The German Ecolabel

BLUE ANGEL

Sanitary Paper

DE-UZ 5

Basic Award Criteria

Edition January 2022

Version 5

The Environmental Label is supported by the following four institutions:

Federal Ministry
for the Environment, Climate Action,
Nature Conservation and Nuclear Safety

The Federal Ministry for the Environment is the owner of the label, defines the fundamental guidelines for the award of the Blue Angel ecolabel and appoints the Environmental Label Jury.

Umwelt Bundesamt

The German Environment Agency with its specialist department for "Ecodesign, Eco-Labelling and Environmentally friendly Procurement" acts as the office of the Blue Angel ecolabel. It develops the technical criteria including the required compliance verifications in cooperation with relevant interest groups.

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, churches, young people and the German federal states.

RAL gGmbH

RAL gGmbH is the awarding body for the environmental label. It examines the applications submitted by companies for the use of the Blue Angel ecolabel and concludes the "Contracts on the Use of the Environmental Label". It also monitors correct use of the ecolabel.

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Changes compared to the previous versions can be found in Appendix F.

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This document is a translation of a German original. 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, Nuclear Safety and Consumer Protection, the German 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.
The product must comply with all the legal requirements in the country in which it is to be marketed. The applicant shall declare that the product meets this requirement.

1.2 Background

The use of recovered paper for the production of sanitary paper contributes to the preservation of resources, especially ecosystems such as forests, for the protection of the climate and to a reduction in waste, especially when using recovered paper from household and commercial collections. The environmental pollution directly associated with the pulp production is avoided. In a comparison of their impact on ecological systems, those paper products made from recovered paper perform significantly better in terms of their use of resources, waste water load and water and energy consumption than paper products made from virgin fibres that use wood as a source of fibrous raw materials – when the products have comparable performance characteristics.

In Germany, the average consumption of semi-finished paper products and finished paper products per capita after deducting export surpluses is approximately 219 kg of paper, paperboard and cardboard (semi-finished goods, VDP 2021[1]). This figure also includes consumption outside of the home, such as in commerce, media and administration. According to a recent study conducted by INTECUS GmbH (2019) on behalf of the German Pulp and Paper Association, a total of between 95 and 105 kg of paper is consumed per person in German households. The annual consumption of sanitary paper has remained comparatively constant at 17-18 kg per person. Around 75 % of this amount is consumed in private households and about 25% in companies or public facilities (INTECUS GmbH 2019).

The proportion of recovered paper used in the German paper industry is increasing continuously. It stood at 49% in 1990 but had already risen to 79% in 2020 (VDP 2020). The collection and sorting of recovered paper are important prerequisites for making the recovered paper available to the paper industry. Around 76% of the paper used in the production of sanitary paper was recovered paper in 2003 but this figure has stood at around 50 % since 2010 (VDP 2021). This process involves removing non-paper substances from the collected materials and then sorting the paper into defined grades of recovered paper (according to DIN EN 643: List of standard grades of paper and board for recycling).

[1] The German Pulp and Paper Association (Papierindustrie e.V.) since 24/06/2021

The Blue Angel promotes the use of 100% recovered paper in its criteria for sanitary paper. At least 80 % of the recovered paper must be sourced from the ordinary, medium and kraft paper grades, i.e. groups 1, 2, 4 and the special grade 5. Ordinary paper grades are primarily recovered from household collections. The Blue Angel aims to ensure that almost all of the paper fibres recovered in the paper cycle are preserved and used for other applications such as sanitary paper products. As sanitary paper products are at the end of the usage chain, it is important that paper certified with the Blue Angel ecolabel is made out of recovered paper that cannot otherwise be used for more high quality applications. At the same time, it is important to ensure that the recovered paper contains the lowest amount of pollutants possible. Therefore, the criteria stipulate in certain cases (paper for food contact) that a maximum of 50 % of the recovered paper may be sourced from the high grades (group 3). This enables virgin fibre paper to be replaced by recycled paper even for high-quality applications and thus contributes to the preservation of the forests. Using recovered paper from household and commercial collections supports the high-quality recycling of recovered paper and contributes to the avoidance of waste.

The Blue Angel restricts the addition of critical production aids and paper refining agents in its criteria for the production of paper in order to, on the one hand, minimise the pollution of waste water and, on the other hand, reduce the pollutant load in the paper. For example, the use of optical brighteners, halogenated bleaching agents and not readily biodegradable complexing agents is prohibited during the production of the recycled paper. In addition, the Blue Angel also sets requirements for the emissions to waste water and air, the generation of waste and energy consumption during the production of sanitary paper.

In order to guarantee the quality of the end product and ensure that it is low in pollutants, tests must be carried out on the end product to determine a number of different parameters. Furthermore, the use of lotions and fragrances is prohibited in those products certified with the environmental label to avoid the risk of allergies.

1.3 Objectives of the Environmental Label

The requirements in these Basic Award Criteria are intended, in particular, to promote the use of recycled paper and prevent the use of substances that are not required for technical reasons during production. The use of recycled paper that has been awarded the Blue Angel makes an important contribution to the preservation of resources and the protection of species and the climate.

Therefore, following benefits for the environment and health are stated in the explanatory box:

1.4 Definitions

Constituent components: Substances added to the product as such or as part of a mixture in order to achieve or influence certain product properties and those required as chemical cleavage products for achieving the product properties. This does not include, for example, residual monomers that have been reduced to a minimum and unavoidable impurities. If necessary, these substances are covered by their own requirements.

Crepe sanitary paper: Usually single-layer paper that is creped in a damp state, by definition also containing wood pulp, in this case exclusively sourced from recovered paper. The fine crepe wrinkles are created by draining and compressing the damp paper web in a controlled manner. The subsequent drying process then retains the crepe finish.

Wet strength agent: Sanitary paper must have a sufficient wet strength to fulfil its intended use. This requires the use of wet strength agents that generate additional bonds between the fibres.

Tissue paper: Collective term for wet or dry crepe paper with a lower basis weight (15 to 30 g/m²). Typical versions include multi-layer products that are particularly soft, absorbent and tear-resistant. They are designed for hygienic or sanitary purposes and are considered to be disposable items due to their single use.

Repackaging: Packaging that contains a certain number of sales units (consisting of the goods and their sales packaging) and which is typically offered to the end consumer as a "bulk pack" (§3 (1) No. 2 German Packaging Law - VerpackG)

Sales packaging: Packaging that is typically offered to the end consumer with the goods as a sales unit (§3 (1) No.1 VerpackG);

Composite packaging: Composite packaging is packaging that consists of two or more different materials that cannot be separated by hand (§3 (5) VerpackG). If the main material component accounts for more than 95 % by mass of the total composite packaging, the […] composite packaging can be fully assigned to the recycling quota for the main type of material (§16 (3) VerpackG).

Segregation (supply chain management): The raw material from a certified production location is kept separate from other non-certified raw materials along the entire supply chain.

Mass balance (supply chain management): The raw material from a certified production location is monitored administratively in the supply chain based on its weight. The raw material can be mixed with non-certified raw materials and then separated from the mixture using a mass balance.

Book & Claim (supply chain management): Manufacturers purchase certificates via a trading platform based on the quantity of raw materials added to their product. There is no physical relationship between the added raw materials and the production promoted by the certificate.

2 Scope

These Basic Award Criteria apply to sanitary paper that is used to produce products such as medical crepe paper, dental napkins, hand towels, cosmetic tissues, kitchen rolls, cleaning towels, serviettes, tissues and toilet paper and which comes into direct contact with the human body and, in some cases, with food.

3 Requirements

3.1 Use of fibrous raw materials and grades of recovered paper

The paper fibres used to produce the sanitary paper products stated in Paragraph 2 must be sourced 100% from recovered paper. Recovered paper is the umbrella term for paper and paperboard that is collected after use or processing. A general classification of the different grades of recovered paper can be found in Appendix B.

3.1.1 Grades of recovered paper for crepe sanitary paper products

Crepe sanitary paper must be produced from 100 % recovered paper, of which at least 80 % must be sourced from the ordinary, medium and kraft paper grades and special grades (groups 1, 2, 4 and 5). 20 % of the recovered paper may be sourced from group 3.

3.1.2 Grades of recovered paper for sanitary paper products for food contact

All sanitary paper for food contact (kitchen towels, serviettes, paper designed for or expected to be used with food) must be produced from 100 % recovered paper, of which at least 50 % must be sourced from the ordinary, medium and kraft paper grades and special grades (groups 1, 2, 4 and 5). 50 % of the recovered paper may be sourced from group 3.

3.1.3 Grades of recovered paper for other sanitary paper products

All other sanitary paper must be produced from 100 % recovered paper, of which at least 65 % must be sourced from the ordinary, medium and kraft paper grades and special grades (groups 1, 2, 4 and 5). 35 % of the recovered paper may be sourced from group 3.

Compliance verification

The applicant shall state the average percentage of the paper grades from groups 1, 2, 3, 4 and 5 used in the product in Annex 2 to the contract pursuant to DE-UZ 5 and declare compliance with the requirements in Annex 1 to the contract.
The correctness of the data provided in Annex 2 to the contract will be verified once a year in accordance with Annex 6 to the Basic Award Criteria by:

- *a certification body for ISO 14001 (environmental management systems) accredited by the German Accreditation Body (DAkkS) for the scope of paper manufacturers (NACE 17.12) or*
- *an environmental verifier approved for this scope (NACE 17.12) by the German Society for the Accreditation and Registration of Environmental Verifiers (DAU) in accordance with the Environmental Audit Act or*
- *an accredited FSC/PEFC certifier*

3.1.4 Diisopropylnaphthalene (DIPN)

The content of DIPN in the sanitary paper should be kept as low as technically possible. It is thus generally not permitted to use the grades of recovered paper 2.05.00 ordinary sorted office paper, 2.05.01 sorted office paper, 2.06.00 ordinary sorted coloured letters, 2.06.01 sorted coloured letters, 3.05.01 white wood free letters unprinted, 3.06.00 white business forms and 5.09.00 carbonless copy paper (NCR).

Alternatively, the stated grades of recovered paper that could potentially contain DIPN (2.05.00, 2.05.01 2.06.00, 2.06.01, 3.05.01, 3.06.00 and 5.09.00) may be used if an efficient technical system (e.g. washable deinking) exists that largely removes the DIPN from the fibre cycle and the DIPN content in the finished paper does not exceed a maximum of 50 mg/kg.

Compliance verification

The applicant shall declare compliance with the requirements in Annex 1 to the contract. If the grades of recovered paper 2.05.00, 2.05.01, 2.06.00, 2.06.01, 3.05.01, 3.06.00 and 5.09.00 have been used, the applicant shall state the maximum DIPN content in the finished product in Annex 2 and submit a test report from an independent testing institution accredited according to ISO 17025 or a testing institution recognised by the UBA. The DIPN content shall be determined once a year in accordance with DIN EN 14719 (DIPN in acetone extract).

3.1.5 Colour developers from thermal paper

The use of recovered paper could transfer colour developers from thermal paper to the finished paper. Therefore, the content of bisphenol A (BPA), bisphenol S (BOS) and Pergafast 201 in the finished paper must be determined in a cold water extract once a year[2].

Depending on the type of product, the content of BPA (CAS no. 80-05-7), BPS (CAS no. 80-09-1) and Pergafast 201 (CAS no. 232938-43-1) must be determined in a cold water extract prepared according to DIN EN 645 using liquid chromatography and UV/fluorescence detection or MS detection in accordance with CEN/TS 17497.

Compliance verification

The applicant shall confirm in Annex 1 to the contract that a test report from an independent testing institution accredited according to ISO 17025 or a testing institution recognised by the UBA will be submitted once a year for statistical purposes and shall state the measurement results in Annex 2. If multiple products are produced based on the same composition of recovered paper (Annex 2), it is sufficient to submit an analysis of a sample of the paper once a year.

3.2 General exclusion of substances with certain properties

No substances or mixtures (e.g. colourants, surface finishing agents, auxiliaries and cleaning agents) may be added that contain constituent components with the following properties:

a) substances of very high concern (SVHC) that are included in the so-called "list of candidates" according to Article 59, Paragraph 1 of the REACH regulation (EC/1907/2006)[3].

b) according to the criteria of CLP Regulation (EG/1272/2008)[4], substances which are classified with the following H Phrases named in Table 3-1 or which

c) are classified as carcinogenic, mutagenic or reprotoxic substances in the currently valid version of TRGS 905[5].

Table 3-1: H Phrases according to the CLP Regulation

EC Regulation 1272/2008 (GHS Regulation)	**Wording**
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.
H3516	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.
Sensitizing substances	
H317[7]	May cause an allergic skin reaction.
H344	May cause allergy or asthma symptoms or breathing difficulties if inhaled

Compliance verification

The applicant shall verify compliance with the requirement by submitting declarations from the suppliers of the chemical additives in accordance with Annex 3 to the contract and submitting the relevant safety data sheets if requested to do so by RAL gGmbH.

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3 https://echa.europa.eu/web/guest/candidate-list-table
4 www.reach-compliance.ch/ghsclp/
5 www.baua.de/DE/Angebote/Rechtstexte-und-Technische-Regeln/Regelwerk/TRGS/TRGS-905.html
6 An exception is made for titanium dioxide because its classification is only based on the respirable dust.
7 An exception is made for anti-slime agents and preservatives, see Paragraph 3.5

3.3 Further requirements for production aids and paper refining agents

Only those production aids and paper refining agents that are listed in Recommendation XXXVI from the BfR for "Paper and board for food contact"[8] (positive list) in sections B (production aids) and C (special paper refining agents) may be added to the product. The maximum limits stated in the recommendation must be observed for each type of product.

Compliance verification

The applicant shall list the production aids and paper refining agents used in the product in Annex 3 to the contract. The applicant shall also declare compliance with the stated maximum limits for the production aids and paper refining agents in Annex 1 to the contract and submit the relevant safety data sheets if requested to do so by RAL gGmbH.

3.4 Exclusion of certain substances and substance groups

Due to their importance in the paper production process, the following substances have been listed separately because they either should not be used in the production process or should not be added to the product.[9] They are already excluded to a large extent by the requirements in Paragraphs 3.2 and 3.3.

3.4.1 Bleaching and complexing agents

The recovered paper must be processed without the use of chlorine, halogenated bleaching agents and not readily biodegradable complexing agents such as e.g. ehylenediaminetetraacetic acid (EDTA) and diethylenetriaminepentaacetic acid (DTPA).

Compliance verification

The applicant shall declare compliance with the requirement in Annex 1 and also state the bleaching chemicals and complexing agents used in Annex 2 to the contract.

3.4.2 Optical brighteners

No additional optical brighteners may be added. However, a certain amount of optical brighteners will already be contained in the product due to the use of recovered paper.

Compliance verification

The applicant shall declare compliance with the requirement to avoid the use of the stated auxiliary in Annex 1 to the contract.

3.4.3 Glyoxal in wet or dry strength agents

No wet or dry strength agents or other auxiliaries containing glyoxal may be used in the production of the sanitary paper.

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8 http://bfr.ble.de/kse/faces/DBEmpfehlung.jsp

9 Many of the excluded substances or substance groups are added as standard in the production of paper; however, the use of some of them has already been largely banned across the entire sector and/or they have been replaced and are thus only listed here for the sake of completeness.

Compliance verification

The applicant shall declare compliance with the requirement to avoid the use of the stated auxiliary in Annex 1 to the contract.

3.4.4 Azo dyes and pigments as well as mercury, lead, cadmium or chromium VI compounds in colourants

No azo dyes or pigments that can cleave to any of the amines named in REACH Regulation (EC) No. 1907/2006, Annex 8, or the latest version of TRGS 614[10] may be added to the product as colourants.

It is not permitted to add any colourants (pigments or dyes) containing mercury, lead, cadmium or chromium (VI) compounds as constituent ingredients.

Compliance verification

The applicant shall verify compliance with the requirement for the colourants by submitting a declaration from the colourant supplier in Annex 3 to the contract.

3.4.5 Mineral oil-based production aids

No mineral oil-based production aids that contain aromatic hydrocarbons with ≥ 10 carbon atoms as a component may be added. In the case of aliphatic hydrocarbons, only those substances with a chain length of C10 to C20 may be used. Plant-based substitutes for mineral oil should be free of genetic engineering and sourced from sustainable cultivation[11].

Compliance verification

The applicant shall declare compliance with the requirement for mineral oils in Annex 1 to the contract and state the production aids used in Annex 3. If plant-based substitutes are used, the applicant shall state in Annex 3 which substitutes (which plant-based raw material) are added. The applicant should thus state the name of the plants from which the raw materials for the substitutes were sourced and whether their cultivation has been certified with a sustainability certificate or if the plants were sourced from conventional cultivation.

3.4.6 Mineral oil-based paper refining agents and mineral oil-based colourants

No mineral oil-based paper refining agents or mineral oil-based colourants may be added. Plant-based substitutes for mineral oil should be free of genetic engineering and sourced from sustainable cultivation.

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[10] http://www.baua.de/nn_16790/de/Themen-von-A-Z/Gefahrstoffe/TRGS/pdf/TRGS-614.pdf

[11] The following certification systems are considered suitable for renewable raw materials: RSPO (Roundtable on Sustainable Palmoil), ISCC+, ISCC EU (International Sustainable & Carbon Certification) or RSB (Roundtable on Sustainable Biomaterial), Roundtable Responsible Soy (RTRS) und ProTerra (ProTerra Foundation) or a comparable certification system whose scope and requirement standards are equivalent to one of the named certification systems.

Compliance verification

The applicant shall declare compliance with the requirement for mineral oils in Annex 1 to the contract and state the refining agents, colourant and base oils used in Annex 3. If plant-based substitutes have been used, the applicant shall state in Annex 3 which substitutes (which plant-based raw material) are added. The applicant should thus state the name of the plants from which the raw materials for the substitutes were sourced and whether their cultivation has been certified with a sustainability certificate or if the plants were sourced from conventional cultivation.

3.4.7 Alkylphenol ethoxylates (APEO) in auxiliaries

Relatively stable intermediate products that are toxic to fish are produced during the degradation of non-ionic surfactants such as alkylphenol ethoxylates. Therefore, this group of surfactants should not be used for the cleaning of machines, sieves or other equipment parts. These surfactants should also not be added to the deinking chemicals, antifoaming agents and dispersing agents.

Compliance verification

The applicant shall declare compliance with the requirement to avoid the use of the stated auxiliary in Annex 1 to the contract.

3.5 Anti-slime agents and preservatives (biocides)

In the production of the sanitary paper, only those slimicides (substances in product type 12) and material preservatives for fibres (substances in product type 9) in the sense of the Biocidal Products Regulation that have been approved in accordance with the Biocidal Products Regulation (EU) No. 528/2012 (EU list of approved active substances) or are still being examined as a notified existing active substance for the relevant type of biocides as part of the EU work programme for the systematic examination of all existing active substances may be used. In addition, the biocidal products used in the product must not contain any substances that have been considered as candidates for substitution according to Article 10 of Regulation (EU) No. 528/2012.

Accordingly, it is only permitted to use those biocidal products classified in product types 9 and 12 that have been explicitly approved for the desired application. For a transitional period, biocidal products that contain notified existing active substances of product types 9 and 12 that are still being examined as part of the EU examination process can also be used without approval if they have been registered in accordance with the German ordinance on the notification of biocidal products pursuant to the German Chemicals Act (Biocide Notification Ordinance – ChemBiozidMeldeV). Until the approval requirements for the biocidal products containing notified existing active substances come into force, only those substances that are also listed in Recommendation XXXVI from the BfR are permitted.

It is also possible that production aids and paper refining agents used for the production of the recycled paper contain biocidal products in product type 6 (protection of finished products in containers against microbial deterioration to ensure their shelf life ("in-can preservatives")) that

have been made available on the market. Residual content of these biocidal products will be accepted.

However, the finished product must only contain very small quantities of the permitted biocidal substances. Accordingly, colourants, surface finishing agents, auxiliaries and coating materials that contain isothiazolinone may only be used if it can be verified that the following quantities are not exceeded in total in the extracts from the finished products:

- Mixture of 5-chloro-2-methyl-4-isothiazolin-3-one, approx. 3 parts, and 2-Methyl-4-isothiazolin-3-one, approx. 1 part (CIT:MIT): **25 µg/dm²**
- 2-methyl-4-isothiazolin-3-one (MIT): **80 µg/dm²**

The extracted quantities of the above-named biocides in the finished products must be verified in accordance with the "Guidelines for verifying the mass transfer from consumer goods made out of paper and board" (Leitfaden zur Überprüfung der Stoffübergänge von Bedarfsgegenständen aus Papier, Karton und Pappe) from the BfR. Depending on the type of product, the extracts must be produced in accordance with the "Collection of methods for examining paper and board for food contact" ("Methodensammlung zur Untersuchung von Papier, Karton und Pappe für den Lebensmittelkontakt) from the BfR and in accordance with DIN EN 645 (preparation of a cold water extract). The quantities must be determined using LC-MS (liquid chromatography and mass spectrometry).

Compliance verification

The applicant shall declare compliance with the requirement in Annex 1 to the contract and state in Annex 2 which anti-slime agent and preservative substances have been used with their IUPAC names and CAS numbers, as well as the quantities used per kilogram of dry pulp.
The applicant shall declare in Annex 1 to the contract whether he has added colourants, surface finishing agents, auxiliaries and coating materials, which due to the use of 2-methyl-4-isothiazolin-3-one (CIT, CAS 2682-20-4) or a mixture of 5-chloro-2-methyl-4-isothiazolin-3-one and 2-Methyl-4-isothiazolin-3-one (3:1) (CIT:MIT, CAS 55965-84-9) should be monitored. If the applicant has used these types of agents or substances, verification of compliance with the permissible quantities of CIT and MIT in the extract from the sanitary paper using the above-named testing method must be provided. For this purpose, the applicant shall submit a test report from an independent testing institution accredited according to ISO 17025 or a testing institution recognised by the UBA.

3.6 Lotions, fragrances and other enhancements

Lotions, fragrances, bacterial suspensions and antibacterial enhancements must not be added in the production of the sanitary paper.

Compliance verification

The applicant shall declare compliance with the requirement to avoid the use of the stated auxiliary in Annex 1 to the contract.

3.7 Tests for the end product

An overview of the test parameters is given in Appendix E.
Additional pollutant limits apply to sanitary paper for food contact.

3.7.1 Whiteness

It is not permitted for the sanitary paper to exceed a maximum grade of whiteness of 80% (including the UV proportion) according to ISO 2470 or a maximum CIE whiteness of 100 according to DIN ISO 11475.

Compliance verification

The applicant shall submit the measurement for this requirement carried out in accordance with ISO 2470 or DIN ISO 11475 by submitting a test report from a testing institution accredited according to ISO 17025 or a testing institution recognised by the UBA.

3.7.2 Chlorpropanols in wet strength agents

The concentration of chloropropanols in the water extract from the sanitary paper that was produced according to the type of product must not exceed the limits specified in Recommendation XXXVI from the BfR. The value must be determined using a measurement method according to § 64 LFGB, B 80.56-2.

Compliance verification

The applicant shall verify compliance with the requirements by submitting a test report from an independent testing institution accredited according to ISO 17025 or a testing institution approved by the UBA.

3.7.3 Bleeding resistance of colourants

When the colourants used for all coloured or printed products are tested for their bleeding resistance according to DIN 646 (colour fastness of dyed paper and board), they must achieve at least level 4 on the grey scale. Serviettes, kitchen towels and paper designed for contact with food are required to reach level 5 on the grey scale.

Compliance verification

The applicant shall verify compliance with the requirement by submitting a test report from an independent testing institution accredited according to ISO 17025 or a testing institution approved by the UBA. As sanitary products are in contact with the human body for differing amounts of time, different extraction times are already taken into account for the preparation of the sample[12].

[12] https://www.bfr.bund.de/cm/343/din-en-646-und-din-en-648-beispiele-fuer-die-in-den-normen-festgelegten-pruefverfahren.pdf

3.7.4 Bleeding resistance of optical brighteners

A test of the bleeding of optical brighteners must be carried out for kitchen towels, serviettes and paper designed for contact with food. These optical brighteners are generally contained in the recovered paper. Level 5 must be achieved in the test carried out in accordance with DIN 648 (colour fastness of dyed paper and board)[13].

Compliance verification

The applicant shall verify compliance with the requirement by submitting a test report from an independent testing institution accredited according to ISO 17025 or a testing institution approved by the UBA. As sanitary products are in contact with the human body for differing amounts of time, different extraction times are already taken into account for the preparation of the sample[14].

3.8 Fitness for use

The products must be suitable for their intended use. The relevant test parameters from the DIN EN ISO 12625 series of standards must be determined for the relevant sanitary paper made of recycled paper.

Compliance verification

The applicant shall declare compliance with the requirement in Annex 1 to the contract. As sanitary products are in contact with the human body for differing amounts of time, different extraction times are already taken into account for the preparation of the sample[15].

3.9 Packaging materials

Packaging materials should be used as efficiently as possible in order to conserve resources. Composite packaging or coating of the paper/cardboard with plastics or metals are not permitted.

Sales packaging made out of paper and cardboard must be produced using at least 95 % recovered paper/recycled paper (percentage by mass).

The same applies to repackaging materials made of paper and cardboard.

Packaging materials are considered recycled if product waste (post-consumer waste) has been subjected to a material recycling process. The permitted proportion of virgin fibres must not be sourced from forests that are particularly worthy of protection e.g. tropical or boreal forests.

If plastic packaging is used for the sales packaging, it is only permitted to use unmixed plastic without any coating.

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[13] If the assessment is between 4 and 5, the assessment level 5 should be selected.

[14] https://www.bfr.bund.de/cm/343/din-en-646-und-din-en-648-beispiele-fuer-die-in-den-normen-festgelegten-pruefverfahren.pdf

[15] https://www.bfr.bund.de/cm/343/din-en-646-und-din-en-648-beispiele-fuer-die-in-den-normen-festgelegten-pruefverfahren.pdf

Plastics containing PVC are not permitted.

The use of post-consumer recycled waste should be promoted. If bioplastics from renewable raw materials are used, they must be sourced from sustainable cultivation on cultivation areas that can verify that they are managed in an ecological and socially responsible manner.

The origin of the renewable raw materials for the production of the bio-based plastics must be verified in the form of a certificate from one of the following certification systems:

- International Sustainability and Carbon Certification (ISCC+),*[16]
- Roundtable on Sustainable Biomaterials (RSB),
- Roundtable Responsible Soy (RTRS),*
- Roundtable on Sustainable Palm Oil (RSPO),*
- REDcert (EU waste) – exclusively made of bio-based waste within the EU
- Forest Stewardship Council (FSC),
- Programme for the Endorsement of Forest Certification Schemes (PEFC)
- Öko-Landbau-Siegel (German organic label or EU organic logo "Euro Leaf")
- or a comparable certification system whose scope and requirement standards are equivalent to one of the named certification systems. The equivalence of the certification system must be confirmed by an independent environmental verifier.
- Alternatively, individual verifications in accordance with the criteria and verification requirements of one of the named certification systems may be presented if an equivalent level of protection can be achieved.

The equivalence of the individual verifications must be confirmed by an independent environmental verifier.

The use of purchased certificates based on the Book & Claim system is excluded so that the traceability of the raw materials is possible.

The proofs of purchase for the raw materials or semi-finished products must be based on processes according to the segregation or mass balance systems (see Paragraph 1.4 "Definitions"). Certifications from the Rainforest Alliance (SAN), Bonsucro and REDcert EU will not be accepted.

The content of the sales packaging that is available for recycling must exceed 95 %[17]. The recyclability of the packaging must be determined in accordance with the currently valid version of the "Minimum standard for determining the recyclability of packaging subject to system participation"[18] from the Zentrale Stelle Verpackungsregister (Central Agency Packaging Register – ZSVR); the recyclability should be expressed in percent. It can also be determined based on a method that complies with the minimum criteria in the minimum standard from the ZSVR and also verifies this compliance.

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[16] Feasibility study on overarching aspects - Part 1: material utilisation of biomass (Machbarkeitsstudie zu übergreifenden Aspekten - Teil 1: Stoffliche Nutzung von Biomasse) by Henneberg et al. (2019) from: https://www.umweltbundesamt.de/publikationen/implementierung-von-nachhaltigkeitskriterien-fuer

[17] The available recyclable content according to the currently valid version of the "Minimum standard for determining the recyclability of packaging subject to system participation".

[18] Available at: https://www.verpackungsregister.org/stiftung-behoerde/mindeststandard-21-verpackg

Compliance verification

The applicant shall state the material composition of the packaging (sales packaging, repackaging if relevant) in Annex 2 to the contract and declare compliance with this requirement in Annex 1 to the contract. The applicant shall also state the recyclable content of the packaging materials in percent in Annex 2 to the contract.

In addition, the applicant shall state the proportion of recovered paper in sales packaging made of paper and cardboard per tonne of product in Annex 2. If virgin fibres are used in the paper/cardboard packaging, the applicant shall declare that these fibres were not sourced from forests that are particularly worthy of protection e.g. tropical or boreal forests. The applicant shall submit a FSC and/or PEFC certificate for the virgin fibres added to the product.

The applicant shall declare in Annex 2 to the contract whether renewable raw materials are used to produce the plastics. If this is the case, the applicant shall document the origins and proportions by mass of the renewable raw materials used for the plastics in Annex 7 to the contract and submit the required certificates or verifications as an Annex.

If the applicant has a Blue Angel contract on the use of the environmental label for the cardboard/plastic added to the product, he/she shall declare that this material is added to the product and submit a copy of the contract on the use of the environmental label as an Annex. This requirement is then considered to have been fulfilled.

3.10 Waste water in the paper production process

3.10.1 Direct discharge

In the production of sanitary paper, the emission limits for the waste water load must be complied with by direct dischargers. The values listed here in Table 3-2 are based on the European "Best Available Techniques (BAT) Reference Document for the Production of Pulp, Paper and Board PP BRE"[19] and Appendix 28 of the German Waste Water Ordinance. They go above and beyond the statutory requirements in some cases.

If deinked recovered paper (DIP) is purchased as a semi-finished product, the emissions for "Paper factory with deinking" must be observed.

Table 3-2: Maximum limits for the average annual emission parameters (waste water) in the paper production process

Parameter	**Maximum limit for waste water emissions (average annual value as a load or concentration)**	
	Paper factory with deinking	Paper factory without deinking
Volumetric flow rate of waste water	<25 m³/Adt	<10 m³/Adt
COD	< 3 kg/Adt	< 1.3 kg/Adt
BSB5	< 0.15 kg/Adt or <25 mg/l	< 0.15 kg/Adt or <25 mg/l
AOX	< 0.01 kg/Adt	< 0.01 kg/Adt

[19] https://www.umweltbundesamt.de/sites/default/files/medien/367/dokumente/papier_ue_s.pdf

Parameter	Maximum limit for waste water emissions (average annual value as a load or concentration)	
Total N (inorganic + organic N) (TNb)	0.15 kg/Adt or 15 mg/l	0.09 kg/Adt or 15 mg/l
Total P	0.015 kg/Adt or 1.5 mg/l	0.008 kg/Adt or 1.5 mg/l

Adt = air dried ton
COD = chemical oxygen demand
BSB5 = biological oxygen demand (5 days)
AOX = adsorbable organically combined halogens
Total N = total nitrogen TNb = total Nitrogen bound.[20]
Total P = total phosphorous

3.10.2 Indirect discharge

Indirect dischargers must declare compliance with the emission limits for the parameters stated in Table 3-2 after treatment.

Compliance verification

Direct dischargers
If the manufacturer of the recycled paper is a direct discharger, he/she shall declare compliance with the emission limits according to Table 3-2 in Annex 1 to the contract pursuant to DE-UZ 5 and state the measured emission values in the Annex.

Indirect dischargers
If the manufacturer of the recycled paper is an indirect discharger, he/she shall declare compliance with the limit values in Annex 1 to the contract pursuant to DE-UZ 5.
The volumetric flow rate of waste water and the AOX value at the mixing location must be stated in Annex 2.
The manufacturer shall submit a confirmation from the operator of the waste water treatment plant that provided the emission values for the other parameters in the downstream waste water treatment plant as Annex 5 to the contract (mixed values for all dischargers).

The correctness of the data on the waste water provided in Annexes 2, 4 and 5 to the contract shall be verified for both direct dischargers and indirect dischargers at the time of application and then once a year in accordance with Annex 6 to the Basic Award Criteria by:

- *a certification body for ISO 14001 accredited by the German Accreditation Body (DAkkS) for the scope of paper manufacturers (NACE 17.12) or*
- *an environmental verifier approved for this scope (NACE 17.12) by the German Society for the Accreditation and Registration of Environmental Verifiers (DAU) in accordance with the Environmental Audit Act or*
- *an accredited FSC/PEFC certifier or*
- *an expert recognised by the UBA in the areas of fibrous raw materials, grades of recovered paper, the recycling of recovered paper and waste water treatment.*

[20] TNb defines the total pollution of water by nitrogen compounds, which can appear in the form of e.g. ammonia, nitrites, nitrates or organic nitrogen compounds. A suitable method for determining this parameter is described in DIN EN 12260.

3.11 Emissions to air in the paper production process

Requirements are placed on the emissions to air in the production of sanitary paper. The emissions to air include both the emissions from the plants generating the steam and electricity needed for the production of the paper and also the emissions from the plants used to prepare the recovered paper as well as the paper machine. Emissions during the production of the fibrous raw materials (DIP) also have to be taken into account. The limits listed here in Table 3-3 are based on the EU criteria for the award of the EU Ecolabel for sanitary paper and sanitary paper products (Annex II) in the Official Journal of the European Union of 17 January 2019.

The applicant must determine the levels of the following pollutants in the emissions to air at the production plant and should[21] comply with the limits stated in Table 3-3 (measurement specifications, see Appendix D "Measurement of emissions to air"):

Table 3-3: Maximum limits for the average annual emission parameters (emissions to air) in the paper production process (average annual value (AAV) in kg/air dry tonne)

	Sulphur (S) as AAV	**NOx as AAV**
Preparation of the recovered paper	0.2 kg/t	0.25 kg/t
Sanitary paper production	0.3 kg/t	0.5 kg/t

Compliance verification

The applicant shall declare compliance with the requirement according to Table 3-3 in Annex 1 to the contract and submit reports and supplementary documentation to the contract. The supplementary documentation comprises calculations of the emission points verifying compliance with this requirement. The test reports must comply with the requirements in the measurement specifications in Appendix D "Measurement of emissions to air". The submitted test reports must be produced by a testing laboratory accredited according to DIN EN ISO/IEC 17025 (general requirements for the competence of testing and calibration laboratories) or with official accreditation as a GLP laboratory[22]. In-house laboratories are recognised as being of an equivalent standard when they have been accredited by an independent body as an SMT laboratory (supervised manufacturer testing laboratory).
The measurements of the sulphur emissions in the air should include oxidised and reduced sulphur. The sulphur emissions associated with the generation of heating energy from gas, oil, coal and other external fuels with known sulphur contents can be calculated instead of measured and must also be taken into account.

3.12 Waste in the paper production process

To promote the avoidance of waste and in the spirit of a circular economy, the waste generated during the production process must be minimised. The following waste materials are usually generated during the production of paper from recovered paper:

[21] This is considered a "should" requirement and not a "must" requirement, i.e. the measurements must be carried out but it is not necessary to comply with the limits.
[22] http://www.oecd.org/chemicalsafety/testing/oecdseriesonprinciplesofgoodlaboratorypracticeglpandcompliancemonitoring.htm

- Residues from the treatment of the recovered paper
- Fibrous sludge
- Deinking sludge
- Sludge from the treatment of the process water

The quantities of these waste fractions are dependent on both the quality of the paper used in the process and also the type of energy generation and other processes. The quantities of the residual waste materials can thus deviate and they should be recycled as far as possible.

Compliance verification

The applicant shall state the quantities of the above-named waste fractions per tonne of product (as a dry mass) that are generated during the production of the recycled paper in Annex 2 to the contract. The applicant shall also state and document the relevant waste code numbers and the recycling or disposal channels.

3.13 Requirements for energy consumption and the origin of the electricity

The paper industry is one of the six most energy-intensive industries in Germany, which is why it is important to further reduce the consumption of heat and electricity at the production sites and switch to environmentally friendly/friendlier energy sources.

For the production of recycled paper, the limits in Table [3-4] for the consumption of electricity and process heat must not be exceeded as an annual average. These limits were derived from the data collected for the BAT reference document for the paper and pulp industry (PP BREF[23], see Section 6.2.2.4, Table 6.8). If deinked recovered paper (DIP) is purchased as a semi-finished product, the energy consumption for additional drying and transport processes must also be taken into account.

In addition, the applicant must state the energy mix used at the plant based on the type and origin of the energy. The consumed electricity should be sourced from renewable energies.

Table 3-4: Maximum permitted limits for the consumption of process heat and electricity in the production of paper (annual average value in kWh/air dry tonne)

	Process heat in kWh/t	**Electrical power in kWh/t**
Paper factory with deinking	2,500	1,650
Paper factory without deinking	1,700	950
Dried deinked recovered paper (DIP)	900	950

The sum of the process heat and electrical power is permitted to exceed the limit by a total of 10 %.

[23] See footnote 16.

Compliance verification

The manufacturer of the recycled paper shall declare compliance with the emission values in Table 3-4 in Annex 1 to the contract and state the measured energy consumption values and the measurement period used in Annex 2. In addition, the manufacturer shall state all of the energy sources used, their proportions and origins (own generation/third party generation) and the proportion of green electricity in the electricity consumed (notifications from the energy supply company) and, if relevant, the proportion of self-generated green electricity.

3.14 Outlook

The outlook describes aspects that will be examined in the next revision of the Basic Award Criteria:

- The possibility of requiring the use of certain proportions of plastic recyclate in packaging in the future will be examined.
- The extent and timing of a switch to sustainable energy sources (purchased and own generation) will be examined. The main focus will initially be placed on excluding coal and wood as energy sources, as well as promoting the use of green electricity including the addition of new capacities.
- The extent to which renewable energy sources should be required for energy generation (purchased and own generation) in future will be examined. The use of coal and wood biomass as energy sources in thermal energy generation should also be excluded.
- The existence of microplastics in the product should also be examined where possible.

4 Applicants and Parties Involved

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

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

5 Use of the Environmental Label

The use of the Environmental Label by the applicant is governed by a contract on the use of the Environmental Label concluded with RAL gGmbH.

Within the scope of such contract, the applicant undertakes to comply with the requirements under Paragraph 3 while using the Environmental Label.

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 December 31, 2028.
They shall be extended by periods of one year each, unless terminated in writing by March 31, 2028 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.

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 organisations.

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

- Applicant (manufacturer)
- Brand/trade name, product description
- Distributor (label user), i.e. the above-mentioned marketing organisations.

Appendix A Cited legislations and standards, literature

The currently valid versions of the relevant regulations and standards at the time of application apply, unless reference is made to a particular version of the regulation or standard in the criteria.

Best Available Techniques (BAT) Reference Document for the Production of Pulp, Paper and Board, 2015, according to Directive 2010/75/EU on industrial emissions

BfR Recommendations on Food Contact Materials No. 360, XXXVI. Paper and board for food contact

Blechschmidt, Jürgen: Taschenbuch der Papiertechnik (Paper Technology Paperback), Carl Hanser Verlag GmbH & Co. KG 2010

DIN EN 643:2014-11 Paper and board - European list of standard grades of paper and board for recycling

DIN EN 645:1994-01 Paper and board intended to come into contact with foodstuffs; preparation of a cold water extract

DIN EN 648:2019-02 - Paper and board intended to come into contact with foodstuffs - Determination of the fastness of fluorescent whitened paper and board

DIN EN 646:2019-02 - Paper and board intended to come into contact with foodstuffs - Determination of colour fastness of dyed paper and board

DIN ISO 3781:2012-07 - Paper and board - Determination of tensile strength after immersion in water

DIN 6730:2017-09 Paper, board and pulps - Vocabulary

DIN CEN/TS 13130-13:2005-05 Materials and articles in contact with foodstuffs - Plastic substances subject to limitation - Part 13: Determination of 2,2-bis(4-hydroxyphenyl)propane (Bisphenol A) in food simulants

DIN ISO 11475:2019-04 Paper and board - Determination of CIE whiteness, D65/10° (outdoor daylight)

DIN EN ISO 12625-1:2019 - Tissue paper and tissue products - Part 1: Vocabulary

DIN EN ISO 12625-4:2021 Draft
Tissue paper and tissue products - Part 4: Determination of tensile strength, stretch at maximum force and tensile energy absorption

DIN EN 14719:2005-10 Pulp, paper and board - Determination of the Diisopropylnaphthalene content Annex A 19/21 DE-UZ 217a Edition January 2021

DIN EN 15519:2008-01 Paper and board intended to come into contact with foodstuffs - Preparation of an organic solvent extract

DIN EN ISO/IEC 17025:2018-03 General requirements for the competence of testing and calibration laboratories

INTECUS GmbH Dresden, Jörg Wagner, Study 18-11-60 on paper consumption per capita in the Federal Republic of Germany, commissioned by the German Pulp and Paper Association (Verband Deutscher Papierfabriken e.V.), May 2019.

ISO 2470-1:2016-09 Paper, board and pulps - Measurement of diffuse blue reflectance factor

Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) (Recast)

Directive 94/62/EC of the European Parliament and of the Council of 20 December 1994 on packaging and packaging waste Directive (EU) 2018/852 of the European Parliament and of the Council of 30 May 2018 amending Directive 94/62/EC on packaging and packaging waste

Directive 2019/904/EU of the European Parliament and of the Council of 5 June 2019 on the reduction of the impact of certain plastic products on the environment

TRGS 905 Directory of carcinogenic, mutagenic or teratogenic substances

TRGS 614 Restrictions on use for azo dyes, which may release aromatic amines classified as carcinogens

UBA Text xx/2021 Aktualisierte Ökobilanz von grafischem Papier und Hygienepapier (Updated ecological impact of graphic paper and sanitary paper)

German Pulp and Paper Association (Verband Deutscher Papierfabriken e.V., Bonn), Ein Leistungsbericht 2020 (A Performance Report 2019)

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)

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

Regulation (EU) No. 528/2012 of the European Parliament and of the Council of 22 May 2012 concerning the making available on the market and use of biocidal products

Ordinance on Requirements for the Discharge of Waste Water into Waters (Waste Water Ordinance - AbwV) Appendix 28 Production of paper and cardboard 2018German ordinance on the

notification of biocidal products pursuant to the German Chemicals Act (Biocide Notification Ordinance - ChemBiozidMeldeV) of 14 June 2011 (BGBl. I P. 1085) Date of issue: 14/06/2011

Appendix B Overview of the grades of recovered paper

The following summary from DIN 643 "Paper and board – European list of standard grades of paper and board for recycling" aims to provide a general overview of the different grades of recovered paper. Please refer to this standard for more information on the precise components and any undesirable materials.

Group 1 (ordinary grades) includes ordinary mixed recovered paper with certain proportions of cardboard and corrugated board, telephone books, newspapers and magazines and graphic paper for deinking.

Group 2 (medium grades) includes newspapers, books, white shavings and cardboard with a small proportion of wood and small proportions of coloured paper and plastic coatings, copy paper and tissue edges.

Group 3 (high grades) includes mixed and printer shavings containing different proportions of wood-free paper, white letters, board, paper and shavings, as well as unprinted tissue.

Group 4 (kraft grades) includes paperboard, corrugated cardboard, kraft paper, kraft sacks and carrier kraft.

Group 5 (special grades) include mixed recovered paper, mixed packaging, liquid packaging board, labels, various wet strength paper, envelopes, blister packs, kraft sacks, plastic layer paper, paper cups and tableware.

Appendix C Measurement of emissions to waste water in the production of the paper

Measurement of emissions to waste water must be carried out on unfiltered and unsettled samples, either after preparation at the production plant or after preparation at an urban waste water treatment plant.

The measurements must be carried out over a production period of 12 months. The frequency of the measurements must be at least monthly (once a month). In the case of new or renovated production plants, the measurements must be based on at least 45 consecutive days of continuous plant operation. The measurements must be representative for the relevant periods.

Accepted test methods include:

- CSM: ISO 6060, ISO 15705, NS 4748, SFS 3020 SFS 5504, SS 028142, DIN 38409 part 41, NFT 90101, ASTM D 1252 83, EPA SM 5220D or HACH 8000
- Total N: EN ISO 11732, EN 10304-2, EN ISO 13395, SFS 5505, SS 0280101
- Total P: ISO 6878, SS 028102, SFS 3026, NS 4725, EN 1189:1993, SM4500, APAT IRSA CNR 4110 or Dr Lange LCK 349
- An equivalent test method whose scope and requirement standards is equivalent to one of the named national and international standards. The equivalence of the certification system must be confirmed by an independent environmental verifier.
- Alternatively, individual verifications in accordance with the criteria and verification requirements of one of the named test methods may be presented if an equivalent level of protection can be achieved. The equivalence of the individual verifications must be confirmed by an independent environmental verifier.

Appendix D Measurement of emissions to air in the production of the paper

The measurements of the emissions to air are carried out over a production period of 12 months. Unless the regulatory requirements at the site of the fluff pulp production prohibit such measurements, measurements of the emissions to air must be completed at least every six months in addition to any measurements stipulated in the regulatory requirements. Written verification must be provided if the production site for the fluff pulp is exempt from this requirement for six monthly measurements. The sulphur emissions associated with the generation of heating energy from oil, coal and other external fuels with known S-contents can be measured or calculated and must be taken into account. In the case of new or renovated production plants, the measurements must be based on at least 45 consecutive days of continuous plant operation. The measurements must be representative for the relevant periods.

Accepted test methods include:

- Gaseous sulphur compounds: NS 4859, SFS 5265, SS 028421, EPA 8, EPA 16A
- NOx: ISO 11564, ISO 10849, EN 14792, SS 028425, EPA 7E
- Dust: EN 13284-1, SFS 3866
- An equivalent test method whose scope and requirement standards is equivalent to one of the named national and international standards. The equivalence of the certification system must be confirmed by an independent environmental verifier.
- Alternatively, individual verifications in accordance with the criteria and verification requirements of one of the named test methods may be presented if an equivalent level of protection can be achieved. The equivalence of the individual verifications must be confirmed by an independent environmental verifier.

Appendix E Required test parameters by product type

Product	BPA	BPS	Pergafast	Chlorpropanol[24]	Whiteness	Migration of colourants	Migration of optical brighteners	MIT/CIT[25]
Medical crepe paper	X	X	X		X			X
Dental napkins	X	X	X	X	X			X
Cosmetic tissues	X	X	X	X	X			X
Kitchen towels	X	X	X	X	X		X	X
Paper hand towels	X	X	X	X	X			X
Cleaning towels	X	X	X		X			X
Serviettes	X	X	X	X	X		X	X
Tissues	X	X	X	X	X			X
Toilet paper	X	X	X		X			X
Medical crepe paper coloured/printed	X	X	X			X		X
Dental napkins coloured/printed	X	X	X	X		X		X
Cosmetic tissues coloured/printed	X	X	X	X		X		X
Kitchen towels coloured/printed	X	X	X	X		X	X	X
Paper hand towels coloured/printed	X	X	X	X		X		X
Cleaning towels coloured/printed	X	X	X			X		X
Serviettes coloured/printed	X	X	X	X		X	X	X
Tissues coloured/printed	X	X	X	X		X		X
Toilet paper coloured/printed	X	X	X			X		X

[24] If wet strength agents are used
[25] If colourants, surface finishing agents, auxiliaries and coating materials that contain preservatives are used.

Appendix F Version history

The following changes were made to ecolabel DE-UZ 5 "Sanitary Paper, Edition January 2022, Version 1" and required the issuing of an updated version in each case. The version at the time of application is valid. If the changes were required for the implementation of new legal regulations, they apply to all certified products.

Version 1 (01/2022): New Edition, Expiry date: December 31, 2026
Version 2 (10/2022): Changes to the verification procedure 3.10.2, 3.11 and Annex D
Version 3 (10/2024): Adaptation of section 3.11, adaptation of Annex D, deletion of footnote 2
Version 4 (12/2025): Prolongation without changes, Expiry date: December 31, 2028
Version 5 (03/2026): Change to the compliance verification in 3.1.5