

# **BLUE ANGEL**

**The Environmental Label**



**Printing and publication paper made primarily  
from recovered paper**

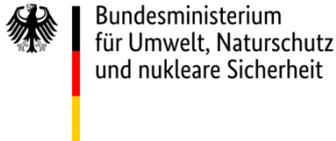
**DE-UZ 72**

**Basic Award Criteria**

**Edition January 2020**

**Version 4**

**The environmental label is underpinned by the following institutions:**



Bundesministerium  
für Umwelt, Naturschutz  
und nukleare Sicherheit

The Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (Bundesministerium für Umwelt, Naturschutz und nukleare Sicherheit) is the owner of the label. It regularly provides information on the decisions taken by the Environmental Label Jury.



The Federal Environmental Agency (Umweltbundesamt) in the specialist department "Ecodesign, Eco-Labeling and Environmentally friendly Procurement" acts as the office of the Environmental Label Jury and develops the specialist criteria in the form of the Basic Award Criteria for the Blue Angel environmental labels.



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 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.

If you require further information please contact:

RAL gGmbH

**RAL ENVIRONMENT**

Fränkische Straße 7

53229 Bonn

Tel.: +49 (0) 228 / 6 88 95 - 190

E-Mail: [umweltzeichen@ral.de](mailto:umweltzeichen@ral.de)

[www.blauer-engel.de](http://www.blauer-engel.de)

Version 1 (01/2020): First edition, term until 31/12/2024

Version 2 (01/2020): Supplement to title point 3.12.1

Version 3 (01/2024): Prolongation without changes, Expiry Date: December 31, 2025

Version 4 (01/2025): Prolongation without changes, Expiry Date: December 31, 2026

## Table of contents

1	Introduction.....	4
1.1	Preface .....	4
1.2	Background .....	4
1.3	Objectives of the environmental label .....	5
1.4	Definitions.....	6
2	Scope .....	6
3	Requirements .....	6
3.1	Use of fibrous raw materials and grades of recovered paper .....	6
3.2	Diisopropylnaphtaline (DIPN) .....	7
3.3	Bisphenol A and bisphenol S .....	7
3.4	General exclusion of substances with certain properties .....	7
3.5	Further requirements for production aids and paper refining agents.....	9
3.6	Bleaching and complexing agents .....	9
3.7	Biocides .....	9
3.8	Optical brighteners .....	10
3.9	Azo dyes and pigments in colourants .....	11
3.10	Mercury, lead, cadmium or chromium VI compounds in colourants .....	11
3.11	Mineral oil-based additives and mineral oil-based colourants.....	11
3.12	Requirements for waste water.....	11
3.12.1	Direct Discharge.....	11
3.12.2	Indirect discharge .....	12
3.13	Origin of the virgin fibres.....	13
3.14	Requirements for the virgin fibres .....	13
3.15	Outlook.....	13
4	Applicants and parties involved .....	14
5	Use of the Environmental Label .....	14
Anhang A	Statutory regulations, testing standards and other literature .....	15
Anhang B	Grades of graphic paper.....	17
Anhang C	Dyes and pigments that are not permitted .....	18

# **1 Introduction**

## **1.1 Preface**

In cooperation with the Federal Ministry for the Environment, Nature Conservation 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.

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 these conditions.

## **1.2 Background**

The use of a high proportion of recovered paper in the production of printing and publication paper contributes to the preservation of resources, especially ecosystems such as forests, and thus helps to protect species and the climate. It also reduces the amount of waste, especially when using recovered paper from household and commercial collections. 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 that are made primarily from virgin fibres.

In Germany, the average consumption of semi-finished paper products and finished paper products per capita after deducting export surpluses is approximately 210 kg of paper, paperboard and cardboard (semi-finished goods)<sup>1</sup>. 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 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 proportion of recovered paper used in the German paper industry is increasing continuously. It stood at 49 percent in 1990 but had already risen to 76 percent in 2018.<sup>2</sup> A significantly higher proportion of recovered paper is also being used for graphic paper. According to statistics from the German Pulp and Paper Association, the proportion of recovered paper used for graphic paper had risen from 33 percent in 1995 to 51 percent in 2018. The collection and sorting of recovered paper are important prerequisites for making the recovered paper available to the paper industry. 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). The Blue Angel promotes printing and publication paper made primarily from recovered paper in its criteria (>80 %).

---

<sup>1</sup> Study 18-11-60 on paper consumption per capita in the Federal Republic of Germany, INTECUS GmbH Dresden, Jörg Wagner, commissioned by the German Pulp and Paper Association (Verband Deutscher Papierfabriken e. V.), May 2019

<sup>2</sup> VDP 2019

If some virgin fibres sourced from wood are used in the production of printing and publication paper to achieve certain mechanical properties for the printing process or to recycle particularly low grades of recovered paper, it is imperative from an ecological viewpoint that the wood is sourced from certified, sustainably managed forests and forestry companies with high ecological standards. Harvesting timber from forests that are particularly worthy of protection e.g. tropical or boreal forests is not acceptable.

In Germany, three forest certification systems have become established. The "Programme for the Endorsement of Forest Certification Schemes" (PEFC) is the system with the largest certified area, covering around 7.35 million hectares out of a total of 11.4 million hectares of forests in Germany. The system operated by the "Forest Stewardship Council®" (FSC) currently certifies an area of around 1.1 million hectares, while around 54,000 hectares are certified according to the criteria for ecological forest management from Naturland. The latter are also FSC certified. Compliance with the PEFC criteria largely corresponds to the minimum requirements found in the applicable legal regulations in Germany or the Helsinki and Vienna criteria from FOREST EUROPE. By certifying their forests in accordance with especially demanding certification systems such as the FSC or Naturland, forest owners indicate their willingness to comply with requirements for sustainability and nature and species protection that go far beyond the legally prescribed standards<sup>3</sup>. All three systems are recognised by the Blue Angel for certifying the proportion of virgin fibres.

The Blue Angel restricts the addition of critical production aids and paper refining agents in its criteria 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 and halogenated bleaching agents is prohibited except for in a few exceptional cases. Requirements for waste water emissions from paper production will also be set from 2020.

### 1.3 Objectives of the environmental label

The requirements in these Basic Award Criteria are intended, in particular, to promote the use of lower grades of recovered 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 forests and thus also to the protection of species and the climate.

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



[www.blauer-engel.de/uz72](http://www.blauer-engel.de/uz72)

- primarily made from waste paper
- save energy, water and wood
- low level of harmful materials

---

<sup>3</sup> UBA Forest Paper

[https://www.umweltbundesamt.de/sites/default/files/medien/376/publikationen/umweltschutz\\_wald\\_und\\_nachhaltige\\_holznutzung\\_in\\_deutschland\\_web.pdf](https://www.umweltbundesamt.de/sites/default/files/medien/376/publikationen/umweltschutz_wald_und_nachhaltige_holznutzung_in_deutschland_web.pdf)

## 1.4 Definitions

**LWC paper (lightweight coated paper)** is lightweight roll printing paper, coated on both sides, containing either wood or recovered paper and with a basis weight of  $> 75\text{g/m}^2$ .

**Newsprint paper** is machine-smooth or calendered paper with a high wood content, often produced from deinked recovered paper, and with a basis weight of between 40 and 65  $\text{g/m}^2$ . The paper is characterised by its good printability.

## 2 Scope

These Basic Award Criteria apply to printing and publication paper up to a maximum weight of  $75\text{ g/m}^2$  and for the grades of paper listed in Appendix B according to the grade statistics for "Graphic Paper" from the German Pulp and Paper Association (Verband Deutscher Papierfabriken e. V. (VDP)).

## 3 Requirements

### 3.1 Use of fibrous raw materials and grades of recovered paper

A minimum of 800 kg of recovered paper per 1000 kg of new paper (air dry) must be used in the production of the paper. Recovered paper is the umbrella term for paper and paperboard that is collected after use or processing.

Refer to DIN EN 643 for specifications about the different grades of recovered paper.

The proportion of virgin fibres added to the product must not exceed a maximum of 250 kg per 1000 kg of new paper (air dry).

If virgin fibres are used, they must comply with the requirements in Paragraphs 3.13 and 3.14.

**At least 80 %** of the recovered paper used for the product must be sourced from **group 1** of the grades of recovered paper.

#### **Compliance verification**

*The applicant shall characterise the paper in Annex 2 by stating the sort key, format, weight, surface treatment (coated or uncoated), whiteness and opacity.*

*The applicant shall state the average percentage of the recovered paper grades from groups 1, 2, 3, 4 and 5 used in the product in Annex 2 to the contract and declare compliance with the requirement in Paragraph 3.1.*

*The applicant shall also state the percentages of the individual grades 2.05.00, 2.05.01, 2.06.00, 2.06.01 and 5.09.00.*

*The correctness of the data provided in Annex 2 to the contract shall be verified on request 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 FSC or PEFC certifier accredited by the German Accreditation Body (DAkKS) or*

- *an expert recognised by the UBA in the areas of fibrous raw materials, grades of recovered paper and the recycling of recovered paper.*

### **3.2 Diisopropylnaphthalene (DIPN)**

The content of diisopropylnaphthalene (DIPN) in paper and cardboard 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 and 5.09.00 "carbonless copy paper (NCR)". Alternatively, grades of recovered paper containing DIPN (2.05.00, 2.05.01, 2.06.00, 2.06.01 and 5.09.00) may be used if an efficient technical system (e.g. 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 and 5.09.00 have been used, the applicant shall state the maximum DIPN content in the finished product in Annex 2 to the contract 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 EN 14719 (DIPN in acetone extract).*

*The applicant shall submit a product sample.*

### **3.3 Bisphenol A and bisphenol S**

The content of bisphenol A and bisphenol S in the finished paper must be determined once a year.

#### **Compliance verification**

*The content of bisphenol A (CAS no. 80-05-7) and bisphenol S (CAS no. 80-09-1) must be determined in a cold water extract prepared according to DIN EN 645 using liquid chromatography with UV/fluorescence detection or MS detection.*

*The applicant shall submit a test report for statistical purposes once a year from an independent testing institution accredited according to ISO 17025 or a testing institution recognised by the UBA.*

*If multiple products are produced based on the same composition of recovered paper (Overview A in Annex 1), it is sufficient to submit an analysis of a sample of the paper once a year.*

### **3.4 General exclusion of substances with certain properties**

No substances may be added as colourants, coating materials, production aids and paper refining agents that have the following properties:

- a) It is prohibited to add substances of very high concern (SVHC) that have been identified as being particularly alarming in accordance with Article 57, Paragraph 1 of Regulation (EC) No

1907/2006 (REACH) and added to the so-called "candidate list" according to Article 59, Paragraph 1 of the same regulation.

- b) No substances may be added to the product that
- ♦ according to the criteria of Regulation (EC) No 1272/2008 (CLP) are classified with the following H Phrases named in Table 1 or which meet the criteria for such classification.
  - ♦ are classified as carcinogenic, mutagenic or reprotoxic substances in the currently valid version of TRGS 9054.

**Table 1: H Phrases according to the CLP Regulation**

<b>H Phrases according to the CLP Regulation</b>	<b>Wording</b>
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.

### **Compliance verification**

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

*The applicant shall verify compliance with the requirement by listing the colourants, coating materials, production aids and paper refining agents used and submitting declarations from the suppliers of the colourants, coating materials, production aids and paper refining agents in accordance with Annex 3 to the contract pursuant to DE-UZ 14a. If requested to do so by RAL gGmbH, the applicant shall submit the relevant safety data sheets.*

<sup>4</sup> [http://www.baua.de/nr\\_16812/de/Themen-von -A-Z/Gefahrstoffe/TRGS/pdf/TRGS-905.pdf](http://www.baua.de/nr_16812/de/Themen-von -A-Z/Gefahrstoffe/TRGS/pdf/TRGS-905.pdf)

### **3.5 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 (Federal Institute of Risk Assessment) for "Paper and board for food contact"<sup>5</sup> (positive list) in sections B (production aids) and C (special paper refining agents) may be added to the product. The maximum quantities and concentrations stated in this list must be observed. No production aids containing glyoxal may be used to manufacture the recycled paper.

#### **Compliance verification**

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

*The applicant shall verify compliance with the requirement by listing the production aids and paper refining agents used and submitting declarations from the suppliers of the production aids and paper refining agents in accordance with Annex 3 to the contract pursuant to DE-UZ 14a. If requested to do so by RAL gGmbH, the applicant shall submit the relevant safety data sheets.*

### **3.6 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. ethylenediaminetetraacetic acid (EDTA) and diethylenetriaminepentaacetic acid (DTPA).

#### **Compliance verification**

*The applicant shall declare compliance with the requirement in Annex 1 to the contract and also state the bleaching chemicals and complexing agents used in Annex 3.*

### **3.7 Biocides**

In the production of the recycled 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 EU Biocidal Products Regulation 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.

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).

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 the EU Biocidal Products Regulation 528/2012.

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.

---

<sup>5</sup> <http://bfr.ble.de/kse/faces/DBEmpfehlung.jsp>

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

### **Compliance verification**

*The applicant shall declare compliance with the requirement in Annex 1 to the contract, submit the safety data sheet and state which biocidal substances from which product type have been used with their IUPAC names and CAS numbers, as well as the quantities used per kilogram of dry pulp in Annex 2.*

### **3.8 Optical brighteners**

The use of optical brighteners is not permitted.

An exception applies for the production of SC and LWC paper (according to Appendix B). The following optical brighteners may be added to these products:

- C.I.220, benzenesulfonic acid, 2,2'-(1,2-ethenediyl) bis[5[4-[bis(2-hydroxyethyl) amino]-6-[(4-sulfophenyl)amino]-1,3,5-triazin-2-yl]amino]-, tetra sodium salt (CAS no. 16470-24-9);
- C.I. 113 or C.I. 28 disodium salt 4,4'-bis[6-anilino-4-[bis(2-hydroxyethyl)amino]-1,3,5-triazin-2-yl]amino]stilbene-2,2'-disulphonate; sulfonated stilbene derivatives may be used up to a maximum level of 0.3%.
- Tetrasodium 4,4'-{ethene-1,2-diylbis[(3-sulfonato-4,1-phenylene)imino{6-[bis(2-hydroxyethyl)amino]-1,3,5-triazine-4,2-diyl}imino]}dibenzoate (CAS no. 32257-57-1) and isomeric mixtures of Tetrasodium 4,4'-{ethene-1,2-diylbis[(3-sulfonato-4,1-phenylene)-imino{6-[bis(2-hydroxyethyl)amino]-1,3,5-triazine-4,2-diyl}imino]}dibenzoate (CAS no. 32257-57-1), Tetrasodium 2,2'-{ethene-1,2-diylbis[(3-sulfonatobenzene-4,1-diyl)imino{6-[bis(2-hydroxyethyl)amino]-1,3,5-triazine-4,2-diyl}imino]}dibenzoate (CAS no. 158256-89-4) and Tetrasodium 2-[(4-[bis(2-hydroxyethyl)amino]-6-[(4-{2-[4-(4-[bis(2-hydroxyethyl)amino]-6-[(4-carboxylatophenyl)amino]-1,3,5-triazin-2-yl}amino)-2-sulfonatophenyl]ethenyl}-3-sulfonatophenyl)amino]-1,3,5-triazin-2-yl}amino)benzoate (CAS no. 1271742-13-2)
- C.I.397 (benzenesulfonic acid, 2,2'-(1,2-ethenediyl)bis[5-amino-, reaction products with aniline, diethanolamine, ethanolamine and 2,4,6-trichloro-1,3,5-triazine, sodium salts, 2-(Dimethylamino) ethanol compounds (CAS no. 1627851-12-0)

### **Compliance verification**

*The applicant shall state the grade of manufactured paper based on the grade statistics (according to Appendix B) in Annex 2 to the contract and name the optical brighteners used.*

*In addition, the applicant shall verify compliance with the requirement by submitting a test report from an independent testing institute certifying compliance with the bleeding test according to DIN EN 648 or DIN EN 646 and achievement of valuation level 5. Alternatively, the applicant shall submit a declaration from the manufacturer of the optical brightener as Annex 3 to the contract stating that at least 95 % of the optical brighteners cling to the substrate to be brightened.*

### **3.9 Azo dyes and pigments in colourants**

No azo dyes or pigments may be added in colourants that can cleave into one of the amines stated in Regulation (EC) No. 1907/2006, Annex XVII, No. 43, Appendix 8 or 9, or in TRGS 614<sup>6</sup> (see Appendix C).

#### **Compliance verification**

*The applicant shall verify compliance with the requirement by submitting a declaration from the colourant supplier in Annex 3 to the contract pursuant to DE-UZ 72.*

### **3.10 Mercury, lead, cadmium or chromium VI compounds in 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 by submitting a declaration from the colourant supplier in Annex 3 to the contract pursuant to DE-UZ 72.*

### **3.11 Mineral oil-based additives and mineral oil-based colourants**

No mineral oil-based additives, colourants or base oils that contain aromatic hydrocarbons (with  $\geq 10$  carbon atoms) as a component may be added during the production of the recycled paper. 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<sup>7</sup>.

#### **Compliance verification**

*The applicant shall state the additive and colourant used in the product in Annex 3.*

*The applicant shall declare compliance with the requirement in Annex 1 to the contract and submit Annex 3 to the contract. If plant-based substitutes have been used, the applicant shall state in Annex 3 which substitutes (which plant-based raw material) are added and where they are sourced.*

### **3.12 Requirements for waste water**

The following requirements apply with respect to waste water:

#### **3.12.1 Direct Discharge**

In the production of recycled paper, the emission limits for the waste water load that are listed by the EU Commission in the "Best Available Techniques (BAT) Reference Document for the Production of Pulp, Paper and Board" must be complied with by direct dischargers. These limits are also listed in Table 2 below:

---

<sup>6</sup> <https://www.baua.de/DE/Angebote/Rechtstexte-und-Technische-Regeln/Regelwerk/TRGS/TRGS-614.html>

<sup>7</sup> The following certification systems are considered suitable for renewable raw materials: RSPO (Roundtable on Sustainable Palmoil), ISCC+ (International Sustainable & Carbon Certification), RSB (Roundtable on Sustainable Biomaterial), Roundtable Responsible Soy (RTRS) or a comparable certification system whose scope and requirement standards are equivalent to one of the named certification systems.

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

Parameter	Lower reference value according to BREF and Appendix 28 of the German Waste Water Ordinance <sup>8</sup>
Volumetric flow rate of waste water	15 m <sup>3</sup> /Adt
COD	3 kg/Adt
BSB5	0.15 kg/Adt or 25 mg/l
AOX	< 0.01 kg/Adt
Total N (inorganic + organic N) (TNb)	0.07 kg/Adt or 15 mg/l
Total P	0.008 kg/Adt or 1.2 mg/l

Adt = air dried ton

TNb = total nitrogen bound. This parameter 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. This parameter must be determined using the method described in DIN EN 12260.

### 3.12.2 Indirect discharge

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

#### **Compliance verification**

*If the manufacturer of the recycled paper is a **direct discharger**, he/she shall declare compliance with the emission limits according to Table 2 in Annex 1 to the contract and state the measured emission values in Annex 4 to the contract.*

*If the manufacturer of the recycled paper is an **indirect discharger**, he/she shall declare:*

- *compliance with the emission limits according to Table 2 after treatment in the waste water treatment plant and*
- *compliance with the limit for the volumetric flow rate of waste water and*
- *compliance with the AOX value at the mixing location in Annex 1 to the contract and shall submit 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.*

<sup>8</sup> BREF (Best Available Techniques Reference Document) full version and BAT conclusions in German and English at <https://www.umweltbundesamt.de/themen/wirtschaft-konsum/beste-verfuegbare-techniken/sevilla-prozess/bvt-merkblaetter-durchfuehrungsbeschluesse>  
 Appendix 28: Production of paper and cardboard of the German Waste Water Ordinance: [https://www.gesetze-im-internet.de/abwv/anhang\\_28.html](https://www.gesetze-im-internet.de/abwv/anhang_28.html)

### **3.13 Origin of the virgin fibres**

It must be possible to verify the origin of the wood for the virgin fibres added to the product. The wood must be sourced from forests that are able to verify that they have been managed according to the guidelines for sustainable forestry. The relevant forestry business must work in accordance with a high ecological and social standard and be certified accordingly. The certification systems from the Forest Stewardship Council® (FSC), the Programme for the Endorsement of Forest Certification Schemes (PEFC) and the Naturland standard will be accepted.

Wood sourced from regional forestry businesses that remain close to nature also helps to avoid long transport routes, which have a negative ecological impact.

#### **Compliance verification**

*The applicant shall state the manufacturer(s) of the virgin fibres and provide information on the origin of the wood added to the product in Annex 2 to the contract. The applicant shall submit corresponding certificates for the fibres.*

*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 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 FSC or PEFC certifier accredited by the German Accreditation Body (DAkkS)*

*or*

- *an expert recognised by the UBA in the areas of fibrous raw materials, grades of recovered paper and the recycling of recovered paper*

### **3.14 Requirements for the virgin fibres**

Virgin fibres may only be added to products certified according to DE-UZ 72 up to the maximum amount permitted if they are produced without the use of any chlorine, halogenated bleaching agents and optical brighteners.

#### **Compliance verification**

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

### **3.15 Outlook**

Any future revision of the environmental label will require verifications that renewable raw materials, which are used e.g. for the production of mineral oil-free colourants, are obtained from responsible, GMO-free sources that are located in the local region as far as possible and have been tested by a suitable certification system.

## **4 Applicants and parties involved**

Manufacturers (paper mills) or distributors of end 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, (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.

## **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.

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.

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 31/12/2026.

They shall be extended by periods of one year each, unless terminated in writing by 31/03/2026 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.

The applicant 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.

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

- Applicant (manufacturer/distributor)
- Brand/trade name, product description
- Distributor (Label User), i.e. the marketing organization.

© 2025 RAL gGmbH, Bonn

## **Anhang A Statutory regulations, testing standards and other 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.

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

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

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

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

ISO 14001 Environmental management systems - Requirements with guidance for use, version 2015-11

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

DIN EN 14719 Pulp, paper and board - Determination of the Diisopropyl-naphthalene (DIPN) content by solvent extraction, version 2005-10

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

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

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

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 EN ISO/IEC 17025 General requirements for the competence of testing and calibration laboratories, version 2018-11

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

DIN EN 12260 Water quality - Determination of nitrogen - Determination of bound nitrogen (TNb), following oxidation to nitrogen oxides, version 2003-12

UBA Forest Paper

[https://www.umweltbundesamt.de/sites/default/files/medien/376/publikationen/umweltschutz\\_wald\\_und\\_nachhaltige\\_holznutzung\\_in\\_deutschland\\_web.pdf](https://www.umweltbundesamt.de/sites/default/files/medien/376/publikationen/umweltschutz_wald_und_nachhaltige_holznutzung_in_deutschland_web.pdf)

## **Anhang B Grades of graphic paper**

The grades of graphic paper listed below are a selection from the grade statistics published by the German Pulp and Paper Association (Verband Deutscher Papierfabriken e. V.), version 2009, that are made out of recycled paper and can be awarded the Blue Angel.

As paper made out of secondary fibres/recovered paper is by definition wood-containing paper (irrespective of the grade of recovered paper), any wood-free grades of paper are not listed here because they cannot be awarded the Blue Angel. The composition and the proportions of pulp and cellulose fibre may vary greatly between the different grades of recycled paper.

### **Press and catalogue paper**

#### **Newsprint paper**

- 01 05 05 05 Standard newsprint paper
- 01 05 10 05 Improved newsprint paper

#### **Non-coated magazine paper (rolls)**

- 01 10 05 05 SC-A rotogravure paper
- 01 10 10 05 SC-B rotogravure paper
- 01 10 15 05 SC-A offset
- 01 10 20 05 SC-B offset

### **Wood-containing printing and writing paper**

#### **Other wood-containing, non-coated paper**

- 01 80 05 05 Wood-containing printing and writing paper, in rolls
- 01 80 10 05 Wood-containing printing and writing paper, in formats

#### **Coated, wood-containing roll printing paper**

- 01 85 05 06 Wood-containing printing and writing paper, coated on two sides, in rolls, LWC for rotogravure printing
- 01 85 05 07 Wood-containing printing and writing paper, coated on two sides, in rolls, LWC for offset

#### **Coated, wood-containing format paper**

- 01 85 10 05 Wood-containing printing and writing paper, coated on two sides, in formats, consumption, standard and special coating

## **Anhang C Dyes and pigments that are not permitted**

In accordance with Paragraph 3.9, the azo dyes listed below may not be added.

### **Azo dyes that may cleave to one of the following aromatic amines (according to Directive (EC) No. 1907/2007, Annex XVII, No. 43)**

4-aminobiphenyl	(92-67-1)
benzidine	(92-87-5)
4-chloro-o-toluidine	(95-69-2)
2-naphtylamine	(91-59-8)
o-amino-azotoluene	(97-56-3)
2-Amino-4-nitrotoluene	(99-55-8)
p-chloroaniline	(106-47-8)
2,4-diaminoanisol	(615-05-4)
4,4'-diaminodiphenylmethane	(101-77-9)
3,3'-dichlorobenzidine	(91-94-1)
3,3'-dimethoxybenzidine	(119-90-4)
3,3'-dimethylbenzidine	(119-93-7)
3,3'-dimethyl-4,4'-diaminodiphenylmethane	(838-88-0)
p-cresidine	(120-71-8)
4,4'-methylene-bis-(2-chloro-aniline)	(101-14-4)
4,4'-Oxydianiline	(101-80-4)
4,4'-Thiodianiline	(139-65-1)
o-toluidine	(95-53-4)
2,4-diaminotoluene	(95-80-7)
2,4,5-trimethylaniline	(137-17-7)
4-aminoazobenzene	(60-09-3)
o-anisidine	(90-04-0).
2,4-xylidine	(95-68-1)
2,6-xylidine	(87-62-7)