




Simply Excellent.

BLUE ANGEL FOR PRINTED MATTER DE-UZ 195

The background of the lower half of the slide is a light gray abstract pattern. It features a network of thin, dark gray lines connecting various points. Some of these points are highlighted as larger, metallic-looking spheres with highlights and shadows, giving them a three-dimensional appearance. The overall effect is a complex, interconnected web of lines and nodes.

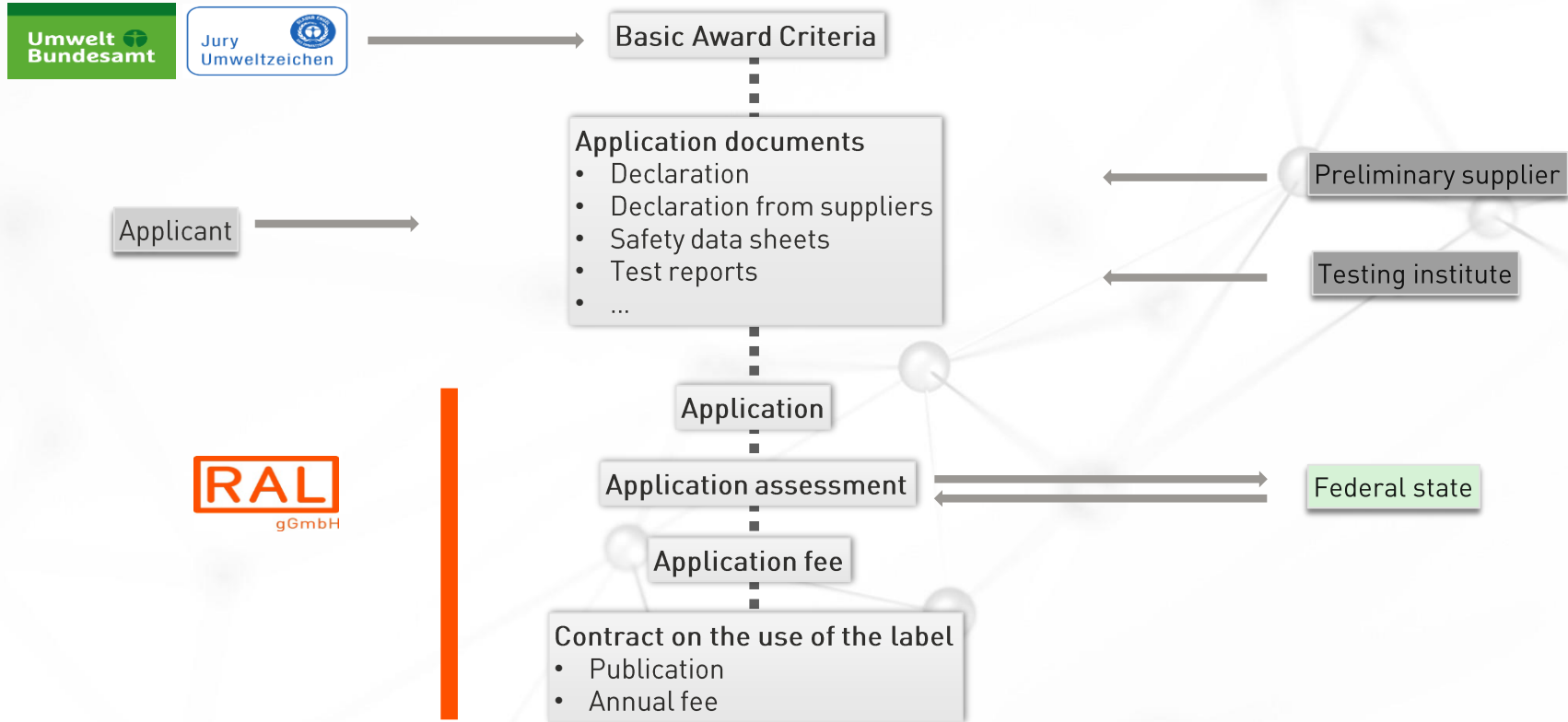
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RAL Environment

Blue Angel for Printed Matter (DE-UZ 195)



- New Basic Award Criteria published 2021
- Valid until: 2025

The application process



Blue Angel for Printed Matter (DE-UZ 195)

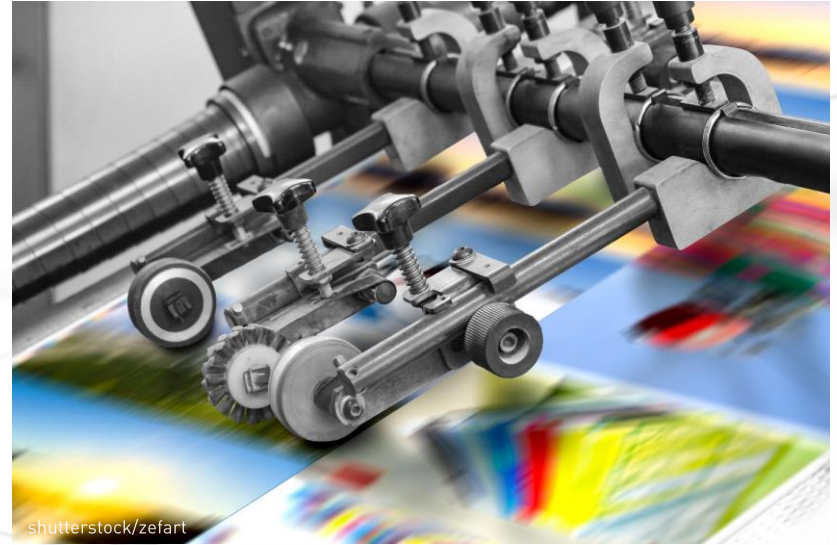
Scope

- Newspapers
- Magazines, brochures, journals
- Books
- Catalogues
- Prospectuses, advertising inserts, newspaper supplements
- Flyers, Leaflets
- Operation instructions, assembly instructions
- Posters, billboards, displays made of cardboard
- Annual reports, telephone books, directories
- Loose leaf publications
- Photo work envelopes
- Printed postcards
- Printed envelopes and padded envelopes
- Printed booklet covers
- Decorative calendar
- Certification not possible: packaging, customized invoice paper, company letter paper, printed business cards



Printing processes that can be certified:

- Sheet-fed offset printing
- Coldset web offset printing
- Heatset web offset printing
- Rotogravure printing
- Flexographic printing
- Digital printing



3.3 Requirements for paper and cardboard

- DE-UZ 14a (Graphic paper and cardboard)
- DE-UZ 56 (Recycled Cardboard)
- DE-UZ 72 (Printing and Publication Paper)



Compliance verification:
Manufacturer declaration (Annex 1), registration number (Annex 2)

3.4 Requirements for the recyclability of the materials added to the printed matter

- Deinkability
- EPRC Scorecard: ≥ 51 Points
- Individual criteria: 50% of the maximum number of points shall be achieved
- Varnishes must be tested together with the printing ink
- Exception for mineral oil optimised paints (3.8.5) in Coldset web offset printing until 12/31/2022



Compliance verification: Manufacturer declaration (Annex 1), Test report

INGEDE Method 11

3.4 Requirements for the recyclability of the materials added to the printed matter

- Adhesive removability
 - EPRC Scorecard: ≥ 71 points
 - Side gluing and back gluing shall be tested in combination
 - Exception for redispersible and water-soluble adhesives
 - Exception for non-redispersible and non water-soluble Hotmelt adhesive:

For thermoplastic adhesives:

- Softening temperature (according to R&B): ≥ 68 °C
- Thickness of the adhesive application: ≥ 120 μm
- Horizontal expansion of the adhesive application (every direction): 1,6 mm.



Compliance verification: Manufacturers declaration (Annex 1), Test report INGEDE Method 12, Annex 4, Technical data sheet of adhesives

3.4 Requirements for the recyclability of the materials added to the printed matter

- Adhesive removability
 - EPRC Scorecard: ≥ 71 points
 - Side gluing and back gluing shall be tested in combination
 - Exception for redispersible and water-soluble adhesives
 - Exception for non-redispersible and non water-soluble Hotmelt adhesive:

For reactive adhesives:

- Thickness of the adhesive application: $\geq 60 \mu\text{m}$
- Horizontal expansion of the adhesive application (every direction): 1,6 mm.



Compliance verification: Manufacturers declaration (Annex 1), Test report INGEDE Method 12, Annex 4, Technical data sheet of adhesives

3.5 Requirements for all substances and mixtures added to the printed matter

- Exclusion of substances classified with specific H-phrases (New: H317, H334)

Hazard statement (H Phrase)	Hazard category	Wording
Toxic substances		
H300	Acute Tox. 1 Acute Tox. 2	Fatal if swallowed.
H301	Acute Tox. 3	Toxic if swallowed.
H304	Asp. Tox. 1	May be fatal if swallowed and enters airways.
H310	Acute Tox. 1 Acute Tox. 2	Fatal in contact with skin.
H311	Acute Tox. 3	Toxic in contact with skin.
H330	Acute Tox. 1 Acute Tox. 2	Fatal if inhaled.
H331	Acute Tox. 3	Toxic if inhaled.



Compliance verification: List of all substances and mixtures used (Annex 3), Safety data sheets

3.6 Requirements for biocidal products and active substances

- Biocidal products and active substances are not allowed to be used in printed matter
- Exception:
 - Preservatives for products during storage (PT06)
 - Preservatives for liquid-cooling and processing systems (PT11)
- Deviating from point 3.5, substances labelled with excluded H-phrases are also permitted.
- H410, H411: Bioaccumulative potential ($\log K_{ow}$) < 3,0 or bioconcentration factor ≤ 100



Compliance verification: Declaration of the supplier (Annex 4),
Safety data sheet

3.7.1 Certified renewable raw materials

- Renewable raw materials in printing inks, varnishes, solvents, and cleaning agents have to come from a cultivation that meets sustainability criteria
- Certificates: ISCCPLUS, ISCC EU, RSB, RSPO, RTRS und ProTerra
- Exception until 12/31/2022: Justified declaration possible in case of non conformability



Compliance verification:
Declaration of the supplier (Annex 4), Certificates

3.7.2 Raw material not sourced from genetically modified organisms

- Renewable raw materials in printing inks, varnishes, solvents, and cleaning agents should not be sourced from genetically modified plants
- Justified declaration possible in case of non conformability



Compliance verification:
Declaration of the supplier (Annex 4), Certificates

3.8 Requirements for the dyes, toners, printing inks, and varnishes I

- Restricted use of heavy metals
- Restricted use of manganese compounds
- Exclusion of azo dyes: Amount of primary aromatic amines $\leq 0,05\%$



Compliance verification: Declaration of the supplier (Annex 4),
Test report

3.8 Requirements for the dyes, toners, printing inks, and varnishes II

- Aliphatic hydrocarbons in offset printing processes
 - Only substances with a chain length of C10 –C20 as constituent components
 - C20-C35 up to 5% and C>35: Microcrystalline waxes, Vaseline, polyolefin waxes, paraffin waxes or Fischer-Tropsch waxes
- Aromatic hydrocarbons in offset printing processes
 - < 0,1% from mineral oil
 - Heatset web offset printing: < 1% from mineral oil



Compliance verification: Declaration of the supplier (Annex 4),
list of ingredients

3.8 Requirements for the dyes, toners, printing inks, and varnishes III

- Restricted use of PAH in printing inks
 - Benzo[a]pyrene, Benzo[e]pyrene, Benzo[a]anthracene, Benzo[b]fluoranthene, Benzo[j]fluoranthene, Benzo[k]fluoranthene, Chrysen, Dibenzo[a,h] anthracene, Benzo[ghi]perylene, Indeno[1,2,3-cd]pyrene: Each 0,2 mg/kg
 - Sum of all PAH: 1 mg/kg
- Exception for Coldset web offset printing inks without double ink supply until 12/31/2022



Compliance verification: Declaration of the supplier (Annex 4),
list of ingredients, Test report

3.8 Requirements for the dyes, toners, printing inks, and varnishes IV

- No use of per- and polyfluoroalkyl substances (PFAS)
- Exception until 12/31/2022: If there are no alternatives to fulfil the requirements on product quality. Indication of the amount of PFAS is necessary.



Compliance verification: Declaration of the supplier (Annex 4), list of ingredients, justification, and test report

[Products A-Z](#)[Companies A-Z](#)[Basic Award Criteria](#)[Products](#) > [Paper and Printing](#) > [Print Houses and Printed Matters \(until 12/2021\)](#)

Environmentally Friendly Printed Matters

Printed matter such as newspapers, magazines, books, catalogues, prospectuses, advertising inserts, brochures, flyers, calendars, operating instructions, posters and billboards are widely disseminated. Energy and resources such as paper and ink are required for their production. The printing process and the cleaning of the machines can lead to the emission of volatile organic solvents that contribute to the production of ozone and "summer smog". In a comparison of their impact on ecological systems, those paper products made out of recovered paper perform significantly better in terms of their use of resources, waste water load and water and energy consumption than paper products made predominantly from virgin fibres. Therefore, the use of paper with a high proportion of recovered paper contributes to the preservation of resources, especially ecosystems such as forests, and to a reduction

Printed matters (DE-UZ 195)

[Basic Award Criteria \(PDF\)](#)[Application Documents](#)[Online Application](#)



Thank you for your attention



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