

# EU GPP Criteria for Cleaning Products & Services

Green Public Procurement (GPP) is a voluntary instrument. This document provides the EU GPP criteria developed for the Cleaning Products and Services product group. The accompanying Technical Background Report provides full details on the reasons for selecting these criteria and references for further information.

For each product / service group two sets of criteria are presented:

- The **core EU GPP criteria** are those suitable for use by any contracting authority across the Member States and address the key environmental impacts. They are designed to be used with minimum additional verification effort or cost increases.
- The **comprehensive EU GPP criteria** are for those who wish to purchase the best products available in the market. These may require additional verification effort or a slight increase in cost compared to other products with the same functionality.

## 1. Definition and scope

This Product sheet covers procurement actions for the purchase of both **cleaning products** and **cleaning services**. In terms of products, four categories of products are covered, in line with those covered by the EU Ecolabel ([http://ec.europa.eu/environment/ecolabel/index\\_en.htm](http://ec.europa.eu/environment/ecolabel/index_en.htm)):

- All purpose cleaners, sanitary cleaners and window cleaners
- Detergents and rinse aids for dishwashers
- Hand dishwashing detergents
- Laundry detergents and pre-treatment stain removers for washing machines

### 1.1 Cleaning products

The purchase of cleaning products presents a particular challenge to contracting authorities given the complexity of the substance information to be assessed.

The criteria presented here are based on the EU Ecolabel for cleaning products. Similar criteria are used in other Type I Ecolabels. A Type I Ecolabel constitutes a useful and reliable verification instrument, as it implies third-party verification. Products carrying a Type I Ecolabel will fulfil both the **Core** and **Comprehensive** criteria. For products not carrying a Type I Ecolabel, the contracting authority will have to verify compliance with the technical specifications based on suitable documentation provided by the tenderer, such as a technical dossier by the manufacturer or a test report from a recognised body.

The **Core** criteria below include the criteria that are easiest for a contracting authority to verify and which focus on important environmental impacts related to the use of certain hazardous substances, the correct use of product in terms of dosage and, where relevant, temperature of water, the generation of packaging waste and, in some cases, the release of phosphorus.

The **Comprehensive** criteria corresponds to a larger sub-set of the EU Ecolabel criteria and not only addresses the above mentioned issues in a more stringent way, but tackle other environmental aspects such as the toxicity to aquatic organisms of the product.

It should be noted however that some of the EU Ecolabel criteria have been developed for products used in households. They should therefore only be used as GPP criteria in relation to products for cleaning operations where:

- a) the cleaning need and performance standard required is similar to that for households, and
- b) the cleaning process, conditions and equipment used are similar to those used in households.

## **1.2 Cleaning services**

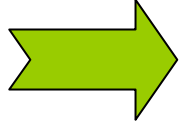
Many authorities have their cleaning services carried out by private contractors. The tendering procedure for selecting the contractor offers opportunities for improving the environmental and health performance of these services.

The reduction in the use of cleaning chemicals through using appropriate dosages or new cleaning techniques is a particularly efficient way to reduce the environmental impacts of cleaning.

At the **Core** level, the recommendations focus on ensuring that the products used meet important environmental criteria, as outlined in section 1.1 above and on some recommendations for defining the way in which the service has to be carried out, including staff training.

At the **Comprehensive** level, in addition to criteria for the products used and to recommendations for defining the way in which the service has to be carried out, the position of a facility manager, foreman/forewoman or coordinator that organises and supervises the cleaning should be foreseen.

## 2. Key environmental impacts

Key Environmental Impacts	GPP Approach
<ul style="list-style-type: none"> <li>• Climate change</li> <li>• Human health</li> <li>• Ecotoxicity</li> <li>• Eutrophication</li> <li>• Water consumption</li> <li>• Waste generation</li> </ul>	 <ul style="list-style-type: none"> <li>• Use cleaning products that are effective at lower temperatures</li> <li>• Avoid certain hazardous substances in the product</li> <li>• Avoid phosphorus and limit biocides in the product</li> <li>• Limit the overall "critical dilution volume" of the product;</li> <li>• Provide information on recommended dosages</li> <li>• Decrease the use of products through reviewing cleaning plans and techniques</li> <li>• Improve the training of cleaning staff</li> <li>• Decrease the quantity of packaging used</li> <li>• Ensure the recyclability of the packaging used and the use of recycled packaging</li> </ul>

Please note that the order of impacts does not necessarily translate to the order of their importance.

## 3. EU GPP criteria for Cleaning Products and Services

Core criteria	Comprehensive criteria
<b>3.1 EU GPP criteria for all purpose cleaners</b>	
<b>SUBJECT MATTER</b>	<b>SUBJECT MATTER</b>
Purchase of environmentally friendly all purpose cleaning products.	Purchase of environmentally friendly all purpose cleaning products.
<b>TECHNICAL SPECIFICATIONS</b>	<b>TECHNICAL SPECIFICATIONS</b>
<b>Substance requirements</b>	<b>Substance requirements</b>
1. No ingredients (substances) shall be listed on the product label, in the safety data sheet (SDS) or in other relevant technical data sheets that have been identified as substances of very high concern and have been included in the list foreseen in Article 59 of Regulation (EC) No	1. The product shall not contain substances that have been identified as substances of very high concern and included in the list foreseen in Article 59 of Regulation (EC) No 1907/2006 (the REACH Regulation) in a quantity that exceeds 0.01% by weight of the final product. The list

<p>1907/2006 (the REACH Regulation). The list of substances referred to (the candidate list) can be found at:</p> <p><a href="http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp">http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp</a>.</p> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as the provision of the ingredients listed on the product label, the safety data sheet (SDS), the manufacturer's website and any other relevant technical data sheets, along with their CAS-Number (where available) and a declaration that none of the listed ingredients are on the candidate list.</p>	<p>of substances referred to (the candidate list) can be found at:</p> <p><a href="http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp">http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp</a>.</p> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as:</p> <ul style="list-style-type: none"> <li>• For each product offered, all substances contained above 0.01% by weight of the final product must be listed together with their CAS-Number (where available) and a declaration that none of the substances are on the candidate list provided.</li> </ul>
	<p>2. No ingredient (substance) shall be included in the product in a quantity that exceeds 0.01% by weight of the final product that is classified with any of the Hazard Statements or Risk-phrases, or combinations thereof, as outlined in the following table in accordance with Regulation (EC) No 1272/2008 or Directive 67/548/EEC. These criteria do not apply to biocides, which are dealt with separately below:</p> <ul style="list-style-type: none"> <li>• EUH029, EUH031, EUH032 (contact with water or acids liberates toxic gases)</li> <li>• R29, R31, R32 (contact with water or acids liberates toxic gases)</li> <li>• H300, H301, H304, H310, H311, H330, H331, H370, H371, H372, H373 (toxic, fatal or may cause organ damage)</li> <li>• R23, R24, R25, R26, R27, R28, R65, R39/23, R39/24, R39/25, R39/26, R39/27, R39/28, R48/20, R48/21, R48/22, R48/23, R48/24, R48/25, R68/20, R68/21, R68/22 (toxic, very toxic or irreversible effects)</li> <li>• H317, H334 (sensitising), except for enzymes</li> <li>• R42, R43 (sensitising), except for enzymes</li> <li>• H340, H341 (mutagenic)</li> <li>• R46, R68 (mutagenic)</li> <li>• H350, H350i, H351 (carcinogenic)</li> <li>• R40, R45, R49 (carcinogenic)</li> </ul>

	<ul style="list-style-type: none"> <li>• H360D, H360F, H360FD, H360Fd, H360Df, H361f, H361d, H361fd, H362 (toxic for reproduction)</li> <li>• R60, R61, R62, R63, R64 (toxic for reproduction)</li> <li>• EUH070 (toxic by eye contact)</li> <li>• R39-41 (toxic by eye contact)</li> <li>• H400, H410, H411, H412 (except for fragrances), H413 (harmful to aquatic organisms)</li> <li>• R50, R50/53, R51/53, R52/53 (except for fragrances), R53 (harmful to aquatic organisms)</li> <li>• EUH059 (hazardous to the ozone layer)</li> <li>• R59 (dangerous for the ozone layer)</li> </ul> <p>Surfactants classified as H400 or R50 are allowable provided the concentration in the product is &lt;25%/M where M is the M-factor established in accordance with Regulation (EC) No 1272/2008.</p> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as:</p> <ul style="list-style-type: none"> <li>• For each product offered, all substances contained above 0.01% by weight of the final product must be listed, together with their CAS-Number (where available) and any Hazard Statements or Risk-phrases with which they are classified.</li> </ul>
	<p>3. The following ingredients must not be included in the product (exceeding 0.01% by weight of the product unless otherwise indicated):</p> <ul style="list-style-type: none"> <li>• Phosphorus (limit: 0.02 g of the dosage of the product recommended by the manufacturer for 1 litre of washing water for cleaners that are diluted before use or 0.2 g per 100 g of product for all purpose cleaners for products that are used without dilution).</li> <li>• Biocides, unless used as preservatives.</li> <li>• Biocides which are classified as H410 or R50/53 or H411 or R51/53 in accordance with Directive 67/548/EC, Directive 1999/45/EC or Regulation (EC) No 1272/2008, unless they are not potentially</li> </ul>

	<p>bioaccumulative. In this context, a biocide is considered to be potentially bioaccumulative if the log Pow (log octanol/water partition coefficient is &gt; or = to 3.0 (unless the experimentally determined BCF &lt; or = to 100).</p> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as:</p> <ul style="list-style-type: none"> <li>• The name and function of all biocides must be listed. For all biocides classified as H410 or R50/53 or H411 or R51/53 the log Pow or BCF must be given.</li> <li>• The total quantity of elementary phosphorus must be given (per functional unit).</li> </ul>
	<p>4. The critical dilution volume (CDV<sub>chronic</sub>) of the product shall not exceed the following limits. The CDV<sub>chronic</sub> shall be determined according to the scheme outlined in the relevant EU Ecolabel (<a href="http://ec.europa.eu/environment/ecolabel/index_en.htm">http://ec.europa.eu/environment/ecolabel/index_en.htm</a>).</p> <ul style="list-style-type: none"> <li>• For products which are diluted with water prior to use, the CDV<sub>chronic</sub> of the recommended dose expressed for 1 litre of washing water shall not exceed 18,000 litres.</li> <li>• For products which are used without dilution, the CDV<sub>chronic</sub> for 100 g of the product shall not exceed 52,000 litres.</li> </ul> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as a technical dossier of the manufacturer or a test report from a recognised body.</p>
<p><b>Packaging requirements</b></p> <p>2. All products must be delivered with clear dosing instructions.</p> <p><b>Verification:</b> Supply of instruction documents to the contracting authority.</p>	<p><b>Packaging requirements</b></p> <p>5. All products must be delivered with clear dosing instructions.</p> <p><b>Verification:</b> Supply of instruction documents to the contracting authority.</p>

<p>3. Sprays containing propellants must not be used.</p> <p><b>Verification:</b> Written declaration confirming that no propellants are used.</p>	<p>6. Sprays containing propellants must not be used.</p> <p><b>Verification:</b> Written declaration confirming that no propellants are used.</p>
<p>4. Products packaged as trigger sprays must be sold as part of a refillable system.</p> <p><b>Verification:</b> Written declaration confirming the trigger sprays are refillable, together with details of how to obtain refills and their prices.</p>	<p>7. Products packaged as trigger sprays must be sold as part of a refillable system.</p> <p><b>Verification:</b> Written declaration confirming the trigger sprays are refillable, together with details of how to obtain refills and their prices.</p>
	<p>8. The weight utility ratio (WUR) for the primary packaging must not exceed the following values:</p> <ul style="list-style-type: none"> <li>• For concentrated products, including liquid concentrates and solids, that are diluted in water prior to use – WUR 1.20 g packaging per litre use solution (washing water).</li> <li>• For ready-to-use products i.e. products used without further dilution – WUR 150 g packaging per litre use solution (washing water).</li> </ul> <p>The WUR is calculated only for the primary packaging (including caps, stoppers and hand pumps/spraying devices) by using the following formula:</p> $WUR = \Sigma((W_i + U_i)/(D_i \times r_i))$ <p>where</p> <p><math>W_i</math> = The weight (g) of the primary packaging (i) including label if applicable.</p> <p><math>U_i</math> = The weight (g) of non-recycled (virgin) material in the primary packaging (i). If the proportion of recycled material is 0% then <math>U_i = W_i</math>.</p> <p><math>D_i</math> = Number of functional doses (the number of dosage volumes which is recommended by the manufacturer for 1 litre of washing water) contained in the primary packaging (i). In the case of ready-to-use products that are sold pre-diluted, <math>D_i</math> = product volume (in litres).</p> <p><math>r_i</math> = Recycling figure, i.e. the number of times the primary packaging (i) is used for the same purpose through a return or refill system (<math>r_i = 1</math> if the</p>

	<p>packaging is not reused for the same purpose).</p> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as a technical dossier of the manufacturer or a test report from a recognised body.</p>
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Log  $P_{ow}$  = log octanol/water partition coefficient.

BCF = Bio-concentration factor.

The CAS-Number is an internationally recognised identity number assigned by the Chemical Abstracts Service (a division of the American Chemical Society) to identify a specific substance.

Core criteria	Comprehensive criteria
<b>3.2 EU GPP criteria for sanitary cleaners</b>	
<b>SUBJECT MATTER</b>	<b>SUBJECT MATTER</b>
Purchase of environmentally friendly sanitary cleaning products.	Purchase of environmentally friendly sanitary cleaning products.
<b>TECHNICAL SPECIFICATIONS</b>	<b>TECHNICAL SPECIFICATIONS</b>
<p><b>Substance requirements</b></p> <p>1. No ingredients (substances) shall be listed on the product label, in the safety data sheet (SDS) or in other relevant technical data sheets that have been identified as substances of very high concern and have been included in the list foreseen in Article 59 of Regulation (EC) No 1907/2006 (the REACH Regulation). The list of substances referred to (the candidate list) can be found at:  <a href="http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp">http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp</a>.</p> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the</p>	<p><b>Substance requirements</b></p> <p>1. The product shall not contain substances that have been identified as substances of very high concern and included in the list foreseen in Article 59 of Regulation (EC) No 1907/2006 (the REACH Regulation) in a quantity that exceeds 0.01% by weight of the final product. The list of substances referred to (the candidate list) can be found at:  <a href="http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp">http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp</a>.</p> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof</p>



<p>listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as the provision of the ingredients listed on the product label, the safety data sheet (SDS), the manufacturer's website and any other relevant technical data sheets, along with their CAS-Number (where available) and a declaration that none of the listed ingredients are on the candidate list.</p>	<p>will also be accepted, such as:</p> <p>For each product offered, all substances contained above 0.01% by weight of the final product must be listed together with their CAS-Number (where available) and a declaration that none of the substances are on the candidate list provided.</p>
	<p>2. No ingredient (substance) shall be included in the product in a quantity that exceeds 0.01% by weight of the final product that is classified with any of the Hazard Statements or Risk-phrases, or combinations thereof, as outlined in the following table in accordance with Regulation (EC) No 1272/2008 or Directive 67/548/EEC. These criteria do not apply to biocides, which are dealt with separately below:</p> <ul style="list-style-type: none"> <li>• EUH029, EUH031, EUH032 (contact with water or acids liberates toxic gases)</li> <li>• R29, R31, R32 (contact with water or acids liberates toxic gases)</li> <li>• H300, H301, H304, H310, H311, H330, H331, H370, H371, H372, H373 (toxic, fatal or may cause organ damage)</li> <li>• R23, R24, R25, R26, R27, R28, R65, R39/23, R39/24, R39/25, R39/26, R39/27, R39/28, R48/20, R48/21, R48/22, R48/23, R48/24, R48/25, R68/20, R68/21, R68/22 (toxic, very toxic or irreversible effects)</li> <li>• H317, H334 (sensitising), except for enzymes</li> <li>• R42, R43 (sensitising), except for enzymes</li> <li>• H340, H341 (mutagenic)</li> <li>• R46, R68 (mutagenic)</li> <li>• H350, H350i, H351 (carcinogenic)</li> <li>• R40, R45, R49 (carcinogenic)</li> <li>• H360D, H360F, H360FD, H360Fd, H360Df, H361f, H361d, H361fd, H362 (toxic for reproduction)</li> <li>• R60, R61, R62, R63, R64 (toxic for reproduction)</li> <li>• EUH070 (toxic by eye contact)</li> <li>• R39-41 (toxic by eye contact)</li> <li>• H400, H410, H411, H412 (except for fragrances), H413 (harmful to</li> </ul>

	<p>aquatic organisms)</p> <ul style="list-style-type: none"> <li>• R50, R50/53, R51/53, R52/53 (except for fragrances), R53 (harmful to aquatic organisms)</li> <li>• EUH059 (hazardous to the ozone layer)</li> <li>• R59 (dangerous for the ozone layer)</li> </ul> <p>Surfactants classified as H400 or R50 are allowable provided the concentration in the product is &lt;25%/M where M is the M-factor established in accordance with Regulation (EC) No 1272/2008.</p> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as:</p> <p>For each product offered, all substances contained above 0.01% by weight of the final product must be listed, together with their CAS-Number (where available) and any Hazard Statements or Risk-phrases with which they are classified.</p>
	<p>3. The following ingredients must not be included in the product (exceeding 0.01% by weight of the product unless otherwise indicated):</p> <ul style="list-style-type: none"> <li>• Phosphorus (limit: 1g per 100g of product)</li> <li>• Biocides, unless used as preservatives</li> <li>• Biocides which are classified as H410 or R50/53 or H411 or R51/53 in accordance with Directive 67/548/EEC, Directive 1999/45/EC or Regulation (EC) No 1272/2008, unless they are not potentially bioaccumulative, In this context, a biocide is considered to be potentially bioaccumulative if the log Pow (log octanol/water partition coefficient) &gt; or = to 3,0 (unless the experimentally determined BCF &lt; or = to 100).</li> </ul> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as:</p> <p>The name and function of all biocides must be listed. For all biocides</p>

	<p>classified as H410 or R50/53 or H411 or R51/53 the log Pow or BCF must be given.</p> <p>The total quantity of elementary phosphorus must be given (per 100g of product).</p>
	<p>4. The critical dilution volume (<math>CDV_{\text{chronic}}</math>) of the product shall not exceed the following limits. The <math>CDV_{\text{chronic}}</math> shall be determined according to the scheme outlined in the relevant EU Ecolabel (<a href="http://ec.europa.eu/environment/ecolabel/index_en.htm">http://ec.europa.eu/environment/ecolabel/index_en.htm</a>).</p> <ul style="list-style-type: none"> <li>• The <math>CDV_{\text{chronic}}</math> for 100 g of the product shall not exceed 80,000 litres.</li> </ul> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as a technical dossier of the manufacturer or a test report from a recognised body.</p>
<p><b>Packaging requirements</b></p> <p>2. All products must be delivered with clear dosing instructions.</p> <p><b>Verification:</b> Supply of instruction documents to the contracting authority.</p>	<p><b>Packaging requirements</b></p> <p>5. All products must be delivered with clear dosing instructions.</p> <p><b>Verification:</b> Supply of instruction documents to the contracting authority.</p>
<p>3. Sprays containing propellants must not be used.</p> <p><b>Verification:</b> Written declaration confirming that no propellants are used.</p>	<p>6. Sprays containing propellants must not be used.</p> <p><b>Verification:</b> Written declaration confirming that no propellants are used.</p>
<p>4. Products packaged in trigger sprays must be sold as part of a refillable system.</p> <p><b>Verification:</b> Written declaration confirming the trigger sprays are refillable, together with details of how to obtain refills and their prices.</p>	<p>7. Products packaged as trigger sprays must be sold as part of a refillable system.</p> <p><b>Verification:</b> Written declaration confirming the trigger sprays are refillable, together with details of how to obtain refills and their prices.</p>
	<p>8. The weight utility ratio (WUR) for the primary packaging must not exceed the following values:</p>

- For concentrated products, including liquid concentrates and solids, that are diluted in water prior to use – WUR 1.20 g packaging per litre use solution (washing water).
- For ready-to-use products i.e. products used without further dilution – WUR 150 g packaging per litre use solution (washing water).

The WUR is calculated only for the primary packaging (including caps, stoppers and hand pumps/spraying devices) by using the following formula:

$$WUR = \Sigma((W_i + U_i)/(D_i \times r_i))$$

where

$W_i$  = The weight (g) of the primary packaging (i) including label if applicable.

$U_i$  = The weight (g) of non-recycled (virgin) material in the primary packaging (i). If the proportion of recycled material is 0% then  $U_i = W_i$ .

$D_i$  = Number of functional doses (the number of dosage volumes which is recommended by the manufacturer for 1 litre of washing water) contained in the primary packaging (i). In the case of ready-to-use products that are sold pre-diluted,  $D_i$  = product volume (in litres).

$r_i$  = Recycling figure, i.e. the number of times the primary packaging (i) is used for the same purpose through a return or refill system ( $r_i = 1$  if the packaging is not reused for the same purpose).

**Verification:** Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as a technical dossier of the manufacturer or a test report from a recognised body.

Log  $P_{ow}$  = log octanol/water partition coefficient.

BCF = Bio-concentration factor.

The CAS-Number is an internationally recognised identity number assigned by the Chemical Abstracts Service (a division of the American Chemical Society) to identify a specific substance.

Core criteria	Comprehensive criteria
<b>3.3 EU GPP criteria for window cleaners</b>	
<b>SUBJECT MATTER</b>	<b>SUBJECT MATTER</b>
Purchase of environmentally friendly window cleaning products.	Purchase of environmentally friendly window cleaning products.
<b>TECHNICAL SPECIFICATIONS</b>	<b>TECHNICAL SPECIFICATIONS</b>
<p><b>Substance requirements</b></p> <p>1. No ingredients (substances) shall be listed on the product label, in the safety data sheet (SDS) or in other relevant technical data sheets that have been identified as substances of very high concern and have been included in the list foreseen in Article 59 of Regulation (EC) No 1907/2006 (the REACH Regulation). The list of substances referred to (the candidate list) can be found at:</p> <p><a href="http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp">http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp</a>.</p> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as the provision of the ingredients listed on the product label, the safety data sheet (SDS), the manufacturer's website and any other relevant technical data sheets, along with their CAS-Number (where available) and a declaration that none of the listed ingredients are on the candidate list.</p>	<p><b>Substance requirements</b></p> <p>1. The product shall not contain substances that have been identified as substances of very high concern and included in the list foreseen in Article 59 of Regulation (EC) No 1907/2006 (the REACH Regulation) in a quantity that exceeds 0.01% by weight of the final product. The list of substances referred to (the candidate list) can be found at:</p> <p><a href="http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp">http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp</a>.</p> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as:</p> <ul style="list-style-type: none"> <li>• For each product offered, all substances contained above 0.01% by weight of the final product must be listed together with their CAS-Number (where available) and a declaration that none of the substances are on the candidate list provided.</li> </ul>
	<p>2. No ingredient (substance) shall be included in the product in a quantity that exceeds 0.01% by weight of the final product that is classified with any of the Hazard Statements or Risk-phrases, or combinations thereof, as outlined in the following table in accordance with Regulation (EC) No 1272/2008 or Directive 67/548/EEC. These criteria do not apply to</p>

biocides, which are dealt with separately below:

- EUH029, EUH031, EUH032 (contact with water or acids liberates toxic gases)
- R29, R31, R32 (contact with water or acids liberates toxic gases)
- H300, H301, H304, H310, H311, H330, H331, H370, H371, H372, H373 (toxic, fatal or may cause organ damage)
- R23, R24, R25, R26, R27, R28, R65, R39/23, R39/24, R39/25, R39/26, R39/27, R39/28, R48/20, R48/21, R48/22, R48/23, R48/24, R48/25, R68/20, R68/21, R68/22 (toxic, very toxic or irreversible effects)
- H317, H334 (sensitising), except for enzymes
- R42, R43 (sensitising), except for enzymes
- H340, H341 (mutagenic)
- R46, R68 (mutagenic)
- H350, H350i, H351 (carcinogenic)
- R40, R45, R49 (carcinogenic)
- H360D, H360F, H360FD, H360Fd, H360Df, H361f, H361d, H361fd, H362 (toxic for reproduction)
- R60, R61, R62, R63, R64 (toxic for reproduction)
- EUH070 (toxic by eye contact)
- R39-41 (toxic by eye contact)
- H400, H410, H411, H412 (except for fragrances), H413 (harmful to aquatic organisms)
- R50, R50/53, R51/53, R52/53 (except for fragrances), R53 (harmful to aquatic organisms)
- EUH059 (hazardous to the ozone layer)
- R59 (dangerous for the ozone layer)

Surfactants classified as H400 or R50 are allowable provided the concentration in the product is <25%/M where M is the M-factor established in accordance with Regulation (EC) No 1272/2008.

**Verification:** Products carrying a relevant Type I Ecolabel fulfilling the

	<p>listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as:</p> <ul style="list-style-type: none"> <li>• For each product offered, all substances contained above 0.01% by weight of the final product must be listed, together with their CAS-Number (where available) and any Hazard Statements or Risk-phrases with which they are classified.</li> </ul>
	<p>3. The following ingredients must not be included in the product (exceeding 0.01% by weight of the product):</p> <ul style="list-style-type: none"> <li>• Phosphorus</li> <li>• Biocides, unless used as preservatives</li> <li>• Biocides which are classified as H410 or R50/53 or H411 or R51/53 in accordance with Directive 67/548/EEC, Directive 199/45/EC or Regulation (EC) No 1272/2008, unless they are not potentially bioaccumulative. In this context, a biocide is considered to be potentially bioaccumulative if the log Pow (log octanol/water partition coefficient) &gt; or = to 3,0 (unless the experimentally determined BCF &lt; or = 100).</li> </ul> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as:</p> <ul style="list-style-type: none"> <li>• The name and function of all biocides must be listed. For all biocides classified as H410 or R50/53 or H411 or R51/53 the log Pow or BCF must be given.</li> <li>• The total quantity of elementary phosphorus must be given.</li> </ul>

	<p>4. The critical dilution volume (CDV<sub>chronic</sub>) of the product shall not exceed the following limits. The CDV<sub>chronic</sub> shall be determined according to the scheme outlined in the relevant EU Ecolabel (<a href="http://ec.europa.eu/environment/ecolabel/index_en.htm">http://ec.europa.eu/environment/ecolabel/index_en.htm</a>).</p> <ul style="list-style-type: none"> <li>• The CDV<sub>chronic</sub> for 100 g of the product shall not exceed 4,800 litres.</li> </ul> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as a technical dossier of the manufacturer or a test report from a recognised body.</p>
<p><b>Packaging requirements</b></p> <p>2. All products must be delivered with clear dosing instructions.</p> <p><b>Verification:</b> Supply of instruction documents to the contracting authority.</p>	<p><b>Packaging requirements</b></p> <p>5. All products must be delivered with clear dosing instructions.</p> <p><b>Verification:</b> Supply of instruction documents to the contracting authority.</p>
<p>3. Sprays containing propellants must not be used.</p> <p><b>Verification:</b> Written declaration confirming that no propellants are used.</p>	<p>6. Sprays containing propellants must not be used.</p> <p><b>Verification:</b> Written declaration confirming that no propellants are used.</p>
	<p>7. The weight utility ratio (WUR) for the primary packaging must not exceed the following values:</p> <ul style="list-style-type: none"> <li>• For concentrated products, including liquid concentrates and solids, that are diluted in water prior to use – WUR 1.20 g packaging per litre use solution (washing water).</li> <li>• For ready-to-use products i.e. products used without further dilution – WUR 150 g packaging per litre use solution (washing water).</li> </ul> <p>The WUR is calculated only for the primary packaging (including caps, stoppers and hand pumps/spraying devices) by using the following formula:</p> $WUR = \Sigma((W_i + U_i)/(D_i \times r_i))$



	<p>where</p> <p><math>W_i</math> = The weight (g) of the primary packaging (i) including label if applicable.</p> <p><math>U_i</math> = The weight (g) of non-recycled (virgin) material in the primary packaging (i). If the proportion of recycled material is 0% then <math>U_i = W_i</math>.</p> <p><math>D_i</math> = Number of functional doses (the number of dosage volumes which is recommended by the manufacturer for 1 litre of washing water) contained in the primary packaging (i). In the case of ready-to-use products that are sold pre-diluted, <math>D_i</math> = product volume (in litres).</p> <p><math>r_i</math> = Recycling figure, i.e. the number of times the primary packaging (i) is used for the same purpose through a return or refill system (<math>r_i = 1</math> if the packaging is not reused for the same purpose).</p> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as a technical dossier of the manufacturer or a test report from a recognised body.</p>
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Log  $P_{ow}$  = log octanol/water partition coefficient.

BCF = Bio-concentration factor.

The CAS-Number is an internationally recognised identity number assigned by the Chemical Abstracts Service (a division of the American Chemical Society) to identify a specific substance.

Core criteria	Comprehensive criteria
<b>3.4 EU GPP criteria for hand dishwashing detergents</b>	
<b>SUBJECT MATTER</b>	<b>SUBJECT MATTER</b>
Purchase of environmentally friendly hand dishwashing detergent products.	Purchase of environmentally friendly hand dishwashing detergent products.
<b>TECHNICAL SPECIFICATIONS</b>	<b>TECHNICAL SPECIFICATIONS</b>
<p><b>Substance requirements</b></p> <p>1. No ingredients (substances) shall be listed on the product label, in the safety data sheet (SDS) or in other relevant technical data sheets that have been identified as substances of very high concern and have been included in the list foreseen in Article 59 of Regulation (EC) No 1907/2006 (the REACH Regulation). The list of substances referred to (the candidate list) can be found at:</p> <p><a href="http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp">http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp</a>.</p> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as the provision of the ingredients listed on the product label, the safety data sheet (SDS), the manufacturer's website and any other relevant technical data sheets, along with their CAS-Number (where available) and a declaration that none of the listed ingredients are on the candidate list.</p>	<p><b>Substance requirements</b></p> <p>1. The product shall not contain substances that have been identified as substances of very high concern and included in the list foreseen in Article 59 of Regulation (EC) No 1907/2006 (the REACH Regulation) in a quantity that exceeds 0.01% by weight of the final product. The list of substances referred to (the candidate list) can be found at:</p> <p><a href="http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp">http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp</a>.</p> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as:</p> <p>For each product offered, all substances contained above 0.01% by weight of the final product must be listed together with their CAS-Number (where available) and a declaration that none of the substances are on the candidate list provided.</p> <p>2. No ingredient (substance) shall be included in the product in a quantity that exceeds 0.01% by weight of the final product that is classified with any of the Hazard Statements or Risk-phrases, or combinations thereof, as outlined in the following table in accordance with Regulation (EC) No 1272/2008 or Directive 67/548/EEC. These criteria do not apply to biocides, which are dealt with separately below:</p> <ul style="list-style-type: none"> <li>• EUH029, EUH031, EUH032 (contact with water or acids liberates</li> </ul>

toxic gases)

- R29, R31, R32 (contact with water or acids liberates toxic gases)
- H300, H301, H304, H310, H311, H330, H331, H370, H371, H372, H373 (toxic, fatal or may cause organ damage)
- R23, R24, R25, R26, R27, R28, R65, R39/23, R39/24, R39/25, R39/26, R39/27, R39/28, R48/20, R48/21, R48/22, R48/23, R48/24, R48/25, R68/20, R68/21, R68/22 (toxic, very toxic or irreversible effects)
- H317, H334 (sensitising), except for enzymes
- R42, R43 (sensitising), except for enzymes
- H340, H341 (mutagenic)
- R46, R68 (mutagenic)
- H350, H350i, H351 (carcinogenic)
- R40, R45, R49 (carcinogenic)
- H360D, H360F, H360FD, H360Fd, H360Df, H361f, H361d, H361fd, H362 (toxic for reproduction)
- R60, R61, R62, R63, R64 (toxic for reproduction)
- EUH070 (toxic by eye contact)
- R39-41 (toxic by eye contact)
- H400, H410, H411, H412 (except for fragrances), H413 (harmful to aquatic organisms)
- R50, R50/53, R51/53, R52/53 (except for fragrances), R53 (harmful to aquatic organisms)
- EUH059 (hazardous to the ozone layer)
- R59 (dangerous for the ozone layer)

Surfactants classified as H400 or R50 are allowable provided the concentration in the product is <25%/M where M is the M-factor established in accordance with Regulation (EC) No 1272/2008.

**Verification:** Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as:

	<ul style="list-style-type: none"> <li>• For each product offered, all substances contained above 0.01% by weight of the final product must be listed, together with their CAS-Number (where available) and any Hazard Statements or Risk-phrases with which they are classified.</li> </ul>
	<p>3. The following ingredients must not be included in the product (exceeding 0.01% by weight of the product):</p> <ul style="list-style-type: none"> <li>• Fragrances in hand dishwashing detergents for professional use</li> <li>• Biocides, unless used as preservatives</li> <li>• Biocides which are classified as H410 or R50/53 or H411 or R51/53 in accordance with Directive 67/548/EEC, Directive 1999/45/EC or Regulation 1272/2008, unless they are not potentially bioaccumulative. In this context, a biocide is considered to be potentially bioaccumulative if the log Pow (log octanol/water partition coefficient) &gt; or = to 3.0 (unless the experimentally determined BCF &lt; or = 100).</li> </ul> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as:</p> <ul style="list-style-type: none"> <li>• The name and function of all biocides must be listed. For all biocides classified as H410 or R50/53 or H411 or R51/53 the log Pow or BCF must be given.</li> <li>• For hand dishwashing detergents for professional use, all fragrances contained above 0.01% by weight of the final product must be listed.</li> </ul>

	<p>4. The critical dilution volume (<math>CDV_{\text{chronic}}</math>) of the product shall not exceed the following limits. The <math>CDV_{\text{chronic}}</math> shall be determined according to the scheme outlined in the relevant EU Ecolabel (<a href="http://ec.europa.eu/environment/ecolabel/index_en.htm">http://ec.europa.eu/environment/ecolabel/index_en.htm</a>).</p> <ul style="list-style-type: none"> <li>• The <math>CDV_{\text{chronic}}</math> of the recommended dose for preparing 1 litre of dishwashing water for cleaning of normally soiled dishes shall not exceed 3,800 litres.</li> </ul> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as a technical dossier of the manufacturer or a test report from a recognised body.</p>
<p><b>Packaging requirements</b></p> <p>2. All products must be delivered with clear dosing instructions.</p> <p><b>Verification:</b> Supply of instruction documents to the contracting authority.</p>	<p><b>Packaging requirements</b></p> <p>5. All products must be delivered with clear dosing instructions.</p> <p><b>Verification:</b> Supply of instruction documents to the contracting authority.</p>

6. The weight utility ratio (WUR) for the primary packaging must not exceed the following value – WUR 1.20 g packaging per litre use solution (dishwashing water).

The WUR is calculated only for the primary packaging (including caps, stoppers and hand pumps/spraying devices) by using the following formula:

$$\text{WUR} = \Sigma((W_i + U_i)/(D_i \times r_i))$$

where

$W_i$  = The weight (g) of the primary packaging (i) including label if applicable.

$U_i$  = The weight (g) of non-recycled (virgin) material in the primary packaging (i). If the proportion of recycled material is 0% then  $U_i = W_i$ .

$D_i$  = Number of functional doses (the number of dosage volumes which is recommended by the manufacturer for 1 litre of washing water) contained in the primary packaging (i).

$r_i$  = Recycling figure, i.e. the number of times the primary packaging (i) is used for the same purpose through a return or refill system ( $r_i = 1$  if the packaging is not reused for the same purpose).

**Verification:** Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as a technical dossier of the manufacturer or a test report from a recognised body.

Log  $P_{ow}$  = log octanol/water partition coefficient.

BCF = Bio-concentration factor.

The CAS-Number is an internationally recognised identity number assigned by the Chemical Abstracts Service (a division of the American Chemical Society) to identify a specific substance.

Core criteria	Comprehensive criteria
<b>3.5 EU GPP criteria for laundry detergents and pre-treatment stain removers</b>	
<b>SUBJECT MATTER</b>	<b>SUBJECT MATTER</b>
Purchase of environmentally friendly laundry detergents and pre-treatment stain removers.	Purchase of environmentally friendly laundry detergents and pre-treatment stain removers.
<b>TECHNICAL SPECIFICATIONS</b>	<b>TECHNICAL SPECIFICATIONS</b>
<p><b>Substance requirements</b></p> <p>1. No ingredients (substances) shall be listed on the product label, in the safety data sheet (SDS) or in other relevant technical data sheets that have been identified as substances of very high concern and have been included in the list foreseen in Article 59 of Regulation (EC) No 1907/2006 (the REACH Regulation). The list of substances referred to (the candidate list) can be found at:</p> <p><a href="http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp">http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp</a>.</p> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as the provision of the ingredients listed on the product label, the safety data sheet (SDS), the manufacturer's website and any other relevant technical data sheets, along with their CAS-Number (where available) and a declaration that none of the listed ingredients are on the candidate list.</p>	<p><b>Substance requirements</b></p> <p>1. The product shall not contain substances that have been identified as substances of very high concern and included in the list foreseen in Article 59 of Regulation (EC) No 1907/2006 (the REACH Regulation) in a quantity that exceeds 0.01% by weight of the final product. The list of substances referred to (the candidate list) can be found at:</p> <p><a href="http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp">http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp</a>.</p> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as:</p> <ul style="list-style-type: none"> <li>For each product offered, all substances contained above 0.01% by weight of the final product must be listed together with their CAS-Number (where available) and a declaration that none of the substances are on the candidate list provided.</li> </ul>
	<p>2. No ingredient (substance) shall be included in the product in a quantity that exceeds 0.01% by weight of the final product that is classified with any of the Hazard Statements or Risk-phrases, or combinations thereof, as outlined in the following table in accordance with Regulation (EC) No 1272/2008 or Directive 67/548/EEC. These criteria do not apply to biocides, which are dealt with separately below:</p>

- EUH029, EUH031, EUH032 (contact with water or acids liberates toxic gases)
- R29, R31, R32 (contact with water or acids liberates toxic gases)
- H300, H301, H304, H310, H311, H330, H331, H370, H371, H372, H373 (toxic, fatal or may cause organ damage)
- R23, R24, R25, R26, R27, R28, R65, R39/23, R39/24, R39/25, R39/26, R39/27, R39/28, R48/20, R48/21, R48/22, R48/23, R48/24, R48/25, R68/20, R68/21, R68/22 (toxic, very toxic or irreversible effects)
- H317, H334 (sensitising), except for enzymes and bleach catalysts
- R42, R43 (sensitising), except for enzymes and bleach catalysts
- H340, H341 (mutagenic)
- R46, R68 (mutagenic)
- H350, H350i, H351 (carcinogenic)
- R40, R45, R49 (carcinogenic)
- H360D, H360F, H360FD, H360Fd, H360Df, H361f, H361d, H361fd, H362 (toxic for reproduction)
- R60, R61, R62, R63, R64 (toxic for reproduction)
- EUH070 (toxic by eye contact)
- R39-41 (toxic by eye contact)
- H400, H410, H411, H412 (except for fragrances), H413 (except for optical brighteners for heavy duty detergents) (harmful to aquatic organisms)
- R50, R50/53, R51/53, R52/53 (except for fragrances), R53 (except for optical brighteners for heavy duty detergents) (harmful to aquatic organisms)
- EUH059 (hazardous to the ozone layer)
- R59 (dangerous for the ozone layer)

Surfactants classified as H400 or R50 are allowable provided the concentration in the product is <25%.

**Verification:** Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof



	<p>will also be accepted, such as:</p> <ul style="list-style-type: none"> <li>• For each product offered, all substances contained above 0.01% by weight of the final product must be listed, together with their CAS-Number (where available) and any Hazard Statements or Risk-phrases with which they are classified.</li> </ul>
<p>2. The following ingredients must not be included in the ingredients listed on the product label, in the safety data sheet (SDS) or in other relevant technical data sheets.</p> <ul style="list-style-type: none"> <li>• Phosphates</li> </ul> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as the provision of the ingredients listed on the product label, the safety data sheet (SDS), the manufacturer's website and any other relevant technical data sheets, along with their CAS-Number (where available) and a declaration that none of the listed ingredients are on the candidate list.</p>	<p>3. The following ingredients must not be included in the product (exceeding 0.01% by weight of the product):</p> <ul style="list-style-type: none"> <li>• Phosphates</li> <li>• Biocides, unless used as preservatives</li> <li>• Biocides which are classified as H410 or R50/53 or H411 or R51/53 or H412 or R52/53 in accordance with Directive 67/548/EEC, Directive 1999/45/EC or Regulation 1272/2008, unless they are not potentially bioaccumulative. In this context, a biocide is considered to be potentially bioaccumulative if the log Pow (log octanol/water partition coefficient) &gt; or = to 3.0 (unless the experimentally determined BCF &lt; or = 100).</li> </ul> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as:</p> <ul style="list-style-type: none"> <li>• The name and function of all biocides must be listed. For all biocides classified as H410 or R50/53 or H411 or R51/53 the log Pow or BCF must be given.</li> <li>• The total quantity of phosphates must be given.</li> </ul>
	<p>4. The critical dilution volume (<math>CDV_{\text{chronic}}</math>) of the product shall not exceed the following limits. The <math>CDV_{\text{chronic}}</math> shall be determined according to the scheme outlined in the relevant EU Ecolabel (<a href="http://ec.europa.eu/environment/ecolabel/index_en.htm">http://ec.europa.eu/environment/ecolabel/index_en.htm</a>).</p> <ul style="list-style-type: none"> <li>• For heavy-duty laundry detergents and colour-safe detergents (all types) the <math>CDV_{\text{chronic}}</math> shall not exceed 35,000 litres per kg wash.</li> <li>• For low-duty laundry detergents (all forms) the <math>CDV_{\text{chronic}}</math> shall not</li> </ul>

	<p>exceed 20,000 litres per kg wash.</p> <ul style="list-style-type: none"> <li>For pre-treatment stain removers the <math>CDV_{\text{chronic}}</math> shall not exceed 3,500 litres per kg wash.</li> </ul> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as a technical dossier of the manufacturer or a test report from a recognised body.</p>
<p><b>Dosage requirements</b></p> <p>3. The recommended dosage for a water hardness of 2.5 mmol <math>\text{CaCO}_3/\text{l}</math> (“medium” water hardness”) shall not exceed the following amounts for normally soiled textiles (heavy duty detergents, colour-safe detergents) and lightly soiled textiles (low-duty detergents) respectively.</p> <ul style="list-style-type: none"> <li>Heavy-duty laundry detergent – 17.0 g/kg wash (powders/tablets) or 17.0 ml/kg wash (liquids)</li> <li>Colour-safe detergent - 17.0 g/kg wash (powders/tablets) or 17.0 ml/kg wash (liquids)</li> <li>Low-duty laundry detergent - 17.0 g/kg wash (powders/tablets) or 17.0 ml/kg wash (liquids).</li> </ul> <p>If recommendations for both prewash and subsequent wash apply, the total recommended dosage (prewash and subsequent wash) shall comply with the maximum dosage.</p> <p><b>Verification:</b> The recommended dosage for medium water hardness must be provided for normally soiled textiles and lightly soiled textiles. Where the recommended dosage is per load, this should relate to a 4.5 kg (dry textile) load for heavy-duty detergents and colour-safe detergents and a 2.5 kg (dry textile) load for low-duty detergents.</p>	<p><b>Dosage requirements</b></p> <p>5. The recommended dosage for a water hardness of 2.5 mmol <math>\text{CaCO}_3/\text{l}</math> shall not exceed the following amounts for normally soiled textiles (heavy duty detergents, colour-safe detergents) and lightly soiled textiles (low-duty detergents) respectively.</p> <ul style="list-style-type: none"> <li>Heavy-duty laundry detergent – 17.0 g/kg wash (powders/tablets) or 17.0 ml/kg wash (liquids)</li> <li>Colour-safe detergent - 17.0 g/kg wash (powders/tablets) or 17.0 ml/kg wash (liquids)</li> <li>Low-duty laundry detergent - 17.0 g/kg wash (powders/tablets) or 17.0 ml/kg wash (liquids).</li> </ul> <p>If recommendations for both prewash and subsequent wash apply, the total recommended dosage (prewash and subsequent wash) shall comply with the maximum dosage.</p> <p><b>Verification:</b> The recommended dosage for medium water hardness must be provided for normally soiled textiles and lightly soiled textiles. Where the recommended dosage is per load, this should relate to a 4.5 kg (dry textile) load for heavy-duty detergents and colour-safe detergents and a 2.5 kg (dry textile) load for low-duty detergents.</p>
<p><b>Packaging requirements</b></p> <p>4. All products must be delivered with clear dosing instructions.</p>	<p><b>Packaging requirements</b></p> <p>6. All products must be delivered with clear dosing instructions.</p>

<p><b>Verification:</b> Supply of instruction documents to the contracting authority.</p>	<p><b>Verification:</b> Supply of instruction documents to the contracting authority.</p>
	<p>7. The weight utility ratio (WUR) for the primary packaging must not exceed the following values.</p> <ul style="list-style-type: none"> <li>• Powders – WUR 1.2 g/kg wash</li> <li>• Others (e.g. liquids, gels, tablets, capsules) – WUR 1.5 g/kg wash.</li> </ul> <p>The WUR is calculated only for the primary packaging (including caps, stoppers and hand pumps/spraying devices) by using the following formula:</p> $WUR = \Sigma((W_i + U_i)/(D_i \times r_i))$ <p>where</p> <p><math>W_i</math> = The weight (g) of the primary packaging (i) including label if applicable.</p> <p><math>U_i</math> = The weight (g) of non-recycled (virgin) material in the primary packaging (i). If the proportion of recycled material is 0% then <math>U_i = W_i</math>.</p> <p><math>D_i</math> = Number of functional doses contained in the primary packaging (i). The functional unit = dosage in g/kg wash.</p> <p><math>r_i</math> = Recycling figure, i.e. the number of times the primary packaging (i) is used for the same purpose through a return or refill system. The default value for r is set to 1 (= no re-use). Only if it is documented that the packaging component is re-used for the same purpose can a higher value of r be used in the calculation.</p> <p>Plastic/paper/cardboard packaging containing more than 80% recycled material is exempted from this requirement.</p> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as a technical dossier of the manufacturer or a test report from a recognised body.</p>

CONTRACT PERFORMANCE CLAUSES	CONTRACT PERFORMANCE CLAUSES
1. Information on the recommended wash temperatures should be provided for laundry detergents.	1. Information on the recommended wash temperatures should be provided.

Log  $P_{ow}$  = log octanol/water partition coefficient.

BCF = Bio-concentration factor.

The CAS-Number is an internationally recognised identity number assigned by the Chemical Abstracts Service (a division of the American Chemical Society) to identify a specific substance.

Core criteria	Comprehensive criteria
<b>3.6 EU GPP criteria for dishwasher detergents and rinse aids</b>	
SUBJECT MATTER	SUBJECT MATTER
Purchase of environmentally friendly dishwasher detergents and rinse aids.	Purchase of environmentally friendly dishwasher detergents and rinse aids.
TECHNICAL SPECIFICATIONS	TECHNICAL SPECIFICATIONS
<p><b>Substance requirements</b></p> <p>1. No ingredients (substances) shall be listed on the product label, in the safety data sheet (SDS) or in other relevant technical data sheets that have been identified as substances of very high concern and have been included in the list foreseen in Article 59 of Regulation (EC) No 1907/2006 (the REACH Regulation). The list of substances referred to (the candidate list) can be found at:</p> <p><a href="http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp">http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp</a>.</p> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as the provision of the ingredients listed on the</p>	<p><b>Substance requirements</b></p> <p>1. The product shall not contain substances that have been identified as substances of very high concern and included in the list foreseen in Article 59 of Regulation (EC) No 1907/2006 (the REACH Regulation) in a quantity that exceeds 0.01% by weight of the final product. The list of substances referred to (the candidate list) can be found at:</p> <p><a href="http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp">http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp</a>.</p> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof</p>

<p>product label, the safety data sheet (SDS), the manufacturer's website and any other relevant technical data sheets, along with their CAS-Number (where available) and a declaration that none of the listed ingredients are on the candidate list.</p>	<p>will also be accepted, such as:</p> <ul style="list-style-type: none"> <li>• For each product offered, all substances contained above 0.01% by weight of the final product must be listed together with their CAS-Number (where available) and a declaration that none of the substances are on the candidate list provided.</li> </ul>
	<p>2. No ingredient (substance) shall be included in the product in a quantity that exceeds 0.01% by weight of the final product that is classified with any of the Hazard Statements or Risk-phrases, or combinations thereof, as outlined in the following table in accordance with Regulation (EC) No 1272/2008 or Directive 67/548/EEC. These criteria do not apply to biocides, which are dealt with separately below:</p> <ul style="list-style-type: none"> <li>• EUH029, EUH031, EUH032 (contact with water or acids liberates toxic gases)</li> <li>• R29, R31, R32 (contact with water or acids liberates toxic gases)</li> <li>• H300, H301, H304, H310, H311, H330, H331, H370, H371, H372, H373 (toxic, fatal or may cause organ damage)</li> <li>• R23, R24, R25, R26, R27, R28, R65, R39/23, R39/24, R39/25, R39/26, R39/27, R39/28, R48/20, R48/21, R48/22, R48/23, R48/24, R48/25, R68/20, R68/21, R68/22 (toxic, very toxic or irreversible effects)</li> <li>• H317, H334 (sensitising), except for enzymes</li> <li>• R42, R43 (sensitising), except for enzymes</li> <li>• H340, H341 (mutagenic)</li> <li>• R46, R68 (mutagenic)</li> <li>• H350, H350i, H351 (carcinogenic)</li> <li>• R40, R45, R49 (carcinogenic)</li> <li>• H360D, H360F, H360FD, H360Fd, H360Df, H361f, H361d, H361fd, H362 (toxic for reproduction)</li> <li>• R60, R61, R62, R63, R64 (toxic for reproduction)</li> <li>• EUH070 (toxic by eye contact)</li> <li>• R39-41 (toxic by eye contact)</li> <li>• H400, H410, H411, H412 (except for fragrances), H413 (harmful to aquatic organisms)</li> </ul>

	<ul style="list-style-type: none"> <li>• R50, R50/53, R51/53, R52/53 (except for fragrances), R53 (harmful to aquatic organisms)</li> <li>• EUH059 (hazardous to the ozone layer)</li> <li>• R59 (dangerous for the ozone layer)</li> </ul> <p>Surfactants classified as H400 or R50 are allowable provided the concentration in the product is &lt;25%.</p> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as:</p> <ul style="list-style-type: none"> <li>• For each product offered, all substances contained above 0.01% by weight of the final product must be listed, together with their CAS-Number (where available) and any Hazard Statements or Risk-phrases with which they are classified.</li> </ul>
<p>2. The following ingredients must not be included in the ingredients listed on the product label, in the safety data sheet (SDS) or in other relevant technical data sheets.</p> <ul style="list-style-type: none"> <li>• Phosphates</li> </ul> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as the provision of the ingredients listed on the product label, the safety data sheet (SDS), the manufacturer’s website and any other relevant technical data sheets, along with their CAS-Number (where available) and a declaration that none of the listed ingredients are on the candidate list.</p>	<p>3. The following ingredients must not be included in the product (exceeding 0.01% by weight of the product):</p> <ul style="list-style-type: none"> <li>• Phosphates</li> <li>• Biocides, unless used as preservatives</li> <li>• Biocides which are classified as H410 or R50/53 or H411 or R51/53 or H412 or R52/53 in accordance with Directive 67/548/EEC, Directive 1999/45/EC or Regulation 1272/2008, unless they are not potentially bioaccumulative. In this context, a biocide is considered to be potentially bioaccumulative if the log Pow (log octanol/water partition coefficient) &gt; or = to 3.0 (unless the experimentally determined BCF &lt; or = 100).</li> </ul> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as:</p> <ul style="list-style-type: none"> <li>• The name and function of all biocides must be listed. For all biocides classified as H410 or R50/53 or H411 or R51/53 or H412 or R52/53 the log Pow or BCF must be given.</li> </ul>

	<ul style="list-style-type: none"> <li>The total quantity of phosphates must be given.</li> </ul>
	<p>4. The critical dilution volume (CDV<sub>chronic</sub>) of the product shall not exceed the following limits. The CDV<sub>chronic</sub> shall be determined according to the scheme outlined in the relevant EU Ecolabel (<a href="http://ec.europa.eu/environment/ecolabel/index_en.htm">http://ec.europa.eu/environment/ecolabel/index_en.htm</a>).</p> <ul style="list-style-type: none"> <li>For single-functional dishwasher detergents the CDV<sub>chronic</sub> shall not exceed 25,000 litres per wash.</li> <li>For multi-functional dishwasher detergents the CDV<sub>chronic</sub> shall not exceed 30,000 litres per wash.</li> <li>For rinse aids the CDV<sub>chronic</sub> shall not exceed 10,000 litres per wash.</li> </ul> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as a technical dossier of the manufacturer or a test report from a recognised body.</p>
<p><b>Packaging requirements</b></p> <p>3. All products must be delivered with clear dosing instructions.</p> <p><b>Verification:</b> Supply of instruction documents to the contracting authority.</p>	<p><b>Packaging requirements</b></p> <p>5. All products must be delivered with clear dosing instructions.</p> <p><b>Verification:</b> Supply of instruction documents to the contracting authority.</p>
<p>4. The cardboard packaging shall consist of <math>\geq 80\%</math> recycled material.</p> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as a technical dossier of the manufacturer or a test report from a recognised body.</p>	<p>6. The cardboard packaging shall consist of <math>\geq 80\%</math> recycled material.</p> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as a technical dossier of the manufacturer or a test report from a recognised body.</p>
	<p>7. The primary packaging shall not exceed 2.0 g per wash.</p> <p><b>Verification:</b> Products carrying a relevant Type I Ecolabel fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof will also be accepted, such as a technical dossier of the manufacturer or a</p>

	test report from a recognised body.
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Log  $P_{ow}$  = log octanol/water partition coefficient.

BCF = Bio-concentration factor.

The CAS-Number is an internationally recognised identity number assigned by the Chemical Abstracts Service (a division of the American Chemical Society) to identify a specific substance.

Core criteria	Comprehensive criteria
<b>3.7 EU GPP criteria for cleaning services</b>	
<b>SUBJECT MATTER</b>	<b>SUBJECT MATTER</b>
Environmentally friendly cleaning services.	Environmentally friendly cleaning services.
<b>SELECTION CRITERION</b>	<b>SELECTION CRITERION</b>
	<p>The tenderer must demonstrate its capacity to carry out the service in an environmentally sound manner. This must include evidence of the regular training of staff on health, safety and environmental aspects of cleaning activities and evidence of compliance with environmental and health and safety obligations.</p> <p><b>Verification:</b> An environmental management system (such as EMAS, or ISO 14001) if covering and attesting environmental management capacities as laid down in the selection criteria, shall be recognised as evidence of compliance, as will other evidence of equivalent environmental management measures.</p>
<b>TECHNICAL SPECIFICATIONS</b>	<b>TECHNICAL SPECIFICATIONS</b>
1. Products used by the cleaning company must meet the relevant core criteria as contained in sections 3.1 to 3.6 above.	1. Products used by the cleaning company must meet the relevant comprehensive criteria as contained in sections 3.1 to 3.6 above.
<b>Verification:</b> The tenderer must supply a list of the products that will be	<b>Verification:</b> The tenderer must supply a list of the products that will be



<p>used, together with proof of compliance with the specifications for core criteria contained in sections 3.1 to 3.6 above.</p>	<p>used, together with proof of compliance with the specifications for comprehensive criteria contained in sections 3.1 to 3.6 above.</p>
<p><b>CONTRACT PERFORMANCE CLAUSES</b></p>	<p><b>CONTRACT PERFORMANCE CLAUSES</b></p>
<p>1. After the first six months of the contract, and thereafter at the end of every year of the contract, a balance must be submitted by the contractor indicating the name and quantity of the cleaning products used. For any products not mentioned in the initial bid the contractor shall provide the required proof of compliance with the technical specifications.</p> <p><b>Verification:</b> Reports listing the products used. The contractor should also be able to justify the cleaning frequency and range of products used.</p>	<p>1. After the first six months of the contract, and thereafter at the end of every year of the contract, a balance must be submitted by the contractor indicating the name and quantity of the cleaning products used. For any products not mentioned in the initial bid, proof of compliance with the specifications must be submitted.</p> <p><b>Verification:</b> Reports listing the products used. The contractor should also be able to justify the cleaning frequency and range of products used.</p>
<p><b>Staff and organisation</b></p> <p>2. All cleaning staff employed in carrying out the service must be regularly trained for their various tasks. This training should cover cleaning agents, methods, equipment and machines used; waste management and aspects of health, safety and the environment.</p> <p><b>Verification:</b> A record of these training measures (introductory/vocational training) should be kept at the disposal of the contracting authority.</p>	<p><b>Staff and organisation</b></p> <p>2. All cleaning staff employed in carrying out the service must be regularly trained for their various tasks. This training should cover cleaning agents, methods, equipment and machines used; waste management and aspects of health, safety and the environment.</p> <p><b>Verification:</b> A record of these training measures (introductory/vocational training) should be kept at the disposal of the contracting authority.</p>

	<p>3. In agreement with the contracting authority, precise work instructions on environmental protection and on health and safety standards in carrying out the service shall be produced and displayed in the buildings in a way that they can be consulted by cleaning staff at any time.</p> <p><b>Verification:</b> Displayed instructions to be made available for inspection by the contracting authority.</p>
	<p>4. A facility manager, foreman/forewoman or co-ordinator should be nominated to organise and supervise the cleaning. The appointed person should stay in contact with the contracting authority and be reachable during working hours. The facility manager, foreman/forewoman or co-ordinator has to be sufficiently trained in the fields of occupational health and safety standards, application techniques and environmental issues.</p> <p><b>Verification:</b> The contractor shall supply the name of the responsible member of staff, details of their qualifications and training, and contact details.</p>
	<p><b>Environmentally friendly cleaning techniques</b></p> <p>5. The contractor should use reusable microfibre cloths where appropriate.</p> <p><b>Verification:</b> Within 6 months of the beginning of the contract, the contractor will provide a report to the contracting authority on the practice of using microfibre cloths.</p>

### Explanatory notes

#### Type I or ISO 14024 ecolabels

The Type I or ISO 14024 ecolabels are those where the underlying criteria are set by an independent body and which are monitored by a certification and auditing process. As such they are a highly transparent, reliable and an independent source of information. These labels have to meet the following conditions:

- The requirements for the label are based on scientific evidence
- The ecolabels are adopted with the participation of all stakeholders, such as government bodies, consumers, manufacturers, distributors and environmental organisations
- They are accessible to all interested parties.

In public procurement, procurers may require that the criteria underpinning a certain ecolabel must be met, and that the ecolabel may be used as one form of proof of compliance. They are however not allowed to request that a product carries an ecolabel. Moreover, procurers may only use ecolabel criteria which refer to characteristics of the product or service itself or production processes, not those relating to the general management of the company.

### **Proof of compliances**

Where the verification for the criteria states that other appropriate means of proof can be used, this could include a technical dossier from the manufacturer, a test report from a recognised body, or other relevant evidence. The contracting authority will have to satisfy itself on a case by case basis, from a technical/legal perspective, whether the submitted proof can be considered appropriate.

### **Cleaning products**

- **Ecolabel criteria:** It is possible to indicate that the criteria underlying a certain ecolabel need to be met, as long as the criteria are eligible for defining the product, and on the condition that other forms of proof are also accepted. For more information see the accompanying Fact Sheet on the use of Ecolabels in public procurement:

[http://ec.europa.eu/environment/gpp/pdf/toolkit/module1\\_factsheet\\_ecolabels.pdf](http://ec.europa.eu/environment/gpp/pdf/toolkit/module1_factsheet_ecolabels.pdf)

### **Cleaning services**

- **Developing work instructions:** One good way to reduce the amount of substances used for cleaning is to ensure that excessive cleaning does not occur. In drawing up the work instructions the contractor should be encouraged to consider the appropriate cleaning frequency for different areas of the building.
- **Reducing the quantity of cleaning products used:** It may be a good idea to encourage an improvement in the environmental/health aspects of the service throughout the contract period, by setting targets for constant improvement in the contract conditions. This could be done by specifying, for example, that the quantity of cleaning products used must decrease by a certain percentage each year, which can be judged by asking the contractor to provide a full breakdown of the quantities of all products used per year. In this case it will be important to ensure that the quality of the service does not suffer, through regular quality checks. Contractors could also be asked to offer automatic mixers for dilution of the cleaning products to ensure optimal use of the cleaning products.
- **Optimising the range of cleaning products used:** A number of products typically used in cleaning services are often used too frequently or may even be unnecessary from a hygiene perspective. Such products include toilet bowl freshener, cistern additives, deodorising blocks for urinals, air freshener, chemical drain cleaners, fabric softeners, floor finish based on water insoluble polymers, disinfectants, aerosol cans and propellants.

## Cost considerations

A Commission study on the Costs & Benefits of GPP in 2007,<sup>1</sup> examined the cost implications of purchasing green (ecolabelled) cleaning products on the overall cleaning budget. Significantly, between 92% and 97% of the money is spent on staff costs, and therefore differences in product prices have a largely minimal impact on overall cleaning budgets.

With regards to the products themselves a mixed picture emerged, as the following table demonstrates.

Country	Price difference between green and non-green product (%)		
	All-purpose and floor care products	Sanitary cleaning products	Window cleaners
Sweden	-74% (i.e. green product less expensive)	-82%	-9%
Germany	+36%	+148%	-36%
Spain	+131%	+92%	-94%
Czech Republic	+158%	+2%	-

These differences reflect the advanced development of the market for green cleaning products in the Nordic countries, and indicate that in countries where the market is not so well developed, products currently may cost substantially more.

As this survey was published in 2007 the cost differences relate to older data and may not reflect the current cost differences.

Reconsidering the cleaning frequency for different parts of the building may be beneficial both in terms of human resources and substances needed for carrying out the service.

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<sup>1</sup> Study on costs/benefits of Green public procurement in Europe, Öko-Institut & ICLEI 2007, available at [http://ec.europa.eu/environment/gpp/index\\_en.htm](http://ec.europa.eu/environment/gpp/index_en.htm).