

BLUE ANGEL

The Environmental Label



**Hand Dishwashing Detergents, All-Purpose
Cleaners, Sanitary Cleaners and Glass Cleaners**

DE-UZ 194

Basic Award Criteria

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Version 1

The Environmental Label is supported by the following four institutions:



The Federal Ministry for the Environment, Nature Conservation and Nuclear Safety is the owner of the label. It regularly provides information on the decisions taken by the Environmental Label Jury.



The German Environmental Agency with its specialist department for "Ecodesign, Eco-Labeling and Environmentally friendly Procurement" acts as office of the Environmental Label Jury and develops the technical criteria of the Basic Criteria for Award of the Blue Angel.



The Environmental Label Jury is the independent, decision-making body for the Blue Angel and includes representatives from environmental and consumer associations, trade unions, industry, the trade, crafts, local authorities, academia, the media, churches, young people and the German federal states.



The RAL gGmbH is the awarding body for the Environmental Label. It organises the process for developing the relevant award criteria in independent expert hearings – which involve all relevant interest groups.

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Appendix 1	Renewable raw materials in surfactants, requirement for renewable raw materials in the production of surfactants
Appendix 2	Fitness for use of all-purpose, sanitary and glass cleaners
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Appendix	DID List 2014, Part A / DID List 2014, Part B

This document is a translation of an original in German. In case of dispute, the original document should be taken as authoritative.

1 Introduction

1.1 Preface

In cooperation with the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety, the Federal Environmental Agency and considering the results of the expert hearings conducted by RAL gGmbH, the Environmental Label Jury has set up these Basic Criteria for the Award of the Environmental Label. RAL gGmbH has been tasked with awarding the Environmental Label.

Upon application to RAL gGmbH and on the basis of a Contract on the Use of the Environmental Label to be concluded with RAL gGmbH, the permission to use the Environmental Label may be granted to all products, provided that they comply with the requirements as specified hereinafter.

1.2 Background

Washing and cleaning agents are used on a daily basis for maintaining cleanliness and hygiene. Approx. 480,000 tonnes of these cleaning and care agents are sold each year in Germany, whereby dishwashing detergents account for around 260,000 tonnes.¹ All of these products contain ingredients that find their way into the wastewater system and can have a negative effect on the environment and human health. If these components cannot be completely retained or degraded in sewage treatment plants, they will enter into bodies of water and can be ingested by water organisms and, in some circumstances, enriched. Furthermore, washing and cleaning agents can negatively effect human health when substances hazardous to health such as fragrance allergens and preservatives are used.

An important component of cleaning agents are surfactants. These can be manufactured based on petrochemicals and/or renewable raw materials. The use of sustainably produced raw materials makes a significant contribution to sustainable development. In order to ensure this is the case, the cultivation of the plants is subject to ecological, social and economic requirements. Criteria for sustainable cultivation are currently being discussed in different initiatives and reliable certification systems for recording and labelling this type of cultivation are being developed or are establishing themselves on the market.

The separation and traceability of the raw materials (segregation) is currently only possible to a very limited extent in the case of palm (kernel) oil for the manufacturing of surfactants. An interim solution that currently exists is the possibility to support

¹ <http://www.umweltbundesamt.de/themen/chemikalien/wasch-reinigungsmittel>

sustainable cultivation using trading certificates (Book & Claim System). This system involves the auditing of both plantations and also companies who manufacture end products containing surfactants in order to monitor and tally up the sum of the oils produced and the number of associated certificates sold with the surfactants actually added to products. In this process, the end product does not necessarily contain the palm (kernel) oil purchased via the certificate.

However, it is important to ensure in the longer term that certified palm (kernel) oil is exclusively used in the product and other natural resources e.g. other oil plants or raw materials for the manufacture of citric acid or bioalcohol are integrated into the certification system. In future updates to the environmental label criteria, the further development of these certification systems for sustainable cultivation will be taken into account.

1.3 Objective of the environmental label

The following criteria are designed to promote the use of those cleaning agents that in the interests of the environment, climate and nature conservation have been produced in such a way that they have the least possible impact on the environment and human health during their production, use and disposal. In addition, they should also help to reduce and prevent the risks posed to the environment and human health through the use of hazardous substances and to minimise packaging waste. Furthermore, information should be provided that enables consumers to use the product both efficiently and with the least possible impact on the environment.

Preserving natural resources is also an important focus of this environmental label. Cleaning agents with the Blue Angel ecolabel should thus make a contribution to the protection of the environment through the use of renewable raw materials in their production that have been cultivated under sustainable conditions or which support sustainable cultivation.

1.4 Compliance with legal requirements

The observance of relevant existing laws and legal requirements is a prerequisite for those products awarded with the environmental label. The substance requirements defined by the Detergents Regulation (648/2004/EC), the Chemicals Regulation REACH (1907/2006/EC)² and the CLP Regulation (1272/2008/EG)³ are observed.

² Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC

1.5 Definitions

For the purpose of their use in these Basic Award Criteria, the following definitions are valid:

- **Substance**⁴: means a chemical element and its compounds in the natural state or obtained by any manufacturing process, including any additive necessary to preserve its stability and any impurity deriving from the process used, but excluding any solvent which may be separated without affecting the stability of the substance or changing its composition.
- **Impurity**⁵: An unintended constituent present in a substance as manufactured. It may originate from the starting materials or be the result of secondary or incomplete reactions during the manufacturing process. While it is present in the final substance it was not intentionally added.
- **Mixture**⁶: Mix, mixture or solution composed of two or more substances.
- **End product**: Within the scope of these Basic Award Criteria, the end product describes the cleaning agent offered for sale on the market that should be labelled with the Blue Angel ecolabel.
- **Microplastic**: Plastic particles with a size of between 100 nm and 5 mm.
- **Plastic**: A macromolecular substance with a water solubility < 1 mg/L, obtained through:
 - a) a polymerisation process such as e.g. polyaddition or polycondensation or a similar process using monomers or other starting substances; or
 - b) chemical modification of natural or synthetic micromolecules; or
 - c) microbial fermentation.
- **Nanomaterial**: means a natural, incidental or manufactured material containing particles, in an unbound state or as an aggregate or as an agglomerate and where, for 50 % or more of the particles in the number size distribution, one or more external dimensions is in the size range 1 nm - 100 nm.⁷

³ Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, as well as amending Regulation (EC) No. 1907/2006 (CLP Regulation).

⁴ REACH, Article 3, and CLP Regulation, Article 2

⁵ Guidance for identification and naming of substances under REACH and CLP, Version 1.2 March 2012, Chapter 2.2, P. 8, http://echa.europa.eu/documents/10162/13643/substance_id_de.pdf

⁶ Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, as well as amending Regulation (EC) No. 1907/2006 (CLP Regulation).

⁷ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:275:0038:0040:DE:PDF>

- **All-purpose cleaner:** A cleaning agent that according to its advertised purpose is designed for the normal cleaning of floors, walls, ceilings, glass surfaces and other non-textile surfaces exclusively in indoor areas and which is diluted in water prior to use. All-purpose cleaners include floor cleaners that according to their advertised purpose can be used for the upkeep and cleaning of different types of floor coverings (e.g. ceramic tiles, plastic, linoleum, wood).
- **Glass cleaner:** A cleaning agent that is designed for the normal cleaning of windows, panes, mirrors or other glass surfaces and is used undiluted⁸.
- **Sanitary cleaner:** A cleaning agent that is designed for the normal removal (also through scrubbing) of dirt and/or sediments in sanitary systems such as in laundry rooms, toilets, bathrooms, showers and kitchens. Sanitary cleaners include the subgroups: acidic toilet cleaners, bathroom cleaners and kitchen cleaners.
- **Acidic toilet cleaner:** A liquid sanitary cleaner that is used in a concentrated form for the removal of limescale.
- **Bathroom cleaner:** A liquid sanitary cleaner that is used in a concentrated form or diluted with water for the removal of limescale and limesoap.
- **Kitchen cleaner:** A liquid or solid sanitary cleaner that is used to remove grease and dirt, also through scrubbing, in kitchen areas.
- **Hand dishwashing detergent:** A cleaning agent that is designed for washing dishes, drinking glasses, earthenware, cutlery, pots, pans and other kitchen utensils.
- **Identity preserved:** Palm (kernel) oil from a specific production location that is sourced from sustainable plantations is kept separate from other palm oils along the whole supply chain.
- **Segregation:** Palm (kernel) oil from different production locations that is sourced from sustainable plantations is kept separate from other non-certified palm oils along the whole supply chain.
- **Mass balance:** Palm (kernel) oil from a certified production location that is sourced from sustainable plantations is monitored administratively along the supply chain; it is however mixed with non-certified palm (kernel) oil.

⁸ Concentrated products offered as refill packs for refilling the initial packaging are permitted if, following the dilution of the concentrate for use as an end product, all substances are present in the same concentrations found in the ready-to-use product in its initial packaging.

- **Book & claim:** Sustainable plantations are promoted through the sale of certificates. Companies purchase these certificates via a trading platform (e.g. GreenPalm) based on the quantity of oil required for the production of surfactants.

2 Scope

These Basic Award Criteria are valid for the following types of products:

- a) All-purpose cleaners
- b) Glass cleaners
- c) Sanitary cleaners
- d) Hand dishwashing detergents
- e) Products from the product categories listed above that are designed for commercial/industrial maintenance and cleaning

Excluded from the scope of these Basic Award Criteria are:

- Products that consist exclusively of water.
- Products containing microorganisms that have been intentionally added by the manufacturer.
- All-purpose cleaners sold as ready-to-use (RTU) products.
- Cleaning agents that according to their advertised purpose are designed for special cleaning purposes or are exclusively suitable for special materials. Products designed for special cleaning purposes include e.g. disinfectant cleaners, drain cleaners, polishing agents, basic cleaners, intensive cleaners, floor care products without a cleaning effect (e.g. floor wax), oven cleaners or grill cleaners, descalers, additives for toilet cisterns, toilet tabs, toilet blocks or toilet rim hangers. If according to the advertised purpose it is possible to carry out both a normal cleaning and also a special cleaning process, it is not permitted for the special cleaning process to be the primary use.
- All cleaning agents that according to their advertised purpose are exclusively suitable for textile surfaces (e.g. carpet cleaners, cleaners for upholstered furniture). If the product is advertised for use with both textile and non-textile surfaces, it is not permitted for the cleaning of textile surfaces to be the primary use.
- All cleaning agents that are exclusively or partially advertised for use on the exterior of buildings or vehicles e.g. façade cleaners, car cleaners (exterior of the car), patio cleaners or boat cleaners (does not apply to glass cleaners).
- Sprays that contain propellant gas.

3 Requirements

The end products named under Paragraph 2 can be labelled with the environmental label illustrated on the first page of these Basic Award Criteria if they fulfil the following requirements.

If the applicant is required to submit declarations, documentation, analysis reports or other documentation in order to verify compliance with the criteria, these can come from the applicant and/or his/her suppliers and/or their suppliers, etc.

3.1 Assessment and testing requirements

Paragraph 3.5 refers to the "Detergent Ingredient Database" (DID list 2014), which contains the most widely used substances in detergent formulations. The data found in this list shall be used for deriving the calculations for the Critical Dilution Volume (CDV) and for assessing the biodegradability of the substances. In the case of those substances not found on the DID list, guidance is given on how to calculate or extrapolate the relevant data. The DID lists are published as annexes.

In certain cases, RAL gGmbH can request additional verification and carry out independent tests.

3.1.1 Measurement thresholds

All of the substances contained in the end product, including substances added for specific purposes (e.g. preservatives or stabilisers), whose concentrations exceed 0.010 % by mass in the final formulation must comply with these Basic Award Criteria. Exceptions are the criteria "Toxicity to aquatic organisms" (3.5) and "Exclusion of substances" (3.7), where every substance irrespective of its proportion by mass must comply with the requirements. Impurities resulting from the production of substances that are present in the final formulation in concentrations greater than 0.010 % by mass must also comply with the criteria.

3.1.2 Reference dosage

In the case of all-purpose cleaners, the dosage of the end product in grams that is recommended by the manufacturer for the preparation of 1 litre of cleaning water for the cleaning of normally soiled surfaces is taken as the reference dosage for the calculations. In the case of glass cleaners and sanitary cleaners, 100 grams of the end product is taken in each case as the reference dosage for the calculations used to document compliance with the criteria for the environmental label. The same rule also applies to bathroom cleaners.

In the case of hand dishwashing detergents, the dosage of the end product in grams that is recommended by the manufacturer for the preparation of 1 litre of dishwashing water for the cleaning of normally soiled dishes is taken as the reference dosage for the calculations used to document compliance with the criteria for the environmental label.

3.1.3 Testing institutions

The tests to be submitted to verify compliance with the requirements, with the exception of the tests for the product's fitness for use, shall be carried out by testing institutions that fulfil the following requirements:

- The tests comply with the requirements of Good Laboratory Practice (Annex 1 of German Chemicals Act (ChemG)) or
- The testing institution has been notified or accredited according to DIN EN 17025 and these tests form part of this accreditation in terms of the fields being tested and the processes and specifications used.

Compliance verification

Verification of compliance is to be provided in the form of certification in accordance with Article 19b of the German Chemicals Act (ChemG) and a written declaration from the testing institution that the test was carried out according to the principles of Good Laboratory Practice or through submission of the accreditation certificate from Germany's National Accreditation Body (DAKKS) or another national accreditation system that has been included in the Multilateral Agreement (MLA).

3.2 Renewable raw materials in surfactants

The proportion of renewable carbon in the total carbon in the surfactant system must be at least 50%.

Compliance verification

The applicant shall confirm compliance with the requirement in Annex 1. The proportion of renewable carbon is calculated based on the organic carbon (see Annex 2) and verified with a declaration by the surfactant manufacturer. The calculation shall be based on the annual production volume. (Appendix 1)

3.3 Requirements for renewable raw materials in the production of surfactants

In the use of surfactants produced from palm oil and palm kernel oil, the sustainable cultivation of the oil plants on certified plantations is to be supported.

Compliance verification

The applicant shall confirm compliance with the requirement in Annex 1.

A mass balance shall be submitted at the latest after the Blue Angel ecolabel has been used for the first 15 months and then additionally on request from RAL gGmbH. (Annex 2)

The verification shall be submitted in the form of either the purchased certificates (Book & Claim) or a proof of purchase from the surfactant supplier (segregated or mass balance). The following certification systems are recognised: RSPO (Roundtable on Sustainable Palmoil), ISCC+(International Sustainability & Carbon Certification), Rainforest Alliance or RSB (Roundtable on Sustainable Biomaterial).⁹ (Appendix 1)

3.4 Biodegradability of surfactants

All of the surfactants contained in the end product must be readily biodegradable¹⁰ under aerobic conditions and biodegradable under anaerobic conditions.

Compliance verification

The applicant shall confirm compliance with the requirement in Annex 1.

The precise formulation of the end product shall be submitted to RAL gGmbH together with an explanation of the function of every individual substance in Annex 2.

Part A of the DID list indicates whether a certain surfactant is aerobically or anaerobically biodegradable (those surfactants with an "R" in the column for aerobic biodegradability are readily biodegradable, while those surfactants with a "Y" in the column for anaerobic biodegradability are biodegradable under anaerobic conditions).

The list is not comprehensive, but guidance is given in Part B of the list concerning the determination of the relevant calculation parameters for substances not present on the DID list. For those surfactants which are not included in Part A of the DID list or those surfactants classified with an "O" in the column for anaerobic biodegradability, relevant information from literature or other sources or corresponding test results shall be submitted to verify that these surfactants are biodegradable under anaerobic conditions. The reference test for anaerobic degradability shall be the OECD test 311, the ISO standard 11734, the ECETOC test No. 28 (June 1988) or an equivalent test method, with the requirement of 60 % ultimate degradability under anaerobic conditions. In order to verify at least 60% ultimate degradability under anaerobic conditions, test processes can also be used

⁹ It is possible that other certification systems will be accepted after they have been investigated by the Federal Environmental Agency.

¹⁰ According to the regulations in EU Regulation No. 648/2004/EC

that simulate the conditions in a corresponding anaerobic environment.

3.5 Toxicity to aquatic organisms

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

$$CDV_{chronic} = \sum CDV_{(i)} = \sum \frac{weight_{(i)} \times DF_{(i)}}{TF_{chronic(i)}} \times 1\,000$$

where the $weight_{(i)}$ of the substance (in grams) is the dosage recommended by the manufacturer for 1 litre of dishwashing water or cleaning water or 100 grams for the end products for glass and sanitary cleaners. $DF_{(i)}$ is the degradation factor and $TF_{chronic(i)}$ is the value for the chronic toxicity of the substance (in milligrams/litre).

The parameters DF and $TF_{chronic}$ shall be taken from Part A of the Detergent Ingredient Database (DID list) (Appendix). If the substance in question is not included in Part A of the DID list, the applicant shall estimate the values in accordance with the approach stated in Part B of the DID list (Appendix). The sum of $CDV_{chronic}$ for the individual substances gives the $CDV_{chronic}$ for the end product.

- In the case of hand dishwashing detergents, the $CDV_{chronic}$ is calculated based on the dosage of the end product in grams that is recommended by the manufacturer for the preparation of 1 litre of dishwashing water for the cleaning of normally soiled dishes. The $CDV_{chronic}$ for the recommended dose stated for 1 litre of dishwashing water shall not exceed 3800 litres.
- In the case of all-purpose cleaners which are diluted in water prior to use, the $CDV_{chronic}$ is calculated based on the dosage of the end product in grams that is recommended by the manufacturer for the preparation of 1 litre of cleaning water for the cleaning of normally soiled surfaces. The $CDV_{chronic}$ for the recommended dose stated for 1 litre of cleaning water shall not exceed 18000 litres.
- In the case of glass cleaners, the $CDV_{chronic}$ for 100 g of the end product shall not exceed 4800 litres.
- In the case of sanitary cleaners, the $CDV_{chronic}$ for 100 g of the end product shall not exceed 80000 litres.

Compliance verification

The applicant shall confirm compliance with the requirement in Annex 1.

The precise formulation of the end product, together with the individual details of the calculation of the $CDV_{chronic}$ demonstrating compliance with this criterion, shall be submitted to RAL gGmbH in Annex 2.

3.6 General exclusion of substances with certain properties

The use of the following substances is not permitted in order to protect the environment and human health: In the case of mixtures e.g. fragrances where it is not possible to obtain information about the individual substances, the classification rules for mixtures shall be applied.

a) Substances of very high concern (SVHC)

It is prohibited to use substances in end products labelled with the Blue Angel ecolabel that have been identified in accordance with Article 57 of Regulation (EC) No. 1907/2006 and listed in accordance with Article 59 of the same regulation on the list of candidates (<http://echa.europa.eu/web/guest/candidate-list-table>) for inclusion on the Annex of substances subject to authorisation. Impurities in substances added to the end product that correspond to the above named criteria are not permitted.

The label holder is obligated to take into account current developments on the list of candidates.

b) Substances which according to the criteria of Regulation (EC) No 1272/2008¹¹ are assigned the following H Phrases named in the table or which meet the criteria for such classification.

EC Regulation 1272/2008 (GHS Regulation)	Wording
Toxic substances	
H300	Fatal if swallowed

¹¹ Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, as well as amending Regulation (EC) No. 1907/2006 (GHS Regulation). The GHS Regulation (Global Harmonization System) that came into force on 20 January 2009, replaces the old Directives 67/548/EEC (Dangerous Substances Directive) and 1999/45/EC (Dangerous Preparations Directive). According to the said regulation, substances are classified, labelled and packed until 1 December 2010 according to Directive 67/548/EEC while mixtures (formerly preparations) are classified, labelled and packed until 1 June 2015 according to Directive 1999/45/EC. Thereafter, the GHS Regulation shall be applied. The new indications of danger (H Phrases) as well as the hitherto applicable risk phrases (R Phrases) shall be indicated for substances until 1 June 2015.

H301	Toxic if swallowed
H304	May be fatal if swallowed and enters airways
H310	Fatal in contact with skin
H311	Toxic in contact with skin
H330	Fatal if inhaled
H331	Toxic if inhaled
H370	Causes damage to organs
H371	May cause damage to organs
H372	Causes damage to organs through prolonged or repeated exposure
H373	May cause damage to organs through prolonged or repeated exposure
Carcinogenic, mutagenic and reprotoxic substances	
H340	May cause genetic defects
H341	Suspected of causing genetic defects
H350	May cause cancer
H350i	May cause cancer if inhaled
H351	Suspected of causing cancer
H360F	May damage fertility
H360D	May damage the unborn child
H360FD	May damage fertility May damage the unborn child
H360Fd	May damage fertility Suspected of damaging the unborn child
H360Df	May damage the unborn child Suspected of damaging fertility
H361f	Suspected of damaging fertility
H361d	Suspected of damaging the unborn child
H361fd	Suspected of damaging fertility Suspected of damaging the unborn child
H362	May cause harm to breast fed children
Water-hazardous substances	
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long-lasting effects
H411	Toxic to aquatic life with long-lasting effects
H412	Harmful to aquatic life with long lasting effects
H413	May cause long lasting harmful effects to aquatic life
Other Health and Environmental Effects	
EUH059 (H420) ¹²	Hazardous to the ozone layer

¹² Commission Regulation (EC) No. 286/2011 from 10 March 2011 amending Regulation (EC) No. 1272/2008

EUH029	Contact with water liberates toxic gas
EUH031	Contact with acids liberates toxic gas
EUH032	Contact with acids liberates very toxic gas
EUH070	Toxic by eye contact
Sensitizing substances	
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H317	May cause an allergic skin reaction

The use of substances or mixtures which upon processing change their properties (e.g. become no longer bioavailable, undergo chemical modification) in a way that the identified hazard no longer applies are exempted from the above requirement.

Deviations: The following substances or mixtures are specifically exempted from the above requirement:

Surfactant (*)	H400	Very toxic to aquatic life
	H411	Toxic to aquatic life with long-lasting effects
	H412	Harmful to aquatic life with long lasting effects
Fragrance	H412	Harmful to aquatic life with long lasting effects
Enzymes (**)	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
	H317	May cause an allergic skin reaction
	H400	Very toxic to aquatic life
	H412	Harmful to aquatic life with long lasting effects
NTA as an impurity in MGDA and GLDA(***)	H351	Suspected of causing cancer

(*) This is also valid for impurities from the starting substances.

(**) Including stabilisers and other auxiliary substances in the preparations.

(***) In concentrations lower than 1.0% in the raw material as long as the total concentration in the end product is lower than 0.10%.

Compliance verification

The applicant shall declare compliance with the requirements in Annex 1.

In the event of changes to the list of candidates, the applicant shall inform RAL gGmbH within one month in the event that the end product does not comply with this criterion.

The applicant shall submit the exact formulation of the end product in Annex 2. The

applicant shall verify that the substances contained in the end product comply with this criterion by providing information that fulfils at least those requirements according to Annex VII of Regulation (EC) No. 1907/2006. Such information shall be specific to the particular form of the substance, including nanoforms, used in the end product. For that purpose, the applicant shall submit a declaration of compliance with this criterion, together with information on the type (IUPAC nomenclature and CAS number) and content (% by mass) of all substances added to the product and the related safety data sheets in accordance with Annex II to Regulation (EC) No 1907/2006 for the end product, as well as for all substances or mixtures listed in the formulation(s). Concentration limits shall be specified in the safety data sheets in accordance with Article 31 of Regulation (EC) No. 1907/2006. The safety data sheets may not be older than two years. The manufacturer shall verify that he/she has requested that the suppliers of primary/intermediate products submit information on the content of substances up to 0.010 % by mass.

3.7 Exclusion of substances

The following substances are not permitted in the end product, either as part of the formulation or as part of any preparation included in the formulation:

- Alkyl phenol ethoxylates (APEOs) and derivatives thereof
- EDTA (ethylenediaminetetraacetic acid) and its salts
- Phosphoric acid and its salts
- Alkyl phosphonic acid derivatives and their salts
- Quaternary ammonium salts that are not readily biodegradable
- 5-bromo-5-nitro-1,3-dioxane
- Formaldehyde and formaldehyde releasers, e.g. (INCI designations):
 - 2-Bromo-2-Nitropropane-1,3-Diol
 - Diazolidinyl Urea
 - Sodium Hydroxymethylglycinate
 - Dimethylol Glycol
 - Dimethylol Urea
 - DMDM-Hydantoin
 - Quaternium-15
 - Tetramethylolglycoluril
- Nitromusks and polycyclic musks, including for examples

- Musk xylene: 5-Tert-butyl-2,4,6-trinitro-m-xylene,
 - Musk ambrette: 4-Tert-butyl-3-methoxy-2,6-dinitrotoluene,
 - Moskene: 1,1,3,3,5-Pentamethyl-4,6-dinitroindan,
 - Musk tibetine: 1-Tert-butyl-3,4,5-trimethyl-2,6-dinitrobenzene,
 - Musk ketone: 4'-Tert-butyl-2',6'-dimethyl-3',5'-dinitroacetaphenone,
 - HHCB (1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylcyclopenta(g)-2-benzopyran),
- AHTN (6-Acetyl-1,1,2,4,4,7-hexamethyltetralin).
 - Nanomaterials

The use of nanomaterials is only permitted when it can be demonstrated that there is no risk to the environment and human health.

- Microplastics

Compliance verification

The applicant shall confirm compliance with the requirement in Annex 1.

The applicant shall submit a declaration, which is also supported by declarations from the manufacturers of the substances, that the listed substances are not contained in the end product. In the event that ammonium salts have been added to the product, the applicant shall submit documentation demonstrating their biodegradability.

3.8 Requirements for specific substances

These special requirements for specific substances are valid in addition to the general requirements for substances.

3.8.1 Biocides

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

Compliance verification

The applicant shall confirm compliance with the requirement in Annex 1.

The applicant shall submit the safety data sheets for every preservative added to the product, as well as information about the exact concentrations of these substances in the end product. The manufacturer or supplier of the preservatives shall submit information about the dosage required to preserve the end product.

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

Compliance verification

The applicant shall confirm compliance with the requirement in Annex 1.

The applicant shall submit the texts and layouts used for each individual type of packaging and/or a sample of each individual type of packaging to RAL gGmbH.

- c) Biocides, either as part of the formulation or as part of any mixture included in the formulation, that are used to preserve the end product and are classified in accordance with Regulation (EC) No. 1272/2008 of the European Parliament and of the Council¹³ as H400, H410 or H411, are permitted, but only if their log Kow (octanol-water partition coefficient) is < 3.0 or their experimentally determined bioconcentration factor (BCF) is ≤ 100.

Compliance verification

The applicant shall confirm compliance with the requirement in Annex 1.

The applicant shall submit the log Kow or BCF value for biocides classified as H400, H410 or H411 (Annex 2).

3.8.2 Fragrances

- a) The end product is not permitted to contain any fragrances with nitromusk or polycyclic musk compounds.
- b) All of the substances added to the end product as fragrances must have been manufactured and/or handled in accordance with the code of practice of the International Fragrance Association (IFRA). The code of practice is available on the IFRA website: <http://www.ifraorg.org>.
- c) Fragrances that are subject to labelling as detergents in accordance with Annex VII of Regulation (EC) No. 648/2004 and which are not already excluded by criteria 3.6, as well as (other) fragrances classified as H317 (May cause an allergic skin reaction) and/or H334 (May cause allergy or asthma symptoms or breathing difficulties if inhaled) must not be present in the end product in concentrations ≥ 0.010 % (≥ 100 ppm) per substance.
- d) Commercial/industrial hand dishwashing detergents or products specially designed for children and marketed as such are not permitted to contain any fragrances.

¹³ OJ L 353 from 31.12.2008

Compliance verification

The applicant shall confirm compliance with the requirement in Annex 1.

The applicant shall submit a declaration about compliance for each of the criterion (a) and (b). For criterion (c), the applicant shall submit a declaration about compliance with this criterion with information about the amount of fragrances contained in the end product. In addition, the applicant shall also submit a declaration from the fragrance manufacturer specifying the content of each of the substances contained in the fragrance which are listed in Annex III of Regulation (EC) No. 1223/2009¹⁴, as well as the content of (other) substances which have been assigned the risk phrases H317 and/or H334.

3.8.3 Volatile organic compounds

For all-purpose cleaners, the total concentration of volatile organic compounds (VOC) with a boiling point below 150 °C must not exceed 0.2% (by mass) in the cleaning water or exceed 6% (by mass) in the end product.

For sanitary cleaners, the total concentration of volatile organic compounds with a boiling point below 150 °C must not exceed 6% (by mass) in the end product.

For glass cleaners, the end product is not permitted to contain a concentration of more than 10% (by mass) of volatile organic compounds with a boiling point below 150 °C.

Compliance verification

The applicant shall confirm compliance with the requirement in Annex 1.

The calculation of the total concentration of VOCS is carried out according to Annex 2.

3.9 Labelling of the end product

The end product is not permitted to be classified as H400, H410, H411, H412, H314 or H317 in accordance with the CLP Regulation (1272/2008/EG)¹⁵.

Compliance verification

The applicant shall confirm compliance with the requirement in Annex 1.

In addition, the applicant shall submit the exact formulation of the end product in Annex 2, as well as the product label and safety data sheet for the end product.

¹⁴ OJ L 342 from 22.12.2009

¹⁵ Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, as well as amending Regulation (EC) No. 1907/2006 (CLP Regulation).

3.10 Fitness for use

The end product must be fit for use and meet the requirements of the consumer. To ensure that this is the case, the tests for assessing the product's fitness for use described in Appendixes 2 and 3 shall be carried out.

Compliance verification

The applicant shall declare compliance with the requirement in Annex 1 and submit the test results in accordance with the guidelines stated in Appendixes 2 and 3 to verify compliance.

3.11 Packaging requirements

- a) Plastics used for the primary packaging shall be marked in accordance with Directive 94/62/EC of the European Parliament and of the Council of 20 December 1994 on packaging and packaging waste¹⁶ or in accordance with DIN 6120 Parts 1 and 2 in connection with DIN EN ISO 1043 Part 1.
- b) All environmentally-relevant information on the packaging must correspond to the ISO 14021 standard "Environmental labels and declarations — Self declared claims (type II environmental labelling)".
- c) Only phthalates that had been risk assessed at the time of the application and which were not classified according to criterion 3.6 are permitted to be used in plastic packaging.
- d) Packaging made out of halogenated polymers is not permitted.
- e) If adhesive labels are used, these should be easy to remove.
- f) The maximum dosage stated for hand dishwashing detergents must not exceed 0.8 ml/litre.
- g) The weight utility ratio (WUR) of the primary packaging must not exceed the following values:

Type of product	WUR
All-purpose cleaner	1.20 grams of packaging per litre of use solution (washing water)
Sanitary and glass cleaner	150 grams of packaging per litre of use solution

¹⁶ OJ L 365 from 31.12.1994, P.10

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

$$WUR = \sum((W_i + U_i) / (D_i * r_i))$$

Key for the calculation formula:

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

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

D_i = the number of functional doses (= number of the dosage volume which is recommended by the manufacturer for 1 litre of cleaning water or dishwashing water) contained in the primary packaging (i). In the case of sanitary and glass cleaners, the D_i is the product volume contained in the primary packaging.

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). If the packaging is reused, r is set to 1 unless the applicant can document a higher number.

If multiple types of different packaging are offered, the WUR criterion must be fulfilled for each individual type of packaging. This is also true for sales samples or refill packs.

If a refill pack is offered separately, the r_E for the initial packaging shall be increased to a value >1 , whereby r_E is calculated in accordance with the following formula:

$$r_E = ((D_E * A_E) + (D_N * A_N)) / (D_E * A_E)$$

Key for the calculation formula:

A: Number of packaging units sold (or produced). The subscript E describes the initial packaging, the subscript N the refill pack.

If a refill pack is offered together with the initial packaging in one sales unit, D is the sum of the functional doses for both primary packagings and W (see formula for WUR) is the sum of the weights of both primary packagings.

If a refill pack is offered separately to the initial packaging and is only offered for the first time when the application is made, verification of the number of packaging units sold (or produced) shall be automatically submitted without request by the applicant one year after the contract has been concluded.

Compliance verification

The applicant shall confirm compliance with the requirement in Annex 1. The applicant shall submit a calculation of the WUR for the end product in Annex 2. If a

refill pack is offered separately to the initial packaging and is only offered for the first time when the application is made, verification of the number of packaging units sold (or produced) shall be automatically submitted without request by the applicant one year after the contract has been concluded along with Annex 2 and supporting documentation.

3.12 Consumer information

3.12.1 Advertising messages

It is not permitted to advertise the product in combination with the word "nano".

Compliance verification

The applicant shall declare compliance with the requirement in Annex 1.

3.12.2 Dosage instructions

a) For all-purpose cleaners and dilutable bathroom cleaners, an exact dosage recommendation shall appear on the packaging in a reasonably sufficient size and against a visible background.

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

"Proper dosage saves costs and minimises environmental impacts."

b) Hand dishwashing detergents

The end product must carry the following instructions on the packaging:

- "Do not rinse under running water but immerse the dishes and use the recommended dosage."
- The recommended dosage shall appear on the packaging in a reasonably sufficient size and against a visible background. The dosage shall be stated in millilitres (or teaspoons) per 5 litres of dishwashing water for "soiled" dishes.
- It is recommended that information on the approximate number of dishwashing cycles is stated on the bottle, although this information is provided on a voluntary basis. This number can be calculated by dividing the total volume of the end product by the dosage required for 5 litres of dishwashing water for soiled dishes.

Compliance verification

The applicant shall declare compliance with the requirement in Annex 1 and submit a product label to RAL gGmbH.

3.12.3 Safety Instructions

The following safety advice (or an equivalent text) shall appear on all-purpose, sanitary and glass cleaners in both text form and with an equivalent pictogram:

- "Keep away from children!"
- "Do not mix different cleaners!"
- "Avoid inhaling sprayed product" (only for end products that are packaged as sprays).

Compliance verification

The applicant shall declare compliance with the requirement in Annex 1 and submit a product label to RAL gGmbH.

3.13 Training of commercial/industrial users

In the case of cleaning agents that will be used by commercial/industrial users, the manufacturer, distributor or a third party must offer training or training materials for cleaning personnel. This must provide step by step explanations of how to properly dilute, use and dispose of the product, as well as instructions on using associated equipment.

Compliance verification

The applicant shall declare compliance with the requirement in Annex 1 and submit a sample of the training material to RAL gGmbH that includes a detailed description of how to properly dilute, use and dispose of the product, as well as instructions on using associated equipment or a description of the training course.

4 Overview of possible future requirements

The following points will be taken into account, where possible, in future revisions of these Basic Award Criteria:

- The availability of segregated palm (kernel) oils
- Inclusion of other renewable raw materials in the requirements for sustainable cultivation
- The general biodegradability of all substances
- Requirements for the use of recycled materials in the packaging and for the handling of residual cleaning agents in recycling
- Checking the tests for the product's fitness for use to assess their practical relevance and comparability

- Testing other prohibitions for the labelling of the end product in accordance with the CLP Regulation (1272/2008/EC)

5 Applicants and parties involved

Manufacturers or distributors of products according to Paragraph 2 shall be eligible for application.

5.1 Parties involved in the award process are:

- RAL gGmbH to award the Blue Angel ecolabel,
- the federal state being home to the applicant's production site,
- Umweltbundesamt, (Federal Environmental Agency) which after the signing of the contract receives all data and documents submitted in application for the Blue Angel in order to be able to further develop the Basic Award Criteria.

The compliance verifications submitted by the applicant will be handled with complete confidentiality.

6 Use of the Environmental Label

5.1 The terms governing the use of the Environmental Label illustrated on the first page of these Basic Award Criteria by the applicant are stipulated by a Contract on the Use of the Environmental Label to be concluded with RAL gGmbH.

5.2 Within the scope of such contract, the applicant undertakes to comply with the requirements under Paragraph 3 while using the environmental label. Significant changes shall be submitted to RAL gGmbH. In these cases, it is possible that the applicant will be requested to resubmit the compliance verifications.

5.3 Contracts on the Use of the Environmental Label are concluded to fix the terms for the certification of products under Paragraph 2. Such contracts shall run until 31 December 2017. They shall be extended by periods of one year each, unless terminated in writing by 31 March 2017 or 31 March of the respective year of extension. After the expiry of the contract, the Environmental Label may neither be used for labelling nor for advertising purposes. This regulation shall not affect products being still in the market.

5.4 The applicant (manufacturer) shall be entitled to apply to RAL gGmbH for an extension of the right to use the ecolabel on the product entitled to the label if it is to be marketed under another brand/trade name and/or other marketing organizations.

5.5 The Contract on the Use of the Environmental Label shall specify:

- Applicant (manufacturer)
- Brand/trade name
- Distributor (label user), i.e. the marketing organization under Paragraph 5.4.

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CONTRACT

No.

on the Award of the Environmental Label

RAL gGmbH as the label-awarding agency and the firm of

(Applicant/Distributor)

as the applicant conclude the following
Contract on the Use of the Environmental Label:

S P E C I M E N

:

1. Under the following conditions the applicant shall be entitled to use the Environmental Label for the labelling of the product / product group / project:
Hand Dishwashing Detergents, All-Purpose Cleaners, Sanitary Cleaners and Glass Cleaners for
"(Brand/Trade Name)"

This shall not include the right to use the Environmental Label as part of a brand. Unless otherwise agreed, the Environmental Label shall only be used in the above given shape and colour. The entire inner surrounding text shall always be identical as regards font size, form, thickness and colour and it shall be easy to read.

2. The Environmental Label according to Paragraph 1 may only be used for the above-mentioned product / product group / project.
3. If the Environmental Label is used for advertising purposes or other applicant activities, the applicant shall make sure that it is exclusively used in connection with the above-named product / product group / project for which the use of the Environmental Label has been granted and settled under this contract. The applicant shall be solely responsible for the way the label is used, above all, in advertising.
4. During the entire period of label use, the product / product group / project to be labelled shall comply with all requirements and conditions for the use of the label as specified in the "Basic Criteria for Award of the Environmental Label RAL-UZ 194", as amended. This shall also apply to the reproduction of the Environmental Label (including surrounding text). Claims for damages against RAL gGmbH, especially on the grounds of third party objections to applicant's use of the label and the accompanying advertising shall be ruled out.
5. If the "Basic Criteria for Award of the Environmental Label" provide for checks by third parties, the applicant shall bear the costs accruing in connection therewith.
6. Should the applicant himself or third parties find out that the applicant does not comply with the conditions as stipulated in Paragraphs 2-5, the applicant shall be liable to inform RAL gGmbH and stop the use of the

Environmental Label until the conditions are complied with again. Should the applicant be incapable of restoring the state required for the use of the label immediately or should the applicant seriously offend against this contract, RAL gGmbH may, if necessary, withdraw the Environmental Label and prohibit the applicant from using the label any longer. Claims for damages against RAL gGmbH because of the withdrawal of the label shall be ruled out.

7. The Contract on the Use of the Environmental Label may be terminated for good reason.
Examples of good reasons are:
 - unpaid contributions
 - substantiated risk of injury and death.In such case, the applicant's continued use of the Environmental Label shall be prohibited. The applicant shall not be entitled to bring a claim for damages against RAL gGmbH (see above: Paragraph 6, Sentence 3).
8. The applicant undertakes to pay RAL gGmbH an amount according to the "Entgeltordnung für das Umweltzeichen" (Schedule of Fees for the Environmental Label), as amended, for the period of use.
9. According to the "Basic Criteria for Award of the Environmental Label RAL-UZ 194 " this contract will run until 31 December **2017**. They shall be extended by periods of one year each, unless terminated in writing by 31 March **2017** or 31 March of the respective year of extension. After the expiry of the contract, the Environmental Label may neither be used for labelling nor for advertising purposes. This regulation shall not affect products being still in the market.
10. Products / projects marked with the Environmental Label and the advertising for these products / projects may reach the consumer only when naming the company of the

(Applicant/Distributor).

Sankt Augustin, this ... day of20..

RAL gGmbH
Management

(Signature of authorized person
and company stamp)