1 September 2015, must be used or disposed of during the following 12 months.*

Note: *to determine if the detergent containing a surfactant biocidal active substance qualifies as a biocidal product, the definition of "biocidal product" from Article 3 of the BPR is to be considered.*

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.

Note: *In addition, the BPR introduces the new concept of 'treated articles'. According to this, a detergent that has been preserved with a preservative that is allowed under the BPR may qualify as a treated article. BPR Guidance on treated articles is under development. In any case, the provisions of the Detergents Regulation apply to such products.*

4.3. Guidance for manufacturers placing detergent products on the market

Manufacturers placing detergent products on the market should, 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 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). A.I.S.E., together with CESIO, ECOSOL and Fecc, has produced guidelines on the transmission of information for surfactants biodegradability as indicated by Article 9⁶.
- 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.

⁶ http://ec.europa.eu/enterprise/sectors/chemicals/files/studies/cesio_aise_ecosol_fecc_guidelines_en.pdf

5. Labelling of Ingredients

5.1. Which ingredients must be listed on the label for detergents sold to consumers?

On-pack labelling of ingredients and of their concentration ranges in detergents sold to consumers is prescribed in the Detergents Regulation. The following particulars are required:

- **"Optical brighteners"** and **"perfumes"** 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**.

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/EEC⁷, 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/EEC⁸ by adaptation of that Annex to technical progress.

The website address, from which the list of ingredients mentioned in section D of Annex VII can be obtained, shall be given on the packaging.

For detergents intended to be used in the industrial and institutional 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.”

5.2. Ingredient Labelling Guidance

5.2.1. Consumer Products

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.

⁷ now Annex III of Regulation (EC) No 1223/2009 on cosmetic products

⁸ idem

- 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 phosphorus 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 of Regulation (EC) No 1223/2009 are present in any perfume, including essential oils, added to the detergent product. If yes, then when the resultant added concentration of each specified allergenic fragrance exceeds 0.01% by weight, the allergen must be listed using the INCI nomenclature. Listings of typical constituents of essential oils and perfumes are available from perfume suppliers. The list of allergenic fragrance ingredients is reproduced in Appendix 1.
- The Regulation requires that preservation agents, if added, shall be listed, irrespective of their concentration. Thus, manufacturers, through the specification and/or the Safety Data Sheet provided, will need to ascertain if any preservatives have been added to a constituent, e.g. surfactant, or a mixture 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 mixture 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. For more details on INCI names for preservation agents notified as Product Type 6 (in-can preservatives) refer to 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 VI to the Regulation on classification, labeling and packaging of substances and mixtures Regulation (EC) No 1272/2008 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 and Regulation (EU) No. 528/2012) incorporated in a product formulation specifically intended to produce disinfectant effects must be labelled as a disinfectant.

There is currently no specific legislation on the language to be used on the labels of detergents. As per Article 11 (5) of the Detergents Regulation, some Member States have legislation requiring that the label elements should be in the national language(s) – this is not applicable for ingredient labelling as per INCI name. Even when such national requirements do not exist, it is recommended to use at least one of the official

languages of the country where the product is marketed and sold, consistently for all labelling elements, so that consumers can understand labels.

It shall be noted that some label elements are regulated by the Dangerous Preparations Directive (Directive 1999/45/EC) and by the CLP Regulation (Regulation (EC) No 1272/2008) – these legislative acts require the use of national language(s).

5.2.2. 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 consumer laundry and automatic dishwasher detergents

Annex VII B of the Detergent Regulation lays down rules for the labelling of packaging of consumer detergents.

While the requirements for consumer laundry detergents have been in place since 8 October 2005, the requirements for consumer automatic dishwasher detergents are new (please refer to Section 2):

"As prescribed in Article 11(4), the following provisions on labelling shall apply to the packaging of detergents sold to the general public.

Consumer laundry detergents

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 levels 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 levels.*

The standard washing machine loads are 4.5 kg dry fabric for heavy-duty detergents and 2.5 kg dry fabric for light-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 Detergents⁹. 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.”

Consumer automatic dishwasher detergents

The packaging of detergents sold to the general public intended to be used as automatic dishwasher detergents shall bear the following information:

- *the standard dosage expressed in grams or ml or number of tablets for the main washing cycle for normally soiled tableware in a fully loaded 12 place settings dishwasher, making provisions, where relevant, for soft, medium, and hard water hardness.*

As already stated in 5.2.1., there is currently no specific legislation on the language to be used on the labels of detergents, although some Member States have legislation requiring that the label elements should be in the national language(s), as per Article 11 (5) of the Detergents Regulation. Even when such national requirements do not exist, it is recommended to use at least one of the official languages of the country where the product is marketed and sold, consistently for all labelling elements, so that consumers can understand labels. Again, this is not applicable for ingredient labelling as per INCI name.

It shall be noted that some label elements are regulated by the Dangerous Preparations Directive (Directive 1999/45/EC) and by the CLP Regulation (Regulation (EC) No 1272/2008) – these legislative acts require the use of national language(s).

6.1. Dosage Information Labelling Guidance

6.1.1. Consumer laundry detergents

- For consumer laundry detergents, the above provisions are applicable both for “hand-wash only” and machine laundry detergents, and have been in place since 8 October 2005. Auxiliary mixtures (e.g. stain removers, fabric conditioners, bleaches) fall also under the scope of these provisions.

⁹ 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)

Consumer laundry detergents intended for hand-wash

- Dosage information for hand-wash should be indicated as amount (in g or ml) per 5 or per 10 litres of water¹⁰.
- Additionally, for detergents intended for hand-wash only, it is advised to include the following indication on the label: "Not for use in washing machines".

Machine wash consumer laundry detergent

- 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:	< 150 ppm CaCO ₃ (1.5 millimoles - 150 mg per litre)
Medium Water:	150 ppm ≤ CaCO ₃ ≤ 250 ppm
Hard Water:	> 250 ppm CaCO ₃

On the actual label, the soft/medium/hard water classes can be indicated without the additional CaCO₃ range definitions.

- For normally soiled fabrics, when the water hardness is not technically relevant or the product has been designed to accommodate all classes of water hardness, the single recommended dosage can be considered to be appropriate for all classes of water hardness without referring to them unless otherwise specified (e.g. unit dose products, stain removers, bleaches, fabric conditioners).
- In the case of unit dose products, dosage can be expressed as the number of unit doses if the weight or volume of a single dose is indicated on pack.
- 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.
- "Making provision for one or two cycle washing processes..." should be interpreted as referring to "main cycle of the washing process" and "pre-cycle of the washing process (pre-wash) + main cycle of the washing process", respectively.
- 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 CaCO₃/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

¹⁰ Note: for the purpose of P-restrictions, the standard dose expressed per 10 litres of water applies.

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 CaCO₃/l) must be declared. The water hardness of 2.5 millimoles CaCO₃/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 2011/264/EU of 28 April 2011 on establishing the Ecological criteria for the award of the EU Ecolabel for Laundry Detergents. It is recognised that in some Member States 2.5 millimoles CaCO₃/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.

6.1.2. Consumer automatic dishwasher detergents

- For consumer automatic dishwasher detergents, new provisions have been introduced by Regulation (EU) No 259/2012 – please refer also to Section 2. Auxiliary mixtures also fall under the scope of these new provisions. Although rinse aids are deemed to be auxiliary mixtures, the dosage labelling requirement does not apply, as the dosage for these products is controlled by the machine settings.
- Dosage instructions (g or ml) or number of tablets for normally soiled tableware in a fully loaded 12 place settings dishwasher are required.
- Where relevant, provisions for soft, medium and hard water hardness classes should be made. In the majority of cases, if not all, dishwashers are equipped with an ion-exchange system which provides soft water. Therefore, in practice, the dosage is independent of water hardness.
- When using "all-in-one"/single function products, in case of extreme water hardness, providing directions on the adding of regeneration salt should be considered, if technically needed.
- For dosage indication examples please see Appendix 3.

6.1.3. 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.

6.2. Phosphates and other phosphorus compounds restrictions for consumer detergents to be used in washing machines and automatic dishwashers

Annex VIa of Regulation (EU) No 259/2012 lays down the "Limitations on the content of phosphates and of other phosphorus compounds":

"1. Consumer laundry detergents

Limitations: Shall not be placed on the market if the total content of phosphorus is equal to or greater than 0,5 grams in the recommended quantity of the detergent to be used in the main cycle of the washing process for a standard washing machine load as defined in section B of Annex VII for water of hard water hardness – for "normally soiled" fabrics in the case of heavy-duty detergents, – for "lightly soiled" in the case of detergents for delicate fabrics.

Date as of which the limitation applies: 30 June 2013"

"2. Consumer automatic dishwasher detergents

Limitations: Shall not be placed on the market if the total content of phosphorus is equal to or greater than 0,3 grams in the standard dosage as defined in section B of Annex VII.

Date as of which the limitation applies: 1 January 2017"

In practice:

After 30 June 2013 – a consumer laundry detergent (CLD) cannot contain more than 0.5 grams of P per recommended dosage. These restrictions apply to all laundry detergents including auxiliary products, as well as to laundry detergents intended for hand-wash only¹¹.

After 1 January 2017 – a consumer automatic dishwasher cannot contain more than 0.3 grams of P per standard dosage. These restrictions apply to consumer automatic dishwasher detergents, including auxiliary products¹².

These limitations apply to each detergent product separately, i.e. they do not sum up for the different detergents used together in a wash cycle.

Decision trees have been created to help in the interpretation of these restrictions (Appendixes 4 and 5 of this document).

¹¹ At the *Ad Hoc* Working Group meeting on 8 November 2012 the Commission clarified that "the EU restriction for CLD applies to consumer hand-washing laundry detergents, even though the actual wording of the restriction does not clearly set out how to calculate the phosphorous content in case the laundry detergent is used for hand washing only. Pre-treatment laundry detergents – e.g stain removers- used before or during the washing are covered by the EU restriction. Similarly in wash water softener – used during the washing cycle - are covered by the EU restriction. Machine cleaners used to clean the washing machine - without laundry inside - are considered as hard surface cleaners and not laundry detergents, thus they are NOT covered by the EU restriction on phosphorous."

¹² At the *Ad Hoc* Working Group meeting on 8 November 2012 the Commission clarified that "the EU restriction strictly applies to dishwasher detergent used in automatic dishwashers. Hand-dishwashing detergents are NOT covered by the EU restriction. Similarly as for CLD, machine cleaners used to clean the dishwasher – without dishes inside - are considered as hard surface cleaners and are NOT covered by the EU restriction on phosphorous."

6.3. Summary of provisions on dosage information, number of washing loads and Annex VIa restrictions for main detergents and auxiliaries

The following tables summarise the provisions on dosage information, number of washing loads and Annex VIa restrictions for main detergents and auxiliaries. Recommendations for labelling the dosage per wash (in the legal text referred to as "recommended quantity" or "standard dosage") are also provided:

6.3.1. Consumer laundry detergents

		Information on dosage mandatory?	Water hardness technically relevant? *	Number of washing loads on pack required?	Annex VIa restrictions applicable?	Indication of dosage relevant for P restrictions (ml or g)
Main	Heavy duty	Yes	Yes	Yes	Yes	g or ml /standard washing machine load for hard water ¹³
	Delicate fabrics	Yes	Yes	Yes	Yes	g or ml /standard machine load for hard water ¹⁴
	Hand-wash only	Yes ¹⁵	Yes	N/A -	Yes	g or ml /10l hard water
Auxiliaries	In-wash stain remover (e.g. wash booster)	Yes	No	-	Yes	g or ml /standard washing machine load for hard water, if relevant ¹⁶
	Out-of-wash stain remover (pre-treater)	Yes (but limited to amount to be applied to stains)	No	-	Yes	12 ml or g /wash ¹⁷
	In-wash water softener	Yes	Yes	-	Yes	g or ml /standard washing machine load for hard water

¹³ For unit dose products, the number of doses can be indicated instead (see section 6.1.1.).

¹⁴ idem

¹⁵ Recommendation to indicate "For hand-wash only" (for this case no dosage recommendations for water hardness ranges needs to be given, as would be required for machine wash).

¹⁶ For unit dose products, the number of doses can be indicated instead (see section 6.1.1).

¹⁷ Proposed approach taken from EU Ecolabel - 2 g or ml/stain, with a maximum of 6 clothing items.

	Fabric conditioner	Yes	No	Recommended by A.I.S.E.	Yes	g or ml /standard washing machine load for hard water, if relevant ¹⁸
	Bleaches	Yes	No ¹⁹	–	Yes	g or ml /standard washing machine load for hard water, if relevant
	Machine cleaner	No ²⁰	No	–	No ²¹	-

* In the majority of cases

6.3.2. Consumer automatic dishwasher detergents

		Information on dosage mandatory?	Water hardness technically relevant? *	Number of washing loads on pack required?	P restrictions applicable?	Indication of dosage relevant for P restrictions (ml or g)
Main	Automatic dishwashing detergents	Yes	No (in the majority of cases)	–	Yes	ml or g or unit dose
Auxiliaries	In-wash stain remover (e.g. wash booster)	Yes	No	–	Yes	g or ml /standard washing machine load for hard water, if relevant
	Out-of-wash stain remover (pre-treater)	Yes (but limited to amount to be applied)	No	–	Yes	12 ml or g /wash ²²
	Rinse aids	No ²³	Yes	–	Yes	3 ml ²⁴
	Machine cleaner	No ²⁵	No	–	No ²⁶	-

*In the majority of cases

¹⁸ For unit dose products, the number of doses can be indicated instead (see section 6.1.1).

¹⁹ Water hardness only relevant if in-wash.

²⁰ out of the scope as it is a hard surface cleaner.

²¹ out of the scope because it is not a laundry detergent.

²² Approach taken from EU Ecolabel - 2 ml or g/stain, with a maximum of 6 clothing items.

²³ Dosage is determined by machine settings.

²⁴ Standard dosage used for calculations as per EU Ecolabel, see footnote 22.

²⁵ Out of the scope as it is a hard surface cleaner.

²⁶ Out of the scope because it is not a dishwashing detergent.

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.

The packaging shall also indicate the website address where the manufacturer will post a simplified version of the ingredient data sheet (annex VII D, see section 8.3 of this document).

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. 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.

"Ingredient" means any chemical substance, of synthetic or natural origin, intentionally included in the composition of a detergent. For the purpose of this Annex, a perfume, an essential oil, or a colouring agent shall be considered to be a single ingredient and none of the substances that they contain shall be listed, with the exception of those allergenic fragrance substances that appear on the list of substances in Annex III, Part 1 to Directive 76/768/EEC²⁷ if the total concentration of the allergenic fragrance substance in the detergent exceeds the limit mentioned in section A.

The common chemical name or IUPAC²⁸) name, the CAS number, and, where available, the INCI²⁹ name, and the European Pharmacopoeia name, shall be given for each ingredient."

Additionally Article 11 (2) requires that information necessary to locate the source of the **ingredient datasheet** appears "on the packaging in which the detergents are put up for sale to the consumer" – the address, email address where available, and telephone number.

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.³⁰
- 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).

²⁷ now Annex III of Regulation (EC) No 1223/2009 on cosmetic products.

²⁸ International Union of Pure and Applied Chemistry.

²⁹ International Nomenclature Cosmetic Ingredient.

³⁰ It should be noted that new classification and labelling requirements for sensitizers were introduced in the 2nd Adaptation to Technical Progress of CLP Regulation on classification, labeling and packaging of substances and mixtures, Regulation (EU) No. 286/2011.

- Making available 'without delay' should be interpreted as making available as quickly as is practically possible.

8.3. Publication on a website of a list of ingredients

Annex VII D requires that;

"Manufacturers shall make available on a website the ingredient data sheet mentioned above except for the following:

- *information on weight percentage ranges is not required*
- *CAS numbers are not required*
- *the ingredient names shall be given in INCI nomenclature, or where this is not available, the European Pharmacopoeia name, shall be given. If neither name is available, the common chemical name or IUPAC name shall be used instead. For a perfume the word "parfum" shall be used and for a colouring agent, the word "colorant". A perfume, an essential oil, or a colouring agent shall be considered to be a single ingredient and none of the substances that they contain shall be listed, with the exception of those allergenic fragrance substances that appear on the list of substances in Annex III, Part 1 to Directive 76/768/EEC³¹ if the total concentration of the allergenic fragrance substance in the detergent exceeds the limit mentioned in section A.*

Access to the website shall not be subject to any restriction or condition and the content of the website shall be kept up to date. The website shall include a link to the Commission Pharmacos website or to any other suitable website that provides a table of correspondence between INCI names, European Pharmacopoeia names, and CAS numbers.

This obligation shall not apply to industrial or institutional detergents, 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.
- Listing of ingredients on a website is obligatory. The website address should appear on the label as required by Regulation (EC) No 907/2006. 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.
- The hosting 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

³¹ Now Annex III of Regulation (EC) No 1223/2009 on cosmetic products.

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.

- Annex VII D requires that the access to this website "shall NOT be subject to any restriction or condition".

The link to the ingredient datasheet should be intuitive and easy to follow for any consumer with basic internet knowledge, starting with a "click" on the URL given on the packaging. It should preferably be linked to product-related information provided on the website. Direct search by the name of the product would be seen as a good practice.

It is not advised that, in order to find the ingredients of a product, the general public can only access the information by entering a specific code or by access through an online shopping area.

- 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.
- A link must be provided to the European Commission "CosIng" database with information on cosmetic substances and ingredients that provides information on the correspondence between INCI names and CAS numbers. This website address is: <http://ec.europa.eu/consumers/cosmetics/cosing/>.
- 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 fragrance ingredients

These ingredients appear on the list of substances in Annex III of Regulation (EC) No 1223/2009³² - List of substances which cosmetic products must not contain except subject to the restrictions laid down:

Ingredient	INCI name	CAS number	EC number
Amyl cinnamal	AMYL CINNAMAL	122-40-7	204-541-5
Benzyl alcohol	BENZYL ALCOHOL	100-51-6	202-859-9
Cinnamyl alcohol	CINNAMYL ALCOHOL	104-54-1	203-212-3
Citral	CITRAL	5392-40-5	226-394-6
Eugenol	EUGENOL	97-53-0	202-589-1
Hydroxycitronellal	HYDROXYCITRONELLAL	107-75-5	203-518-7
Isoeugenol	ISOEUGENOL	97-54-1	202-590-7
Amylcinnamyl alcohol	AMYLCINNAMYL ALCOHOL	101-85-9	202-982-8
Benzyl salicylate	BENZYL SALICYLATE	118-58-1	204-262-9
Cinnamal	CINNAMAL	104-55-2	203-213-9
Coumarin	COUMARIN	91-64-5	202-086-7
Geraniol	GERANIOL	106-24-1	203-377-1
3 ³³ - and 4-(4-Hydroxy-4-methylpentyl)-3-cyclohexenecarboxaldehyde	HYDROXYISOHEXYL 3-CYCLOHEXENE CARBOXALDEHYDE	51414-25-6/ 31906-04-4	257-187-9/ 250-863-4
Anisyl alcohol	ANISE ALCOHOL	105-13-5	203-273-6
Benzyl cinnamate	BENZYL CINNAMATE	103-41-3	203-109-3
Farnesol	FARNESOL	4602-84-0	225-004-1
2-(4- <i>tert</i> -Butylbenzyl)-propionaldehyde	BUTYLPHENYL METHYLPROPIONAL	80-54-6	201-289-8
Linalool	LINALOOL	78-70-6	201-134-4
Benzyl benzoate	BENZYL BENZOATE	120-51-4	204-402-9
Citronellol	CITRONELLOL	106-22-9/ 26489-01-0 ³⁴	203-375-0/ 247-737-6
Hexyl cinnam-aldehyde	HEXYL CINNAMAL	101-86-0	202-983-3
D-Limonene	LIMONENE	5989-27-5	227-813-5
Methyl heptin carbonate	METHYL 2-OCTYNOATE	111-12-6	203-836-6
3-Methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one	ALPHA-ISOMETHYL IONONE	127-51-5	204-846-3
Oak moss extract	EVERNIA PRUNASTRI EXTRACT	90028-68-5	289-861-3
Tree moss extract	EVERNIA FURFURACEA EXTRACT	90028-67-4	289-860-8

³² Regulation (EC) No 1223/2009 of the European Parliament and of the Council of 30 November 2009 on cosmetic products

³³ As of 11th July 2013

³⁴ idem

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

The active substances notified as product type 6 (in-can preservatives) according to the Regulation (EC) No. 2032/2003 and their CAS number (and chemical identity) can be found on:

- Annex I and Ia to Directive 98/8/EC concerning the placing of biocidal products on the market
- 10-year work programme referred to in Article 16(2) of Directive 98/8/EC – Annex II to Regulation (EC) No. 1451/2007

As of 1st September 2013 on:

- Annex I to Regulation (EU) No. 528/2012
- The “Union List of approved Active Substances” under Regulation (EU) No. 528/2012
- 10-year work programme referred to in Article 89 of Regulation (EC) No. 528/2012

Some of the most commonly used preservatives and their respective INCI-names are included in the table below:

<i>Chemical name according to Annex I and II, Regulation (EC) No. 1451/2007 and Annex I Regulation (EU) No. 528/2012</i>	<i>INCI-name</i>	<i>CAS Number</i>	<i>EC number</i>
Formic acid	FORMIC ACID	64-18-6	200-579-1
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine (Diamine)	LAURYLAMINE DIPROPYLENEDIAMINE	2372-82-9	219-145-8
1,2-benzisothiazol-3(2H)-one (BIT)	BENZISOTHIAZOLINONE	2634-33-5	220-120-9
(benzyloxy)methanol	BENZYLHEMIFORMAL	14548-60-8	238-588-8
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione	DMDM HYDANTOIN	6440-58-0	229-222-8
2-bromo-2-(bromomethyl)pentanedinitrile	METHYLDIBROMO GLUTARONITRILE	35691-65-7	252-681-0
Bronopol	2-BROMO-2-NITROPROPANE-1,3-DIOL	52-51-7	200-143-0
Chlorocresol	p-CHLORO-m-CRESOL	59-50-7	200-431-6
Chlorallyl)-3,5,7-triaza-1-azoniaadamantanchlorid cis-1-(3-chloroallyl)-3,5,7-triaza-1-azoniaadamantane chloride (<i>cis CTAC</i>)	QUATERNIUM-15	51229-78-8	426-020-3
Didecyldimethylammonium chloride (<i>DDAC</i>)	DIDECYLDIMONIUM CHLORIDE	7173-51-5	230-525-2
2,2'-dithiobis[N-methylbenzamide] (<i>DTBMA</i>)	DITHIOMETHYLBENZAMI DE	2527-58-4	219-768-5
7a-ethylidihydro-1H,3H,5H-oxazolo[3,4-c]oxazole (<i>EDHO</i>)	7-ETHYLBICYCLOOXAZOLI	7747-35-5	231-810-4

Chemical name according to Annex I and II, Regulation (EC) No. 1451/2007 and Annex I Regulation (EU) No. 528/2012	INCI-name	CAS Number	EC number
	DINE		
Hexa-2,4-dienoic acid/Sorbic acid	SORBIC ACID	110-44-1	203-768-7
3-iodo-2-propynyl butylcarbamate (IPBC)	IODOPROPYNYL BUTYLCARBAMATE	55406-53-6	259-627-5
Potassium 2-biphenylate	POTASSIUM o-PHENYLPHENATE	13707-65-8	237-243-9
Potassium (E,E)-hexa-2,4-dienoate (Potassium Sorbate)	POTASSIUM SORBATE	24634-61-5	246-376-1
Methenamine 3-chloroallylochloride (CTAC)	QUATERNIUM-15	4080-31-3	223-805-0
2-methyl-2H-isothiazol-3-one (MIT)	METHYLISOTHIAZOLINONE	2682-20-4	220-239-6
Lactic acid	LACTIC ACID	50-21-5	209-954-4
Sodium N-(hydroxymethyl)glycinate	SODIUM HYDROXYMETHYLGLYCINATE	70161-44-3	274-357-8
Sodium 2-biphenylate	SODIUM o-PHENYLPHENATE	132-27-4	205-055-6
2-octyl-2H-isothiazol-3-one (OIT)	OCTYLISOTHIAZOLINONE	26530-20-1	247-761-7
Glutaraldehyde	GLUTARAL	111-30-8	203-856-5
2-Phenoxyethanol	PHENOXYETHANOL	122-99-6	204-589-7
Biphenyl-2-ol	o-PHENYLPHENOL	90-43-7	201-993-5
Pyridine-2-thiol 1-oxide, sodium salt (Sodium pyrithione)	SODIUM PYRITHIONE	3811-73-2	223-296-5
Pyrithione zinc	ZINC PYRITHIONE	13463-41-7	236-671-3
Quaternary ammonium compounds, di-C8-10-alkyldimethyl, chlorides ((see DDAC))	DICAPRYL/DICAPRYLYLDIMONIUM CHLORIDE	68424-95-3	270-331-5
Silver chloride	SILVER CHLORIDE	7783-90-6	232-033-3
Hydrogen peroxide	HYDROGEN PEROXIDE	7722-84-1	231-765-0

For more information on the correspondence between INCI names and CAS numbers, refer to "CosIng"³⁵, the European Commission database with information on cosmetic substances and ingredients.

³⁵ <http://ec.europa.eu/consumers/cosmetics/cosing/>

Appendix 3. Dosage matrix – Examples for consumer laundry detergents (CLD) and consumer automatic dishwasher detergents (CADD)

Consumer Laundry Detergents

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 CaCO₃ (1.5 millimoles - 150 mg per litre, 15°F³⁶)
- Medium Water: 150 ppm (15°F) ≤ CaCO₃ ≤ 250 ppm (25°F)
- Hard Water: >250ppm CaCO₃ (25°F)

On the actual label, the soft/medium/hard water classes can be indicated without the additional CaCO₃ 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		

³⁶ 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	

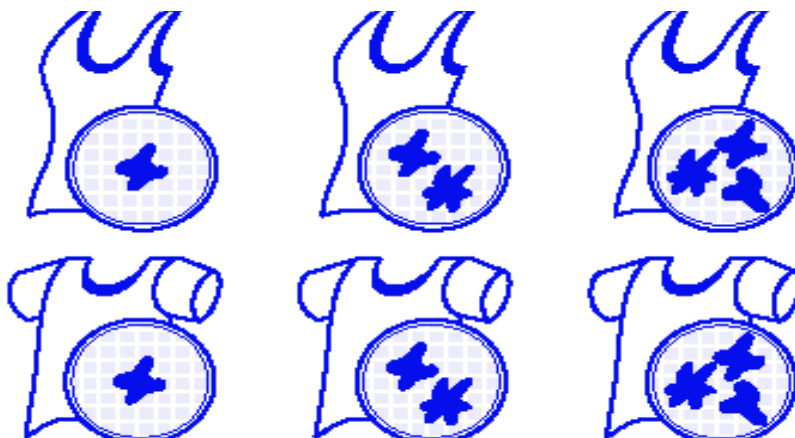
Cell content: amount of product expressed in ml. For powders, the ml/gr equivalence should be indicated somewhere on the pack.

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 CaCO₃/l) must be declared. The water hardness of 2.5 millimoles CaCO₃/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 CaCO₃/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.

If the number of washes calculated would lead to a number with some values behind the decimal point, the number should be rounded to the lowest integer (e.g. 27.7 washes should be 27 washes on pack).

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.

Particular case of fabric conditioners (not mandatory under the Detergent Regulation):

For fabric conditioners, the number of washing machine loads that can be treated with the contents of the package, using the lowest recommended dosage for a normal load³⁷ in a 4.5 kg washing machine, should be mentioned in the wash

³⁷ A normal load here is defined as a full load of cotton or mixed cotton/synthetic fabrics.

basket, in case this is used on the pack. If recommended dosages for the fabric conditioner vary with water hardness, the lowest recommended dosage for water of medium hardness, corresponding to 2.5 millimoles CaCO₃/l should be used, again for a normal load in a 4.5 kg washing machine.

As for laundry detergents, if the number of washes calculated would lead to a number with some values behind the decimal point, the number should be rounded to the lowest integer.

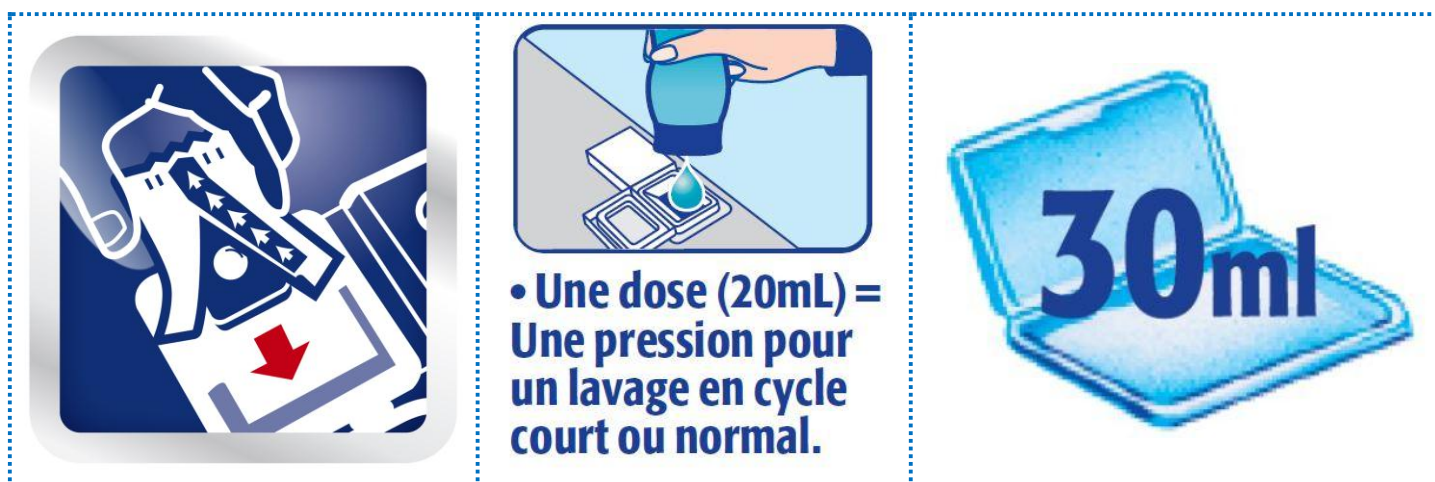
Consumer Automatic Dishwasher Detergents

The dosage can be indicated in different manners, depending on the product form, such as:

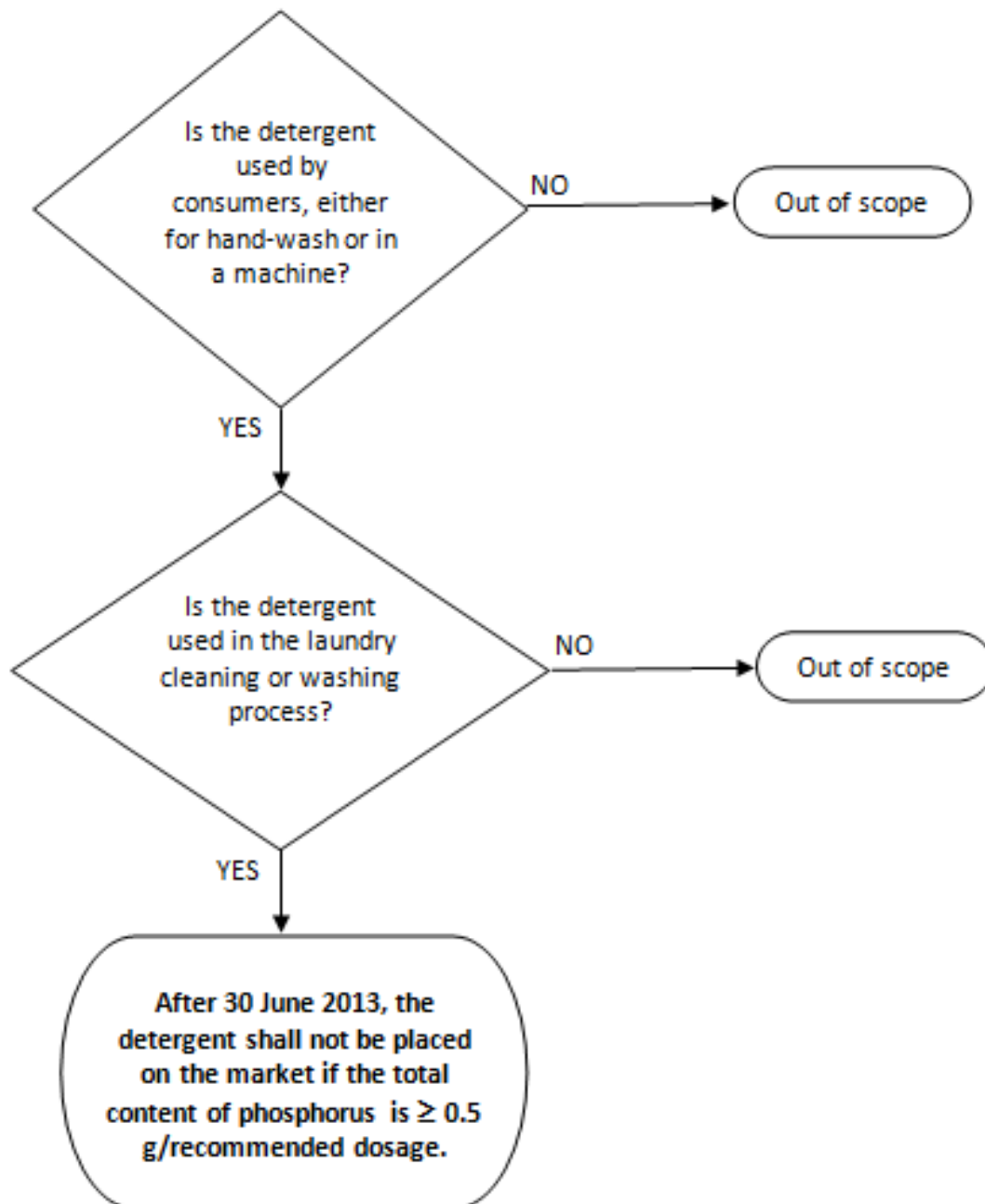
- One "unit dose" (e.g. tablet or capsule); or
- [x] ml or g for a liquid/gel or a powder, respectively; or
- via a drawing showing one "unit dose" (e.g. tablet or capsule) being placed in the dishwasher unit dose compartment,

provided this corresponds to the amount being recommended for a fully loaded 12 setting dishwasher and normally soiled table ware.

Below, some examples of dosage indication:



Appendix 4. Interpretation of Annex VIa on the limitations on the content of phosphates and of other phosphorus compounds for “consumer laundry detergents” (CLD)



Appendix 5. Interpretation of Annex VIa on the limitations on the content of phosphates and of other phosphorus compounds for “consumer automatic dishwasher detergents” (CADD)

