# **BLUE ANGEL**

## **The German Ecolabel**



# **Recycled Cardboard**

**DE-UZ 56** 

Basic Award Criteria
Edition July 2014
Version 3

#### The Environmental Label is supported by the following four institutions:









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

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

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

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

If you require further information please contact:

RAL gGmbH

#### **RAL UMWELT**

Fränkische Straße 7 53229 Bonn

Tel: +49 (0) 228 / 6 88 95 - 0 E-Mail: <u>umweltzeichen@ral.de</u> www.blauer-engel.de Version 1 (07/2014): First Edition, Expiry date: December 31, 2018

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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 and Nuclear Safety, 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 waste paper for the production of recycled cardboard, especially waste paper from household and commercial collections, helps to save resources, above all the forest ecosystem, to protect the climate and to reduce the amount of waste. It also avoids the environmental impacts directly associated with the production of pulp and wood pulp.

In a comparison of ecological systems paper products made from post-consumer waste paper do much better than paper products made from virgin fibres using wood as a source of fibrous raw materials in terms of consumption of resources, wastewater load, water and energy consumption – while still maintaining a comparable level of product serviceability.

#### 1.3 Objectives of the Environmental Label

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



#### www.blauer-engel.de/UZ56

- low use of energy and water in the manufacturing process
- made from 100% waste paper
- particularly low level of harmful materials

#### 2 Scope

These Basic Criteria apply to:

- [1] Recycled cardboard with an area-related mass of about 150 g/sq m or more.Included are the cardboard grades listed in the Grades Statistics "Office and Administration Papers" des Verbandes Deutscher Papierfabriken e.V. (Association of German Paper Mills) (Appendix A to the Basic Criteria DE-UZ 56). Excluded is cardboard for one-time packaging (packaging material).
- [2] Products made of recycled cardboard, e.g. folders, binders and filing material.

#### 3 Requirements and Compliance Verifications

#### 3.1 Waste paper

The paper fibres of the products under paragraph 2.1 must be made from 100 percent recovered waste paper. (A tolerance of 5% shall be allowed for finished products under paragraph 2.2).

Waste paper is the generic term for papers and boards recovered in quantifiable amounts after use or processing. The specifications of the waste paper grades are listed in Appendix B to the Basic Criteria DE-UZ 56.

#### 3.2 Waste paper grades

At least 65% waste paper of ordinary, medium and kraft waste paper grades as well as of special grades (groups 1, 2, 4 and 5 – except for the individual grades 2.05, 2.06, 2.14, 4.07 and  $5.09^{1}$ ) – related to the total fibre content, shall be used for the manufacture of the products under paragraph 2.

#### Compliance Verification

The applicant shall report the average percentage of the paper grades used belonging to groups 1, 2, 3, 4 and 5 in Survey A in Annex 1 to the Contract pursuant to DE-UZ 56 and declare compliance with the requirements in paras. 3.1 to 3.3. The applicant shall also report the percentage of the individual grades 2.05, 2.06 and 5.09. The correctness of the data in Annex 1a to the Contract shall be confirmed once a year in accordance with Annex 6 to the Contract

- by a **certification body** accredited by Deutsche Akkreditierungsstelle (DAkkS) (national accreditation body) for ISO 14001 for the scope of paper mills (NACE 17.12) or
- by an environmental auditor accredited for this scope (NACE 17.12) by Deutsche Akkreditierungs- und Zulassungsgesellschaft für Umweltgutachter mbH (DAU) (German Association for Accreditation and Recognition of Environmental Auditors) in accordance with the Umweltauditgesetz (Environmental Audit Act) or
- by an accredited FSC certifier or
- by a **UBA-recognised expert** in the field of fibrous raw materials, waste paper grades and waste paper recycling.

#### 3.3 DIPN

The content of diisopropylnaphthalene (DIPN) in paper and board shall be kept as low as technically possible. That is why, principally, the above-mentioned waste paper grades 2.05, 2.06 and 5.09 "carbonless copy papers" must, not be used. Alternatively, DIPN-containing waste paper grades (2.05, 2.06 and 5.09) may be used if an efficient technical system (e.g. deinking process) makes sure that the major part of DIPN is removed from the fibre cycle and the DIPN content in the finished paper does not exceed 80mg/kg.

#### **Compliance Verification**

If the waste paper grades 2.05, 2.06 and 5.09 are used the applicant shall report the maximum DIPN content in the finished product in Annex 1 to the Contract and submit a test

<sup>&</sup>lt;sup>1</sup> In the revised DIN EN 643, the 2.09 grade (carbonless copy papers) is now referred to as 5.09.

report prepared by an independent ISO 17025 accredited testing laboratory or a selected UBA-recognized testing laboratory, e.g. a testing laboratory in the field of paper production of Darmstadt Technical University.

The DIPN content shall be determined **once a year in accordance with DIN EN 14719** (DIPN in acetone extract).

The applicant shall present a product sample.

#### 3.4 Bisphenol-A

The bisphenol-A (BPA) content shall be determined in a cold water extract prepared according to EN 645 by HPLC with UV or fluorescence detection on the basis of CEN/TS 13130-13 "Materials and articles in contact with foodstuffs - Plastics substances subject to limitation – Part 13: Determination of 2,2-bis(4-hydroxyphenyl)propane (bisphenol A) in food simulants.

#### **Compliance Verification**

Once a year, the applicant shall present, for statistical purposes, a test report prepared by an independent ISO 17025 accredited testing laboratory or a selected UBA-recognized testing laboratory, e.g. a testing laboratory in the field of paper production and mechanical process engineering of Darmstadt Technical University.

#### 3.5 Process auxiliaries

Only process auxiliaries listed in the 36th Recommendation of BfR<sup>2</sup> (Federal Institute for Risk Assessment) may be used. The maximum quantities or concentrations specified therein shall not be exceeded. The products shall be manufactured without the use of glyoxal-containing auxiliaries.

#### 3.6 Optical brighteners

The use of optical brighteners shall not be permitted.

#### **Compliance Verification**

The applicant shall declare compliance with the requirements in paras. 3.5 and 3.6 in Annex 1 to the Contract.

#### 3.7 Colorants

No azo colorants or pigments that may split off any of the amines listed in Directive 2002/61/EEC or TRGS  $614^3$  may be used as colorants.

#### 3.8 Heavy metal containing colorants

No colorants (pigments or dyes) may be used which contain mercury, lead, cadmium or chromium (VI) compounds as constituent ingredients.

http://www.baua.de/nn 16812/de/Themen-von-A-Z/Gefahrstoffe/TRGS/pdf/TRGS-905.pdf

http://bfr.zadi.de/kse/faces/resources/pdf/360.pdf

#### **Compliance Verification**

To verify compliance with the requirements in paras. 3.7 and 3.8 the applicant shall submit a declaration from a colorant supplier using Annex 2 to the Contract pursuant to DE-UZ 56.

#### 3.9 Auxiliary materials

No colorants, surface finishing agents, auxiliaries and coating materials may be used

- a) which according to the criteria of Regulation (EC) No 1272/2008<sup>4</sup> (or Directive 67/548/EEC) are marked with the H-Phrases (R Phrases) listed in the following table or meet the criteria for such classification<sup>5</sup>, or
- b) which according to TRGS 905<sup>6</sup>, as amended, are classified as carcinogenic, mutagenic or reprotoxic substances.

Regulation (EC) No 1272/2008 (GHS-Regulation)	Directive 67/548/EEC (Dangerous Substances Directive)	Phrase
Toxic, mutagenic a	nd reprotoxic substances	
H340	R46	May cause genetic defects.
H341	R68	Suspected of causing genetic defects.
H350	R45	May cause cancer.
H350i	R49	May cause cancer by inhalation.
H351 <sup>7</sup>	R40	Suspected of causing cancer.
H360F	R60	May damage fertility.
H360D	R61	May damage the unborn child.
H360FD	R60/61	May damage fertility. May damage the unborn child.
H360Fd	R60/63	May damage fertility. Suspected of damaging the unborn child.
H360Df	R61/62	May damage the unborn child. Suspected of damaging fertility.

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

The GHS Regulation (Globally Harmonized System) that has come into force on January 20, 2009, replaces the old Directives 67/548/EEC (Dangerous Substances Directive) and 1999/45/EC (Dangerous Preparations Directive). According to the said regulation, substances are classified, labelled and packed until December 1, 2010 according to Directive 67/548/EEC while mixtures (formerly preparations) are classified, labelled and packed until June 1, 2015 according to Directive 1999/45/EC. After these dates, the GHS Regulation shall be applied. Both the new indications of danger (H-Statements) and the hitherto applicable Risk or R-phrases shall be indicated for substances until the 1st of June 2015 (Material Safety Data Sheet).

The harmonized classifications and labellings of dangerous substances can be found in Part 3 of Annex VI to Regulation (EC) No 1272/2008 (GHS Regulation). Table 3.1 lists classifications and labellings according to the new system using H Phrases; Table 3.2 lists classifications and labellings according to the old system using R Phrases. The GHS Regulation can be found, for example, at: <a href="http://www.reach-info.de/ghs">http://www.reach-info.de/ghs</a>

<sup>6</sup> http://www.baua.de/nn 16812/de/Themen-von -A-Z/Gefahrstoffe/TRGS/pdf/TRGS-905.pdf

Except titanium dioxide, because its classification only applies to inhalable powders.

No 1272/2008	Directive 67/548/EEC (Dangerous Substances Directive)	Phrase
H361f	R62	Suspected of damaging fertility.
H361d	R63	Suspected of damaging the unborn child.
H361fd	R62/63	Suspected of damaging fertility. Suspected of damaging the unborn child.

#### **Compliance Verification**

To verify compliance with the requirement the applicant shall submit declarations from the suppliers of chemical additives using Annex 3 to the Contract pursuant to DE-UZ 56. The declarations shall be signed by the head of the company's product development unit or a comparable engineering department. The relevant Material Safety Data Sheets shall be made available to RAL gGmbH, if so requested.

#### 3.10 Bleaching agents

The waste paper shall be processed without the use of chlorine, halogenated bleaching agents and not readily biodegradable complexing agents, such as, for example, ethylenediaminetetraacetic acid (EDTA) and diethylenetriaminepentaacetic acid (DTPA).

#### **Compliance Verification**

The applicant shall declare compliance with the requirement in Annex 1 to the Contract pursuant to DE-UZ 56 and list in Survey B the bleaching and complexing agents used.

#### 3.11 Biocides

Only those substances may be used as biocides in product manufacturing which have been approved under the Biocidal Products Regulation - Regulation (EU) No 528/2012 - (EU List of approved active substances; formerly inclusion in Annex I of the Biocidal Products Directive 98/09 EC) or which are still being reviewed as notified existing active substances for the respective type of biocidal product under the EU Review Programme for Existing Active Substances.

Only those products may be used as biocidal products which have been approved for the respective field of use. Products containing existing active substances which are still under EU review may continue to be used without authorisation until a decision is reached.

Also, the biocidal products must not contain active substances considered as candidates for substitution in accordance with Article 10 of the EU Biocides Regulation (EU 528/2012). Prior to the respective entry into force of the approval requirement for the use of biocidal products containing existing active substances only substances may be used which are additionally listed in the 36th Recommendation of BfR (Federal Institute for Risk Assessment).

Tetramethylthiuram disulfide (CAS No: 137-26-8) and

nano silver (CAS No: 7440-22-4)

must not be used.

#### **Compliance Verification**

The applicant shall declare compliance with the requirement in Annex 1 to the Contract and name the biocidal active substances used by indicating their IUPAC names and CAS Registry Numbers together with their quantities per kilogram of dry pulp.

#### 3.12 Mineral oil-based additives

Recycled cardboard should be manufactured without the use of mineral oil-based additives which contain aromatic hydrocarbons (with  $\geq 10$  carbon atoms) as ingredients. Only aliphatic hydrocarbons with a chain length of  $C_{10}$  to  $C_{20}$  may be used. Plant-based substitutes for mineral oil should be free of genetic engineering and come from sustainable farming.

#### **Compliance Verification**

The applicant shall present a list of the additives used.

#### 3.13 Serviceability

The serviceability of the products must be guaranteed. If technical requirements for individual types of cardboard and cardboard products are governed by DIN Standards such standards shall be complied with in accordance with the version in effect at the time of signing the contract.

This applies, for instance, to office board according to DIN 6737.

#### Compliance Verification

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

#### 3.14 Finished products

Applications for finished products under para. 2.2:

The applicants for finished products under paragraph 2.2 shall verify compliance with the requirements either by means of the compliance verifications according to paras. 3.1 - 3.13 or, alternatively, by written statement that the finished product has been made from Blue Angellabelled recycled cardboard exclusively.

The applicant shall name the recycled cardboard, its manufacturer as well as the Contract Number.

Also, the applicant shall present compliance verifications according to paras. 3.8 to 3.16 for the finished products.

#### **Compliance Verification**

The applicants for finished products under paragraph 2 shall verify compliance with the requirements either by means of the compliance verifications according to paras. 3.1 - 3.17 or, alternatively, by written statement in Annex 1 to the Contract that the finished product has been made from Blue Angel-labelled recycled cardboard exclusively. The applicant shall name the recycled cardboard, its manufacturer as well as the Contract Number.

Also, the applicant shall present compliance verifications according to paras. 3.7 to 3.17 for the finished products.

#### 3.15 Imprinting

No mineral oil-based printing inks containing aromatic hydrocarbons (with  $\geq$  10 carbon atoms) as ingredients may be used for imprinting products. Only aliphatic hydrocarbons with a chain length of  $C_{10}$  to  $C_{20}$  may be used. Plant-based substitutes for mineral oil should be free of genetic engineering and come from sustainable farming.

#### **Compliance Verification**

The applicant shall declare compliance with the requirement in Annex 1b to the Contract and submit Annex 4 to the Contract. This requirement also applies if the paper comes with a colour design or is coloured in the mass.

#### 3.16 Adhesive applications

It shall be possible to separate adhesive particles that may exist in the printed paper product. The product shall meet the recyclability requirements of the European Recovered Paper Council (ERPC).

Testing shall be based on INGEDE Method 12<sup>8,9</sup> "Bewertung zur Rezyklierbarkeit von Druckerzeugnissen – Prüfung von Klebstoffapplikationen" (Assessment of the Recyclability of Printed Paper Products – Testing of the fragmentation behaviour of adhesive applications) (January 2013). The recyclability shall be assessed in accordance with the ERPC guidelines using the scorecards for the removability of adhesive applications<sup>10</sup>.

Water-based adhesive shall be exempt from the testing requirement under INGEDE 12.

#### 3.17 **DIBP**

No diisobutyl phthalate (DIBP)-containing adhesives may be used in the manufacture of finished products.

#### Compliance Verification

The applicant shall declare compliance with the requirements of paras. 3.16 and 3.17 in Annex 1b to the Contract. Also, the applicant shall provide evidence of compliance with the requirement of para. 3.16 by means of a test report prepared by an independent testing laboratory on the deinkability and removability of adhesive particles confirming compliance with the requirement.

Also, the applicant shall complete and submit Annex 5 to the Contract to verify compliance with the requirement of para. 3.17.

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<sup>8 &</sup>lt;u>http://www.ingede.com/ingindxe/methods/ingede-method-12-2013.pdf</u>

<sup>&</sup>lt;sup>9</sup> The inclusion of equivalent in-house test method is possible after the approval by RAL and FEA (Federal Environmental Agency).

<sup>10</sup> http://www.paperforrecycling.eu/uploads/Modules/Publications/Removability%20Adhesive%20Applicationsfinal.pdf

#### 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, 2022. They shall be extended by periods of one year each, unless terminated in writing by March 31, 2022 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.

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## **Appendix A** Grades Statistics of Office and Administrative Papers

## Verband Deutscher Papierfabriken e.V. (Association of German Paper Mills)

	Data Papers and Data Cardboard
02050505	Accounting transparent paper
02051005	Other accounting papers
02051505	Tape paper
02052005	Cardboard for punched cards, magnetic strips
	OCR Paper
02052505	- roll
02052505	- sheet
02052510	Paper for other reading systems
02053005	Paper for other reading systems
	Continuous Form Printing Paper
02053510	- wood-free
	Index Cardboard
02054005	- wood-containing
02054010	- wood-free
	Writing Papers
02101005	High-quality typewriter and writing papers
02101505	Writing paper for school purposes
	Typewriter, Duplication, Copying Papers,
	wood-free, two-sided, < 43 cm and corresponding rolls
02150510	Typewriter, Duplicating and Copying Papers, wood-free, in rolls
02150510	wood-free
	Typewriter, Duplicating and Copying Papers, wood-free, machine-finished, in sheets
02152005	- wood-free, machine-finished (duplicating paper) white
02152010	- wood-free, machine-finished (copying paper) white
02152015	- wood-free, machine-finished (duplicating paper) coloured

	Typewriter, Duplicating and Copying Papers, wood-free, machine-finished, in sheets
02152505	- wood-free, glazed (transfer paper) white
02152510	- wood-free, glazed (copying paper) white
02152515	- wood-free, glazed (transfer paper) coloured
02153005	Copy Paper

	Envelope	
	Other wood-containing paper, incl. waste-paper-containing and	
	sulphate-mixed paper	
02200505	Other wood-containing dispatch bags	
02200510	Other wood-containing envelopes	
	1	
02201005	Kraft Paper	
<u> </u>	Wood-free	
02201505	- white	
02201510	- coloured	
02202005	Tissue lining paper for envelopes	
	Envelope 100% recycled paper	
02210505	Dispatch bags 100 recycled paper	
02210510	Other envelopes 100 recycled paper	
	Heliographic Paper and Copying Base Paper	
02250505	Heliographic base paper	
02251005	Copying base paper	
	Special Office Page Page	
02200505	Special Office Base Papers  Base paper for offset foils, carbon base paper	
02301005	Base paper for offset foils, carbon base paper	
02201010	- One-time carbon paper	
02301505	- Multiple carbon base paper (inc. Blue-print base paper)	
02302005	Base paper for prepared duplicating paper  Base paper and base cardboard for permanent stencils	
02302505	Base paper for Non-impact printing processes	
02303005	Other base papers for special office papers	
02350505	Other Papers Blotting paper	
02351005	Banknote paper and document paper	
02351505	Map paper and nautical map paper	
02351305	Other papers for office and administration purposes	
02332003	other papers for office and duffinistration parposes	
	Postcard Board	
00.400505	Postcard Board, wood-containing	
02400505	- white	
02400510	- coloured	
	Postcard Board, Wood-Free	
02401005	- white	
02401010	- coloured	
02401505	Picture postcard board	

	Other Wood-Containing Non-Coated Roll Printing Papers, White and	
	Coloured	
02450505	Other wood-containing continuous form printing paper	
	Other Wood-Containing Non-Coated Papers, Cut-Size Sheet Paper,	
	White and Coloured	
02451005	Other wood-containing non-coated papers, cut-size sheet paper:	
	Office, duplicating and cut-size offset papers	
	Other Wood-Containing Graphic Papers > 169 g/m <sup>2</sup>	
02451505	Other wood-containing cardboard, roll	
02451510	Other wood-containing cardboard, cut to size	
	Non-Coated Roll Printing Papers, White and Coloured, 100%	
	Recycled	
02460505	Continuous form printing paper, 100% recycled	
	Non-Coated Papers, Cut-Size Sheet Paper, White and Coloured,	
	100% Recycled	
02461005	Non-coated paper, cut-size sheet paper:	
	Office, duplicating, cut-size offset paper, 100% recycled	
	Cymphic Dangers > 160 g/m² 1000/ Dangeled	

Graphic Papers > 169 g/m², 100% Recycled	
02461505	Cardboard, roll, 100% recycled
02461510	Cardboard, cut to size, 100% recycled

	Other Cardboard for Office and Administration Purposes
02500505	Folder cardboard
02501005	Letter file folder
02502005	Ticket cardboard
02502505	Fancy board
02503005	Other cardboard for office and administration purposes

# Appendix B Extract from "Altpapier, Liste der Deutschen Standardsorten und ihre Qualitäten" (Waste Paper, List of German Standard Grades and their Qualities)

#### in accordance with DIN EN 643, as amended.

Published by:

- Bundesverband der Deutschen Entsorgungswirtschaft e.V.,

  Kölp
  - (Association of German Disposal Management Cologne)
- Bundesverband Sekundärrohstoffe und Entsorgung e.V., Bonn (Association of Secondary Raw Materials and Disposal)
- Verband Deutscher Papierfabriken, Bonn (Association of German Paper Mills)

#### **Waste Paper Grades**

Group 1:	Ordinary Grades	
1.01	Mixed paper and board, unsorted, but unusable materials removed	
	• Mixture of various grades of paper and board, without restriction on	
	short fibre content.	
1.02	Mixed papers and board (sorted)	
	• Mixture various qualities of paper and board, containing a maximum of	
	40% of newspapers and magazines.	
1.03	Grey board	
	• Printed and unprinted white lined and unlined grey board or mixed	
	board, free from corrugated material.	
1.04	Supermarket corrugated paper and board	
	• Used paper and board packaging, containing a minimum of 70% of	
	corrugated board, the rest being solid board and wrapping papers.	
1.05	Old corrugated containers	
	Used boxes and sheets of corrugated board of various quality.	
1.06	Unsold magazines	
	Unsold magazines, with or without glue.	
1.06.01	Unsold magazines without glue	
1.07	Telephone books	
	• New and used telephone books, with unlimited content of pages	
	coloured in the mass, with and without glue. Shavings allowed.	
1.08	Mixed newspapers and magazines I	
	• A mixture of newspapers and magazines, containing a minimum of 50%	
	of newspapers, with or without glue.	
1.09	Mixed newspapers and magazines II	
	• A mixture of newspapers and magazines, containing a minimum of 60%	
	of newspapers, with or without glue.	

1.10	Mixed magazines and newspapers
	A mixture of newspapers and magazines, containing a minimum of 60%
	of magazines, with or without glue.
1.11	Sorted graphic paper for Deinking11
	• Sorted graphic paper from households, newspapers and magazines,
	each at a minimum of 40%. The percentage of non-deinkable paper and
	board should be reduced over time to a maximum level of 1.5%. The
	actual percentage is to be negotiated between buyer and seller.

Group 2:	Medium Grades
2.01	Newspapers  • Newspapers containing a maximum of 5% of newspapers or advertisements coloured in the mass.
2.02	<ul> <li>Unsold Newspapers</li> <li>Unsold daily newspapers, free from additional inserts or illustrated material coloured in the mass.</li> </ul>
2.02.01	<ul> <li>Unsold newspapers, no flexographic printing allowed</li> <li>Unsold daily newspapers, free from additional inserts or illustrated material coloured in the mass, strings allowed. No flexographic printed material allowed.</li> </ul>
2.03	Lightly printed white shavings  Lightly printed white shavings, mainly mechanical pulp-based.
2.03.01	<ul> <li>Lightly printed white shavings without glue</li> <li>Lightly printed white shavings, mainly mechanical pulp-based paper, without glue.</li> </ul>
2.04	Heavily printed white shavings  Heavily printed white shavings, mainly mechanical pulp-based paper.
2.04.01	Heavily printed white shavings without glue <ul> <li>Heavily printed white shavings, mainly mechanical pulp-based paper, without glue.</li> </ul>
2.05	Sorted office paper  • Sorted office paper.
2.06	<ul> <li>Coloured letters</li> <li>Correspondence, in mixed papers coloured in the mass, with or without print, of printing or writing paper. Free from carbon paper and hard covers.</li> </ul>
2.07	<ul> <li>White woodfree books</li> <li>Books, including misprints of books, without hard covers, mainly of woodfree white paper, black printed only. Containing a maximum of 10% of coated paper.</li> </ul>

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 $<sup>^{11}</sup>$  For the current special agreement on the share of contraries (Störstoffgehalt) please see the original list.

2.08	Coloured woodfree magazines
	Coated or uncoated magazines, white or coloured in the mass, free from
	non-flexible covers, bindings, non-dispersable inks and adhesives,
	poster papers, labels or label trim. May include heavily printed circulars
	and coloured in the mass shavings. Containing a maximum of 10%
	mechanical pulp based papers.
5.09	Carbonless copy paper
	Carbonless copy paper.
2.10	Bleached woodfree PE-coated board
	Bleached woodfree PE-coated board from board manufacturers and
	converters.
2.11	Other PE-coated board
	Other PE-coated board. May contain unbleached board and paper from
	board manufacturers and converters.
2.12	Mechanical pulp-based computer print-out
	• Continuous computer print-out, mechanical pulp based, sorted by
	colours, may include recycled fibres.

Group 3:	High Grades
3.01	Mixed lightly coloured printers shavings
	• Mixed shavings of printing and writing papers, lightly coloured in the
	mass, containing a minimum of 50% of woodfree paper.
3.02	Mixed lightly coloured woodfree printer shavings
	• Mixed shavings of printings and writing papers lightly coloured in the
	mass, containing a minimum of 90% of woodfree paper.
3.03	Woodfree binders
	• White woodfree lightly printed shavings with glue, free from paper
	coloured in the mass. May contain a maximum of 10% of mechanical
	pulp based paper.
3.04	Tear white shavings
	White woodfree lightly printed shavings without glue, free from wet-
	strength paper and paper coloured in the mass.
3.05	White woodfree letters
	• Sorted white woodfree writing papers, originating from office records,
	free from cash books, carbon paper and non water soluble adhesives.
3.06	White business forms
	White woodfree printed business forms.
3.07	White woodfree computer print-out
	White woodfree computer print-out, free from carbonless paper and
	glue.
3.08	Printed bleached sulphate board
	• Heavily printed sheets of bleached sulphate board, without glue,
	polycoated or waxed materials.

3.09	Lightly printed bleached sulphate boards  • Lightly printed sheets of bleached sulphate board, without glue, polycoated or waxed materials.
3.10	<ul> <li>Multi printing</li> <li>Woodfree, coated, lightly printed, free from wet-strength paper or paper coloured in the mass.</li> </ul>
3.11	<ul> <li>White heavily printed multiply board New cuttings of heavily printed white multiply board, containing woodfree, mechanical or thermo-mechanical pulp plies, but without grey plies.</li> </ul>
3.12	<ul> <li>White lightly printed multiply board</li> <li>New cuttings of lightly printed white multiply board, containing woodfree, mechanical or thermo-mechanical pulp plies, but without grey plies.</li> </ul>
3.13	<ul> <li>White unprinted multiply board</li> <li>New cuttings of unprinted white multiply board, containing woodfree, mechanical or thermo-mechanical pulp plies, but without grey plies.</li> </ul>
3.14	<ul> <li>White newsprint</li> <li>Shavings and sheets of white unprinted newsprint, free from magazine paper.</li> </ul>
3.15	<ul> <li>White mechanical pulp based coated and uncoated paper</li> <li>Shavings and sheets of white unprinted coated and uncoated mechanical pulp based paper.</li> </ul>
3.15.01	<ul> <li>White mechanical pulp based paper containing coated paper</li> <li>Shavings and sheets of white unprinted mechanical pulp based coated paper.</li> </ul>
3.16	<ul> <li>White woodfree coated paper, without glue</li> <li>Shavings and sheets of white unprinted woodfree coated paper, without glue</li> </ul>
3.17	<ul> <li>White shavings</li> <li>Shavings and sheets of white unprinted paper, free from newsprint and magazine paper containing a minimum of 60% of woodfree paper; may contain a maximum of 10% of coated paper. Without glue.</li> </ul>
3.18	<ul> <li>White woodfree shavings</li> <li>Shavings and sheets of white unprinted woodfree paper; may contain a maximum of 5% of coated paper. Without glue.</li> </ul>
3.18.01	White woodfree uncoated shavings  • Shavings and sheets of white unprinted woodfree paper, free from coated paper. Without glue.
3.19	<ul> <li>Unprinted bleached sulphate board</li> <li>Unprinted sheets of bleached sulphate board, without glue, polycoated or waxed materials.</li> </ul>

Group 4:	Kraft Grades
4.01	New shavings of corrugated board
	Shavings of corrugated board, with liners of kraft or testliner.
4.01.01	Unused corrugated kraft
	• Unused boxes, sheets and shavings of corrugated board, with kraft
	liners only, the fluting made from chemical or thermo-chemical pulp.
4.01.02	Unused corrugating material
	• Unused boxes, sheets and shavings of corrugated board, with liners of
	kraft or testliner.
4.02	Used corrugated kraft I
	• Used boxes of corrugated board, with kraft liners only, the fluting made
	from chemical or thermo-chemical pulp.
4.03	Used corrugated kraft II
	Used boxes of corrugated board, with liners of kraft or testliners but
	having at least one liner made of kraft.
4.04	Used kraft sacks
	Clean used kraft sacks. Wet-strength and non wet-strength.
4.04.01	Used kraft sacks with polycoated papers
	Clean used kraft sacks. Wet-strength and non wet-strength. May include
	polycoated papers.
4.05	Unused kraft sacks
	Unused kraft sacks. Wet-strength and non wet-strength.
4.05.01	Unused kraft sacks with polycoated papers
	Unused kraft sacks. Wet-strength and non wet-strength. May include
	polycoated papers.
4.06	Used kraft
	Used kraft paper and board of a natural or white shade.
4.07	New kraft,
	Shavings and other new kraft paper and board of a natural shade.
4.08	New carrier kraft
	New carrier kraft, may include wet-strength paper.

Group 5:	Special Grades
5.01	Mixed recovered paper and board
	Unsorted paper and board, separated at source.
5.02	Mixed packaging
	• A mixture of various qualities of used paper and board packaging, free
	from newspapers and magazines.
5.03	Liquid board packaging
	Used liquid packaging board including used PE-coated liquid packaging
	board (with or without aluminium content), containing a minimum of
	50% by weight of fibres, and the balance being aluminium coatings.

5.04	<ul> <li>Wrapper kraft</li> <li>Poly-lined, sprayed, or laminated used kraft. Must not contain bitumen or wax coatings.</li> </ul>
5.05	<ul> <li>Wet labels</li> <li>Used wet labels from wet-strength papers, containing a maximum of 1% glass content, and a maximum of 50% moisture, without other unusable material.</li> </ul>
5.06	Unprinted white wet-strength woodfree papers  • Unprinted white wet-strength woodfree papers.
5.07	Printed white wet-strength woodfree papers • Printed white wet-strength woodfree papers.