BLUE ANGEL

The German Ecolabel

Shampoos, shower gels, soaps and other so-called 'rinse off' cosmetic products

DE-UZ 203

Basic Award Criteria

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Version 1

The Environmental Label is supported by the following four institutions:

Federal Ministry
for the Environment, Nature Conservation
and Nuclear Safety

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.

Umwelt Bundesamt

The German Environmental Agency with its specialist department for "Ecodesign, Eco-Labelling 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.

Jury Umweltzeichen

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.

RAL gGmbH

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

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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

Cosmetic products, so-called “rinse-off” cosmetic products, are used daily by a large proportion of the population. Approximately 790,000 tonnes of cosmetic products are produced annually[1]. All of these products contain ingredients that find their way into the wastewater system and can have a negative effect on the environment. 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. In addition, cosmetic products can contain substances relevant to health e.g. certain preservatives or allergenic fragrances.

An important component of “rinse-off” cosmetic products 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. This is particularly true for palm (kernel) oil. Certification systems are part of the solution for achieving sustainable palm (kernel) oil production, although they cannot solve all of the problems in the sector on their own. There are a variety of trading models for buying and selling sustainable certified palm (kernel) oil. They differ in terms of the extent to which sustainable and conventional goods are kept physically separate or mixed during the supply chain and only the sustainability

[1] Environmental Toxicology and Chemistry, Vol. 28, No. 12, pp. 2485–2489, 2009

certificates are traded.

However, it is important to ensure in the longer term that certified and segregated 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 cosmetic products named in Paragraph 2 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.

Preserving natural resources is also an important focus of this environmental label. Cosmetic products 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 the currently valid versions of relevant existing laws and legal requirements is a prerequisite for those products awarded with the environmental label. The substance requirements defined by Regulation (EC) No. 1223/2009 on cosmetic products, the Chemicals Regulation REACH (Regulation(EC) No. 1907/2006)[2] and the CLP Regulation (Regulation (EC) No. 1272/2008)[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

[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).

1.5 Definitions

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

- **Substance**[4]: 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.

  Ingredients: Preservatives, fragrances and colouring agents, irrespective of their concentrations, and other intentionally added substances as well as by-products and impurities in the raw materials whose concentrations are at least 0.010 percent by mass in the finished formulation.

- **Active content (AC):** The sum of the organic ingredients of the product (expressed in grams), calculated based on the finished formulation of the product, including propellant gases in spray cans. Abrasives are not taken into account in the calculation for the active content.

- **Impurity**[5]: An unintended and not deliberately added constituent present in a substance as manufactured. Impurities may originate from the starting materials or be the result of incomplete or secondary reactions during the manufacturing process.

- **Mixture**[6]: Mix, mixture or solution composed of two or more substances.

- **End product:** Products labelled with the Blue Angel ecolabel and offered for sale on the market.

- **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

[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).

c) microbial fermentation.

- **Nanomaterial**: An insoluble or biopersistant and intentionally manufactured material with one or more external dimensions, or an internal structure, on the scale from 1 to 100 nanometres[7].
- **Primary packaging:** The packaging that comes into immediate contact with the contents as it is offered to the end user or consumer at a retail outlet in its smallest sales unit.
- **Secondary packaging:** Packaging that can be removed from the product without changing its properties and which contains a certain number of sales units that are sold together to the end user or consumer at a retail outlet or is solely designed for stocking the shelves in the retail outlet.
- **Transport packaging:** Transport packaging or delivery packaging is packaging that facilitates the transport of goods, protects the goods against damage during transport or which is used for reasons of safety of the transport.
- **Identity preserved**: Palm (kernel) oil from a specific production location that is sourced from sustainable plantations is kept separate from other palm (kernel) 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 (kernel) 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.
- **Book & claim**: Sustainable plantations are promoted though 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.

[7] Definition according to the cosmetics regulation (Regulation (EC) No. 1223/2009)

2 Scope

The product group “rinse-off” cosmetic products comprises all rinse-off substances or mixtures within the scope of Regulation (EG) No. 1223/2009 of the European Parliament and of the Council[8] that are designed for application on the skin and/or hair exclusively or mainly for cleaning purposes, to improve the condition of the hair or to protect the skin and moisten hair before shaving.

Therefore, the following products are permitted:

- Shampoos
- Shower products
- Liquid soaps
- Solid soaps
- “Rinse-off” hair-care products
- Shaving foams
- Shaving gels
- Shaving creams
- Solid shaving soaps

“Rinse-off” cosmetic products comprise products that are intended for private and/or commercial use.

Products in pressurised gas containers are excluded from the award of the environmental label.

Products that are specially marketed for disinfection or antibacterial purposes are excluded from the scope of these Basic Award Criteria.

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.

[8] Regulation (EC) No. 1223/2009 of the European Parliament and of the Council of 30 November 2009 on cosmetic products (OJ L 342 from 22.12.2009, p. 59).

3.1 Assessment and testing requirements

The following refers to the "Detergent Ingredient Database" (DID list 2014), which contains the most widely used substances in detergent and cosmetic 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 list is published as a Appendix. In certain cases, RAL gGmbH can request additional verification and carry out independent tests.

3.1.1 Measurement thresholds

Every substance that exceeds a concentration of 0.010% by mass in the final formulation must comply with these Basic Award Criteria. This also applies to the raw materials used in the product, any listed additives and impurities.

In the case of substances dealt with by the following criteria, a deviating measurement threshold of 0.0010% by mass in the final formulation applies:

- 3.5 Biodegradability of organic substances
- 3.6 Toxicity to aquatic organisms
- 3.8 Exclusion of substances
- 3.9 Requirements for specific substances

There is no lower measurement threshold for colouring agents.

Table 1: Overview of the measurement thresholds for the requirement criteria.

Chapter	Criterion	Measurement threshold in percent by mass [% (w/w)]
3.2	Renewable raw materials in **surfactants**	≥ 0.010
3.3	Requirements for renewable raw materials in the production of **surfactants**	≥ 0.010
3.4	Biodegradability of **surfactants**	≥ 0.010
3.5	Biodegradability of organic substances	≥ 0.0010 (Colouring agents: no lower limit)
3.6	Toxicity to aquatic organisms	≥ 0.0010 (Colouring agents: no lower limit)
3.7 a)	General exclusion of substances with certain properties – a) Substances of very high concern (SVHC)	≥ 0.010 (Colouring agents: no lower limit)
3.7 b)	General exclusion of substances with certain properties – b) Substances classified with the H-phrases listed in accordance with Regulation (EC) No 1272/2008	≥ 0.010 (Colouring agents: no lower limit)
3.8	Exclusion of substances	≥ 0.0010
3.9.1	Requirements for specific substances – **preservatives**	≥ 0.0010
3.9.2	Requirements for specific substances – **fragrances**	≥ 0.0010
3.9.3	Requirements for specific substances – **colouring agents**	no lower limit

3.1.2 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 carbon from renewable raw materials in the total carbon in the surfactant system must be at least 70%.

Compliance verification

The applicant shall confirm compliance with the requirement in Annex 1. The proportion of carbon from renewable raw materials 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 for the end product (Appendix 1).

3.3 Requirement for renewable raw materials

All of the raw materials used in the ingredients added to the product that are manufactured based on palm oil and/or palm kernel oil must have been sourced from plantations cultivated under sustainable conditions. In particular, at least one palm (kernel) oil surfactant must be “mass balance” certified.

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).

Verification shall be provided in the form of a proof of purchase (certificate) from the surfactant supplier (Book & Claim, mass balance or segregated). The following certification systems are recognised: RSPO (Roundtable on Sustainable Palmoil), ISCC+ (International Sustainability & Carbon Certification), Rainforest Alliance, 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 biodegradable 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 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 that simulate the conditions in a corresponding anaerobic environment.

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

3.5 Biodegradability of organic substances

The content of organic substances in the product that are aerobically not readily biodegradable and anaerobically non-biodegradable shall not exceed the maximum limits stated in Table 2. Abrasives should not be taken into account here.

Table 2: Maximum limits for the content of not readily biodegradable organic substances based on the product, where aNBO = aerobically not readily biodegradable; anNBO = anaerobically non-biodegradable; values stated in mg/g of active content (AC).

Type of product	Highest content values	
	aNBO	anNBO
Shampoos, shower products and liquids	25	25
Solid soaps	10	10
Hair-care products	45	45
Shaving, foams, shaving gels, shaving creams	70	40
Solid shaving soaps	10	10

Compliance verification

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

In order to calculate the aNBO and anNBO values, there is an Excel file available for this purpose on the Blue Angel website (Annex 2).

The DID list is authoritative here. In the case of ingredients not included in the DID list, relevant information from literature or other sources or corresponding test results shall be submitted to verify that these ingredients are biodegradable under aerobic and anaerobic conditions.

If verification is missing for the requirements stated above, an exemption can be granted for the required biodegradability under anaerobic conditions for ingredients that are not surfactants if one of the three following conditions is satisfied:

1. *Ready biodegradability and low adsorption (A < 25 %)*
2. *Ready biodegradability and high desorption (D > 75 %)*
3. *Ready biodegradability and no bioaccumulation.*

Adsorption/desorption tests can be carried out in accordance with the OECD test guideline 106.

3.6 Toxicity to aquatic organisms

The critical dilution volume $CDV_{chronic}$ is the sum of the critical dilution volume $CDV_{(i)}$ for each substance (i) in the end product, standardised for the active content AC of the end product:

$$CDV_{chronisch} = \frac{1}{AC} \cdot \sum_{i=1}^{n} CDV_{(i)} = \frac{1}{AC} \cdot \left(CDV_{(1)} + CDV_{(2)} + \ldots + CDV_{(n)}\right)$$

with

$$CDV_{(i)} = \frac{Weight_{(i)} \cdot DF_{(i)} \cdot 1000}{TF_{chronic(i)}}$$

and

$CDV_{chronic}$	Critical dilution volume of the end product [l/g AC]
$CDV_{(i)}$	Critical dilution volume of the substance (i) [l/g AC]
AC	Active content (see definitions) [g]
$Weight_{(i)}$	Weight of the substance (i) in the end product [g]
$DF_{(i)}$	Degradation factor of the substance (i)
$TF_{chronic(i)}$	Chronic toxicity factor of the substance (i) [mg/l]
Factor 1000	Conversion factor for $TF_{chronic(i)}$ [mg/g]

The parameters DF and $TF_{chronic}$ shall be taken from Part A of the Detergent Ingredient Database (DID list 2014) (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.

The chronic dilution volume of the product must not exceed the following maximum limits ($CDV_{chronic}$):

Type of product	$CDV_{chronic}$ (l/g AC)
Shampoos, shower products and liquids	18 000
Solid soaps	3 300
Hair-care products	25 000
Shaving, foams, shaving gels, shaving creams	20 000
Solid shaving soaps	3 300

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.

3.7 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 1272/2008[10] are assigned the following H Phrases named in the table or which meet the criteria for[11] such classification.

[10] Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16 December 2008 concerning the classification, labelling and packaging of substances and mixtures.

[11] Regulation (EC) No. 1272/2008 on classification, labelling and packaging of substances and mixtures (GHS Regulation)

Regulation (EC) No. 1272/2008 (GHS Regulation)	Wording
Toxic substances	
H300	Fatal if swallowed
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	
H420[12]	Harms public health and the environment by destroying ozone in the upper atmosphere (replaces EUH059)
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.

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

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

Surfactants	H400	Very toxic to aquatic life
	H411	Toxic to aquatic life with long-lasting effects
	H412	Harmful to aquatic life with long lasting effects
Preservatives	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
Fragrances	H412	Harmful to aquatic life with long lasting effects
	H413	May cause long lasting harmful effects to aquatic life

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.

3.8 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 (APEO) and alkyl phenol ethoxylate derivatives
- Phosphates
- Phosphonates, which are aerobically not readily biodegradable
- EDTA (ethylenediaminetetraacetic acid and its salts)
- DTPA (diethylenetriaminepentaacetic acid and its salts)
- 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
- Nanosilver
- Hydroxyisohexyl 3-cyclohexene carboxaldehyde (HICC)
- Atranol and Chloratranol
- Nitromusks and polycyclic musks including e.g.:

- 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-hexamethyltetrali)

- 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.

3.9 Requirements for specific substances

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

3.9.1 Preservatives

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

Compliance verification

The applicant shall confirm compliance with the requirements 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 to explain the necessity of the dosage required to preserve the end product.

b) It is prohibited to state 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 copy of each individual type of packaging to RAL gGmbH.

c) No preservatives whose log Pow (octanol-water partition coefficient) is ≥ 3.0 or experimentally determined bioconcentration factor (BCF) is > 100 may be contained in the end product.

Compliance verification

The applicant shall confirm compliance with the requirement in Annex 1.
The applicant shall submit the log Pow or BCF value for the preservatives (Annex 2).

3.9.2 Fragrances

a) 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. The recommendations contained in the IFRA Standards concerning the prohibition, restricted use and specified purity criteria for materials shall be followed by the manufacturer.

b) Fragrances, which must be specified according to Annex III of the cosmetics regulation (Regulation (EC) No. 1223/2009), may not be contained in the product in concentrations ≥ 0.010 % (≥ 100 ppm) per substance.

c) Cosmetic products that have been specially developed and marketed for children under 3 years old or allergy sufferers are not permitted to contain any fragrances.

Compliance verification

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

are listed in Annex III of Regulation (EC) No. 1223/2009[13], as well as the content of (other) substances which have been assigned the risk phrases H317 and/or H334.

3.9.3 Colouring agents

Colouring agents in the product must not be bioaccumulating. A colouring agent is considered to be non-bioaccumulating if the bioconcentration factor (BCF) is < 100 or the log Pow is < 3.0. If the values for both the BCF and the log Pow are available, the highest measurement for the BCF is valid. If using colouring agents that have been approved for use in foodstuffs, no documentation about the bioconcentration factor needs to be submitted.

Compliance verification

The applicant shall submit safety data sheets about all colouring agents added to the product and the values for their BCF and/or log Pow or documentation that verifies that the colouring agent is approved for use in foodstuffs.

3.10 Theoretical classification of the end product

Result (X) for the calculation in accordance with the following formula must not be ≥ 1:

$((WR_{H410}/0.25\ \%) + (WR_{H411}/2.5\ \%) + (WR_{H412}/25\ \%)) = X$

WR_{H410}= Proportional weight of the ingredients in % that could be classified as H410.

WR_{H411}= Proportional weight of the ingredients in % that could be classified as H411.

WR_{H412}= Proportional weight of the ingredients in % that could be classified as H412.

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 safety data sheets for the raw materials added to the end product and a theoretical calculation.

3.11 Fitness for use

The ability of the end product to perform its main function (e.g. washing, care) and all secondary functions (e.g. treating dandruff, colour protection) must be verified using a laboratory test or a consumer test.

1. Consumer test

The consumer test must be carried out anonymously i.e. the name of the standard comparative product must not be revealed.

[13] OJ L 342 from 22.12.2009

At least 15 persons must participate in the test. The following aspects must be taken into account in all cases in the consumer survey:

1. How do you evaluate the performance of the product in comparison to the standard product?

2. In accordance with its intended use, how do you evaluate the dosability of the product in comparison to the standard product?

3. How do you evaluate the application and rinseability of the product in comparison to the standard product?

At least 80% of the consumers must be at least as equally as satisfied with the product in comparison to the standard product.

2. Laboratory test

Laboratory tests will be accepted under the precondition that they cover the performance of the product and the aspects listed under the consumer test.

Compliance verification

The applicant shall declare compliance with the requirement in Annex 1 and submit the test results in accordance with the guidelines stated below. The applicant must document which test report was used to test the effectiveness of the product. The applicant shall submit the results of these tests that verify that the product fulfils the main and secondary functions stated on the product label or on the product packaging.

The verifications should comply with the "Guidelines for the Evaluation of the Efficacy of Cosmetic Products", which can be found under the following link:

https://www.cosmeticseurope.eu/publications-cosmetics-europe-association/guidelines.html?view=item&id=23

In particular, the following sections should be observed:

- *Section II for the general principles*
- *Section III for the test protocols*
- *Section IV for the test reports*

3.12 Packaging requirements

a) The use of halogenated polymers and aluminium is not permitted.

b) If adhesive labels are used, it should be possible to remove them in the recycling process.

c) Paper/cardboard in primary packaging and in secondary packaging for combining multiple individual products as a sales unit (see Subpoint d) must be manufactured using at least 80% recycled materials. In the case of secondary packaging designed for transport purposes, it must be manufactured using at least 40% recycled materials. Packaging materials are considered recycled if product waste (post-consumer waste) has been subjected to a material recycling process.

d) The primary packaging comes into immediate contact with the contents. Further packaging of the product as it is offered for sale (e.g. a bottle in a cardboard box) is not permitted, unless it is secondary packaging in which two or more products are combined (e.g. the product and a refill container).

e) Packaging impact ratio

The packaging impact ratio (*PIR*) must be less than **0.28 grams per gram of product** for each packaging unit in which the product is sold.

Pre-shave products in metal aerosol containers are exempted from this requirement.

The PIR value is calculated as follows (separately for each packaging):

$$PIR = (W + (W_{refill} \times F) + N + (N_{refill} \times F)) / (D + (D_{refill} \times F))$$

Key for the calculation formula:

W: The weight of the packaging (primary packaging + proportion of the secondary packaging[14], including the labels) [g]

W_{refill}: The weight of the refill packaging (primary packaging + proportion of the secondary packaging[15], including the labels) [g]

N: The weight of the non-renewable + non-recycled packaging[15] (primary packaging + proportion of the secondary packaging[15], including the labels) [g]

N_{refill}: The weight of the non-renewable + non-recycled refill packaging[16] (primary packaging + proportion of the secondary packaging[15], including the labels) [g]

D: The weight of the product in the original packaging [g]

[14] Proportional weight of the secondary packaging (e.g. 50% of the total weight of the secondary packaging if two products are sold together).

[15] Packaging materials are considered recycled if product waste (post-consumer waste) has been subjected to a material recycling process.

[16] Packaging materials are considered recycled if product waste (post-consumer waste) has been subjected to a material recycling process.

D_{refill}: The weight of the product in the refill packaging [g]

F: The number of refill packagings that are required to meet the total refillable quantity, which is calculated as follows:

$$F = V \times R/V_{refill}$$

Key for the calculation formula:

V: The volume capacity of the original packaging [ml]

V_{refill}: The volume capacity of the refill packaging [ml]

R: The refillable quantity. This is the number of times that the original packaging can be refilled. If F is not a whole number, it should be rounded up to the next whole number.

If no refill packaging is offered, the PIR value should be calculated as follows:

$$PIR= (W + N)/D$$

The manufacturer must state the number of anticipated refills or the default value (R = 5 for plastic, R = 2 for cardboard).

Compliance verification

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

The applicant shall submit the calculation for the PIR value of the product. A calculation formula is available for this purpose in Annex 2. If the product is sold in different packaging units (i.e. with different volumes), the calculation must be given for every packaging size for which the "Blue Angel" environmental label should be issued. The applicant must submit a signed declaration about the proportion of recycled materials or materials sourced from renewable raw materials contained in the packaging, as well as a description, where relevant, of the refill system offered (type of refill packaging, volumes). In order for the refill packaging to be approved, the applicant or the retailer shall provide documentation to verify that the refill packs are available on the market.

The applicant shall state which adhesive has been added and whether this is removable during the recycling process (i.e. soluble adhesive – in water or alkaline at 80°C – in combination with moisture-resistant labels).

f) Design of the primary packaging

The primary packaging must be designed to make correct dosage easy (e.g. the opening must not be too large) and to ensure that at least 90% of the product can be easily removed from the container.

The residual quantity (R) of the product remaining in the container, which must not exceed a maximum value of 10%, should be calculated as follows:

$$R = ((m2 – m3) / (m1 – m3)) \times 100 \ (\%)$$

Key for the calculation formula:

m1: Primary packaging and product [g]

m2: Primary packaging and residual quantity of the product under normal use [g]

m3: Primary packaging, empty and cleaned [g]

Compliance verification

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

The applicant must submit a description of the dosage device and a test report with the results of the measurement of the residual quantity of the cosmetic product in the packaging (residual quantity). The test method for measuring the residual quantity is described in Appendix 2.

g) Design of recyclable plastic packaging

Plastic packaging must be designed for the purpose of easy recycling i.e. no potential hazardous materials, incompatible materials or construction techniques should be used that are known to hinder the separation or recycling of the materials or reduce the quality of the recycled materials. No individual or combination of materials or components listed in the following table may be contained in the labels or sleeves, closures and, if relevant, barrier coatings.

Materials and components that are excluded from use as a packaging component

Packaging component	Excluded materials and components
All components	— Components in the EuPIA list (exclusion list for printing inks and related products)
Label or sleeve	— PS label or PS sleeve in combination with a PP, HDPE or PET bottle — A PETG or PETC label or a PETG sleeve or PETC sleeve in combination with a PET bottle — Sleeves made of a different polymer than the bottle — Labels or sleeves that are metallised or labels or sleeves that are welded without a seam to a packaging body (in mould labelling) with PET bottles
Closures (exempted are pumps and pressurised gas containers)	— A PS closure in combination with a PP, HDPE or PET bottle — PETG closures and/or PETG closure material and other plastic closure components with a density of above 1 g/cm^3 in combination with a PET bottle — Closures made of metal, glass, EVA — Closures made of silicone. Exempted are silicone closures with a density < 1 g/cm^3 in combination with a PET bottle and silicone closures with a density > 1g/cm^3 in combination with a PP or HDPE bottle — Silicon components with PE and PP bottles — Components made out of foamed elastomers with a PE and PP bottle — Elastomer components with a density > 1 g/cm^3 with a PET bottle — Metallic foils or seals which remain fixed to the bottle or its closure after the product has been opened
Barrier coatings	— Polyamide, EVOH, functional polyolefins, metallised and light blocking barrier coatings
EVA — Ethylene vinyl acetate, EVOH — Ethylene vinyl alcohol, HDPE — High-density polyethylene, PET — Polyethylene terephtalate, PETG — Polyethylene terephthalate glycol-modified, PETC — Crystalline polyethylene terephthalate, PP — Polypropylene, PS — Polystyrene	

Compliance verification

The applicant shall declare compliance with the requirements in Annex 1 and submit the composition of the plastic packaging in Annex 2.

3.13 Advertising messages

It is not permitted to advertise the product in combination with the word "nano". It is prohibited to state or suggest on the packaging or by any other means that the product has an antimicrobial action.

Compliance verification

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

4 Overview of possible future requirements

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

- Checking the extension of the scope of the Basic Award Criteria
- The exclusive use of high-quality certification systems for palm (kernel) oil derivatives
- Inclusion of other renewable raw materials in the requirements for sustainable cultivation
- The general biodegradability of all substances
- Other requirements for the use of recycled materials in the packaging (e.g. for plastics) and associated design requirements

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

6.1 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.

6.2 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.

6.3 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 2018. They shall be extended by periods of one year each, unless terminated in writing by 31 March 2018 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.

6.4 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.

6.5 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.

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:
   Shampoos, shower gels and soaps and other so-called "rinse-off" cosmetic products 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 **203**", 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 **203**" this contract will run until 31 December **2018**. They shall be extended by periods of one year each, unless terminated in writing by 31 March **2018** or March 31 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 of ……..20.. Location, Date

RAL gGmbH
Management

(Signature of authorized person
and company stamp)