

EU ECOLABEL



USER'S MANUAL FOR THE APPLICATION FOR PRINTED PAPER



Attention!

This manual serves only as a guiding document. In any case the legal basis for being awarded the Ecolabel is 'Regulation (EC) no. 66/2010 of 25 November 2009 on the EU Ecolabel' and the 'Commission Decision of 16 August 2012 establishing the ecological criteria for the award of the EU Ecolabel for printed paper (2012/481/EU).

Stationery paper products were removed from the scope of EU Ecolabel criteria for printed paper through Commission Decision 2014/345/EU of 6 June 2014 amending Decision 2012/481/EU establishing the ecological criteria for the award of the EU Ecolabel for printed paper.

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General Information

The purpose of this User's Manual is to describe the requirements in form of data and documentation that the applicant has to compile in order to apply for the EU Ecolabel for printed paper. In addition, this manual describes the requirements for demonstrating continued compliance once the label has been granted.

The basis for the manual is Commission Decision of 16 August 2012 establishing the ecological criteria for the award of the EU Ecolabel to printed paper (2012/481/EU) and Commission Decision 2014/345/EU of 6 June 2014 amending Decision 2012/481/EU establishing the ecological criteria for the award of the EU Ecolabel.

Please also note that a corrigendum to Commission Decision 2012/481/EU of 16 August 2012 establishing the ecological criteria for the award of the EU Ecolabel for printed paper was published on 7 May 2013 (JO L 125, p. 35-36).

Application forms for the European Union Ecolabel shall be provided at least in two copies (some Member States might ask for more copies) bearing original signatures. The application form will be provided by any of the Competent Bodies responsible for the European Union Ecolabel Scheme. For any information, please get in contact with the EU Ecolabel Helpdesk (Ecolabel@biois.com).

For which products can applications be made?

Certifiable products

Only products resulting from the processing of a printing material, the processing consist of printing onto paper, can bear the logo. In addition to printing, the processing may include finishing, for example folding, stamping and cutting or assembling, using glue, binding, yarn-binding.

Printed paper products include newspapers, advertising materials and newsheets, magazines, journals, catalogues, books, leaflets, brochures, posters, business cards and labels.

The printed paper product shall consist of at least 90 % by weight of paper, paperboard or paper-based substrates, except for books, catalogues, booklets or forms that shall consist of at least 80 % by weight of paper or paperboard or paper-based substrates. Inserts, covers and any printed paper part of the final printed paper shall be considered to form part of the printed paper product.

Fixed inserts to the printed paper product (not intended to be removed) shall fulfil the requirements of the Annex to the Decision 2012/481/EU. Inserts that are not fixed to the printed paper (such as flyers, removable stickers) but sold or provided with it, shall fulfil the requirements of the Annex to the Decision 2012/481/EU only if the EU Ecolabel is intended to be placed on them.

Non certifiable products

Printed tissue papers, printed paper products used for packaging and wrapping, folders, envelopes and ring binders are not included in the printed paper product group.

Compiling documentation

The applicant must compile documentation for all relevant criteria for the product. For this purpose the User Manual contains pre-made forms of declarations stating the information needed for the application. Two different levels for declarations are often used: declarations from the applicant/producer and declarations from the supplier. In case where the supplier must provide information which he wants to be held confidential to the applicant it can be sent directly to the Competent Body, which is assigned to treat confidential information.

All relevant documentation has to be sent to the Competent Body together with the application. A copy of all material must be kept by the applicant.

Three main steps may be isolated in the manufacturing of the printed paper products: printing, coating and finishing processes.

In the following notes, the levels of data collection (registrations) are specified for each of the criterion and if they apply to the non-paper components, to the printing, coating and finishing processes of the paper components or to the final printed paper product. These specifications are given with the aim of being as product specific as possible, without causing unacceptable costs for the data collection.

All information on the EU Ecolabel product/products should refer to the requirements in the criteria document.

The applicant shall assemble a dossier containing all relevant data and manufacturers' declarations related to the EU Ecolabel product. This dossier should be presented as a part of the application to verify compliance to the criteria.

The EU Ecolabel criteria for printed paper products comprise:

- A site-specific part, related to management procedures, which remains valid until the end of the licensing period, unless changes which would impact on the EU Ecolabel criteria are introduced in the production process.
- A product-specific part, which can change during the validity of the EU Ecolabel license. Examples of changes which may vary during the validity of the EU Ecolabel license are substrate paper, consumables used for printing, coating and finishing of the printed paper product or amount of waste paper produced.

This means that, in the case where an application covers a weekly magazine XXX, the data concerning the product-specific part included in the application dossier should clearly refer that the 'worst' reference case was considered by the printing company, in order to allow all subsequent



orders, produced at the same site with the same production process, and involving a lower input of the same materials and consumables, to bear the EU Ecolabel, during the validity of the criteria.

When a 'worst' reference case application is submitted and approved, any changes regarding the product-specific part related criteria (e.g., substrate paper, consumables used for printing, coating and finishing of the printed paper product or amount of waste paper produced) shall immediately be reported to the respective Competent Body, in order to be approved.

Who can apply for the EU Ecolabel?

Manufacturers, importers, services providers, traders and retailers, may submit applications for the Ecolabel. Traders and retailers may submit applications in respect of products placed on the trade market under their own brand names.

Examples of possible applicants are publishers, editors, book sellers, printers, advertisers/public relations agencies, private companies and public institutions.

However, the documentation should always be provided by the printing house or those responsible for the production of the printed paper product.

If the printed paper is printed in a single Member State, the application shall be presented in this Member State.

If the printed paper is printed in the same form in several Member States, the application may be presented in any of these Member States.

If the printed paper is printed from outside the European Union, the application may be presented in any of the Member States in which the product is to be, or has been placed on the market.

What does an application/contract cover?

An EU Ecolabel licence for printed paper products shall not be awarded to a printing service or to a printing company.

An application for printed paper products can be made for:

- A specific printed paper product identified by its trade name (e.g., magazine XXX) or
- A single category of products (e.g., magazines, brochures, books, newspapers). In this case, the category of products shall be identified as precise as possible (e.g., magazines, glued, format X-Y, pages A-B).

In both cases, the applicant shall submit an application taking into account the "worst" reference case, which will allow the submission of further orders under the limit set by the reference case.

When an EU Ecolabel application is based on a "worst" reference case, test reports concerning deinking and removability of adhesives shall be submitted for all the possible combinations (different inks on different paper types and different glues used).

When presenting an application, the applicant must submit an identification or reference number of the reference product case in question. All consumables used for the production of the EU Ecolabel printed paper product, precise description of the substrate and declaration about complying with all criteria must be reported in the application. After the application has been processed by the Competent Body and if the result of the process is positive, a certificate is issued to the applicant referring to the company.

The EU Ecolabel contract to be signed between the printing company and the Competent Body shall include two appendixes:

- Appendix 1 listing all approved consumables, paper substrates and reference to the printing process and printing site.
- Appendix 2 listing all trade names and/or corresponding internal reference number covered by the specific EU Ecolabel licence.

Only the trade names of printed paper products covered by an EU Ecolabel licence can be listed in ECat and on the contract. Reference to categories of products (e.g., magazines, brochures, books, newspapers) shall not be listed.

Whenever an extension of the EU Ecolabel contract is requested for new trade names, the printing company shall:

- Register the extension request in ECat, specifying the trade name of the new printed paper product to be added.
- Send a declaration to the Competent Body stating that the new printed paper product is in compliance with the applicable EU Ecolabel criteria assessed and verified under the original application.

The printing company will only have the right to use the EU Ecolabel in the new printed paper product after the approval of the Competent Body in ECat and after Appendix 2 to the EU Ecolabel contract has been updated.

Whenever an EU Ecolabel licence is awarded to categories of products, the printing company is not allowed to use the EU Ecolabel in the same category of printed paper products, whose trade names are not listed in Appendix 2 to the EU Ecolabel contract.

A 'Check-List' is available in order to help compiling documentation for the application process and thereby ensure that all criteria are documenting when submitting an application.

Choice of analytical laboratory

In the criteria document, the "Assessment and verification requirements", paragraph 6 says: "Where possible, the testing should be performed by laboratories that meet the general requirements of EN ISO 17025 or equivalent".

There is a need for a common practice as on how this shall be interpreted. A decision hierarchy for acceptance of a laboratory is described in the following (in ranked priority):

- (1) Laboratory tests shall be performed by laboratories that are accredited for the specified test method according to ISO 17025 or GLP, where possible. The Competent Bodies accept accredited laboratories in all Member States in the EU/EEA and in countries that have signed the mutual recognition agreement according to ILAC, the international accreditation organisation. If in the Member State where the applicant submits its dossier or where the company or the concerned production plant or service is based, one or more laboratories are accredited according to ISO 17025 or GLP, applicants shall use such a laboratory, either in that Member State or another.
- (2) Laboratories with an accreditation for other tests than those required by the criteria can be accepted if they submit a declaration that the tests are done following the same quality management procedures as the tests for which they obtained an accreditation. In case of doubt, the Competent Body or national board shall inspect the laboratory that carries out the tests or shall select an accredited auditor who will be charged to do so.
- (3) If neither point 1 or 2 is possible, applicants should call on a non-accredited independent laboratory certified or approved by a Government Department or other public body in a Member State. In case of doubt, the Competent Body or national board shall inspect the laboratory that carries out the tests or shall select an accredited auditor who will be charged to do so.
- (4) If none of points 1 to 3 are possible, applicants may have the tests performed by an independent laboratory that is neither accredited nor approved by authorities according to point 3. Laboratories with a quality management system shall be preferred. A laboratory situated in an organisation holding an ISO 9001 certificate, may be accepted if the scope of the certification includes the laboratory. The Competent Body or national board shall verify the competence of the laboratory that carries out the tests or shall select an accredited auditor who will be charged to do so.
- (5) If none of the above mentioned points can be fulfilled, the applicant may have the tests carried out in a company laboratory (that is not accredited ISO 17025 or GLP, as this would be covered by point (1)). The Competent Body or national board shall ensure that the tests are properly carried out or shall select an accredited auditor who will be charged to do so. In this case, the laboratory shall have a quality management system. A laboratory within an organisation holding an ISO 9001 certificate is accepted as being under appropriate quality management, if the scope of the certification includes the laboratory. This option may also be used for continuous monitoring of the production, including discharges and emissions, and for testing fitness for use when no standard test method exists.

Continuous control – the responsibility of the applicant

The applicant has the responsibility to keep the product performance in continued compliance with the EU Ecolabel criteria.

After an EU Ecolabel has been granted, the applicant must keep the dossier continuously up to date. In the case where continued tests or measurements are required, the contract holder or his supplier is responsible for keeping a journal containing the test results and other relevant



documentation. This documentation does not need to be sent to the Competent Body, but must be available at any time, if requested.

Any changes concerning approved consumables, paper substrates, printing process, printing site and trade names and/or internal reference numbers listed in Appendixes 1 and 2 of the EU Ecolabel contract shall be submitted and approved by the Competent Body.

If data shows that the product, during the validity period of the license, no longer complies with the criteria, this must be reported to the Competent Body immediately together with a statement of the reasons for the non-compliance. The Competent Body will in each individual case decide the consequences of the non-compliance, e.g. a demand for additional measurements, suspension of the EU Ecolabel license, etc.

Assessment of the compliance to the criteria

The Competent Body may undertake any necessary investigations to monitor the ongoing compliance by the holder of the EU Ecolabel license as regards to both the product group criteria and the terms of use and provisions of the contract. To this end, the Competent Body may request, and the holder shall provide, any relevant documentation to prove such compliance.

Further, the Competent Body may, at any reasonable time and without notice, request, and the holder shall grant, access to the premises.

Costs

The applicant must pay all expenses for tests and verifications related to the application, holding and use of the EU Ecolabel.

The Competent Body to which an application is made shall charge a fee according to Annex III of Regulation (EC) No 66/2010 of 25 November 2009.

Applicant may be charged for travel and accommodation costs where an on-site verification is needed outside the Member State in which the Competent Body is based.

The application process

To get the EU Ecolabel licence, it is mandatory to apply using the online application tool, Ecat_admin. Please register at the following address: https://webgate.ec.europa.eu/ecat_admin.

Download the E-Catalogue User Manual at <http://ec.europa.eu/environment/ecolabel/how-to-apply-for-eu-ecolabel.html>. It will help you navigate the online system. If you have any problems using the system, contact your Competent Body.

Please note that the required paper file will also need to be submitted to the relevant Competent Body once the application in Ecat_admin has been made.

After receiving an application the Competent Body will go through the dossier including the documentation sent directly from the suppliers. The Competent Body has the possibility to ask for further information, if necessary.

The officer at the Competent Body who is assessing the application makes a list of missing documentation, which is communicated to the applicant. The applicant makes sure that the listed requirements are met and provides the Competent Body the missing documentation. In most cases it may be necessary to send more than one list of missing documentation.

As part of the assessment process, the Competent Body may carry out an on-site visit to the applicant and/or his suppliers.

When all requirements have been met, the Competent Body will sign a contract with the applicant specifying the terms of use of the EU Ecolabel, following the standard contract on Annex IV of the Regulation (EC) No 66/2010 of 25 November 2009.

When criteria documents are revised, the license holders will have to apply for re-assessment of their license according to the revised criteria. A transition period for adjusting the products and apply for re-assessment will apply. This will be announced by the European Commission.

General about Ecological Criteria

The ecological criteria apply to all such processes undertaken at the site or sites where the printed paper product is manufactured. If there are printing, coatings and finishing processes exclusively used for EU Ecolabel products, criteria 2, 4, 5, 6 and 7 shall apply only to those processes.

Criteria 1, 3, 8, 9 and 10 apply to the final printed paper product.

Criterion 2 applies both to the non-paper components of the printed paper product and to the printing, coating and finishing processes of the paper components.

Criteria 4, 5, 6 and 7 apply to the printing, coating and finishing processes of the paper components only. The ecological criteria do not cover the transport of raw materials, consumables and final products.

Consumables mean chemical products used during the printing, coating and finishing processes and capable of being consumed, destroyed, dissipated, wasted, or spent. Consumables include products such as printing inks and dyes, toners, overprinting varnishes, varnishes, adhesives, washing agents and damping solutions.

Criterion 1 - Substrate

(a) The printed paper product shall be printed only on paper bearing the EU Ecolabel as established in Commission Decision 2011/333/EU.

(b) Where newsprint paper is used, the printed paper product shall be printed only on paper bearing the EU Ecolabel as established in Commission Decision 2012/448/EU.

Required Documentation for Assessment and Verification

The applicant shall provide the specifications of the printed paper products concerned, including the trade names, amounts and weight/m² of the paper used.

The list shall also include the names of the suppliers of the papers used.

The applicant shall demonstrate compliance with this criterion by providing:

- A copy of a valid EU Ecolabel certificate for the paper used, or
- A declaration from the Competent Body, referring that an EU Ecolabel license was awarded to substrate paper used, or
- The appendix of the contract signed by the paper producer and by the Competent Body, referring explicitly the EU Ecolabel license number and the trade name concerning the substrate paper used by the applicant.

Please note that if requested by the Competent Body, the applicant may have to provide the invoices related to the EU Ecolabel substrate paper used.

Information on the substrate paper used should be provided to the Competent Body in Form 1 (Annex 1).

Criterion 2 - Excluded or limited substances and mixtures

a) Hazardous substances and mixtures

Consumables that could end up in the final printed paper product, and that contain substances and/or mixtures meeting the criteria for classification with the hazard statements or risk phrases specified below in accordance with Regulation (EC) No 1272/2008 of the European Parliament and of the Council or Council Directive 67/548/EEC or substances referred to in Article 57 of Regulation (EC) No 1907/2006 of the European Parliament and of the Council shall not be used for printing, coating, and finishing operations of the final printed paper product.

This requirement shall not apply to toluene for use in rotogravure printing processes where a closed or encapsulated installation or recovery system, or any equivalent system, is in place to control and monitor fugitive emissions and where the recovery efficiency is at least 92 %. UV varnishes and UV inks classified H412/R52-53 are also exempted from this requirement.

The non-paper components (up to 20 % in weight, as specified in Article 1) that are part of the final paper product shall not contain the substances referred to above.

List of hazard statements and risk phrases:

<i>Hazard Statement¹</i>	<i>Risk Phrase²</i>
<i>H300 Fatal if swallowed</i>	<i>R28</i>

<i>H301 Toxic if swallowed</i>	<i>R25</i>
<i>H304 May be fatal if swallowed and enters airways</i>	<i>R65</i>
<i>H310 Fatal in contact with skin</i>	<i>R27</i>
<i>H311 Toxic in contact with skin</i>	<i>R24</i>
<i>H330 Fatal if inhaled</i>	<i>R23 or R26</i>
<i>H331 Toxic if inhaled</i>	<i>R23</i>
<i>H340 May cause genetic defects</i>	<i>R46</i>
<i>H341 Suspected of causing genetic defects</i>	<i>R68</i>
<i>H350 May cause cancer</i>	<i>R45</i>
<i>H350i May cause cancer by inhalation</i>	<i>R49</i>
<i>H351 Suspected of causing cancer</i>	<i>R40</i>
<i>H360F May damage fertility</i>	<i>R60</i>
<i>H360D May damage the unborn child</i>	<i>R61</i>
<i>H360FD May damage fertility. May damage the unborn child</i>	<i>R60; R61; R60-61</i>
<i>H360Fd May damage fertility. Suspected of damaging the unborn child</i>	<i>R60/63</i>
<i>H360Df May damage the unborn child. Suspected of damaging fertility</i>	<i>R61/62</i>
<i>H361f Suspected of damaging fertility</i>	<i>R62</i>
<i>H361d Suspected of damaging the unborn child</i>	<i>R63</i>
<i>H361fd Suspected of damaging fertility. Suspected of damaging the unborn child</i>	<i>R62-63</i>
<i>H362 May cause harm to breast fed children</i>	<i>R64</i>
<i>H370 Causes damage to organs</i>	<i>R39/23; R39/24; R39/25; R39/26; R39/27; R39/28</i>
<i>H371 May cause damage to organs</i>	<i>R68/20; R68/21; R68/22</i>
<i>H372 Causes damage to organs through prolonged or repeated exposure</i>	<i>R48/25; R48/24; R48/23</i>
<i>H373 May cause damage to organs through prolonged or repeated exposure</i>	<i>R48/20; R48/21; R48/22</i>
<i>H400 Very toxic to aquatic life</i>	<i>R50</i>
<i>H410 Very toxic to aquatic life with long-lasting effects</i>	<i>R50-53</i>
<i>H411 Toxic to aquatic life with long-lasting effects</i>	<i>R51-53</i>
<i>H412 Harmful to aquatic life with long-lasting effects</i>	<i>R52-53</i>

<i>H413 May cause long-lasting harmful effects to aquatic life</i>	<i>R53</i>
<i>EUH059 Hazardous to the ozone layer</i>	<i>R59</i>
<i>EUH029 Contact with water liberates toxic gas</i>	<i>R29</i>
<i>EUH031 Contact with acids liberates toxic gas</i>	<i>R31</i>
<i>EUH032 Contact with acids liberates very toxic gas</i>	<i>R32</i>
<i>EUH070 Toxic by eye contact</i>	<i>R39-41</i>

¹ As provided for in Regulation (EC) No 1272/2008 of the European Parliament and of the Council.

² As provided for in Council Directive 67/548/EEC.

Substances or mixtures which change their properties upon processing (e.g., become no longer bioavailable, undergo chemical modification) so that the identified hazard no longer applies are exempted from the above requirement.

Concentration limits for substances and mixtures which may be, or have been, assigned the hazard statements or risk phrase listed above or which meet the criteria for classification in the hazard classes or categories, and concentration limits for substances meeting the criteria of Article 57 (a), (b) or (c) of Regulation (EC) No 1907/2006, shall not exceed the generic or specific concentration limits determined in accordance with the Article 10 of Regulation (EC) No 1272/2008. Where specific concentration limits are determined, they shall prevail over the generic ones.

Concentration limits for substances meeting criteria set out in Article 57 (d), (e) or (f) of Regulation (EC) No 1907/2006 shall not exceed 0,1% weight by weight.

Required Documentation for Assessment and Verification

For substances not already classified in accordance with Regulation (EC) No 1272/2008, the applicant shall prove compliance with these criteria by providing: (i) a declaration that the non-paper components that are part of the final product do not contain the substances referred to in these criteria in concentration above the authorised limits; (ii) a declaration that consumables that could end up in the final printed paper product and used for printing, coating, and finishing operations do not contain the substances referred to in these criteria in concentration above the authorised limits; (iii) a list of all consumables used for the printing, finishing and coating of the printed paper products. This list shall include the quantity, function and suppliers of all the consumables used in the production process.

The applicant shall demonstrate compliance with this criterion by providing a declaration on the non-classification of each substance into any of the hazard classes associated to the hazard statements referred to in the above list in accordance with Regulation (EC) No 1272/2008, as far as this can be determined, as a minimum, from the information meeting the requirements listed in Annex VII to Regulation (EC) No 1907/2006. This declaration shall be supported by summarised information on the relevant characteristics associated to the hazard statements referred to in the above list, to the level of detail specified in Sections 10, 11 and 12 of Annex II to Regulation (EC) No 1907/2006 (Requirements for the Compilation of Safety Data Sheets).

Information on intrinsic properties of substances may be generated by means other than tests, for instance through the use of alternative methods such as *in vitro* methods, by quantitative structure activity models or by the use of grouping or read-across in accordance with Annex XI to Regulation (EC) No 1907/2006. The sharing of relevant data is strongly encouraged.

The information provided shall relate to the forms or physical states of the substance or mixtures as used in the final product.

For substances listed in Annexes IV and V to REACH, exempted from registration obligations under Article 2(7)(a) and (b) of Regulation (EC) No 1907/2006 REACH, a declaration to this effect will suffice to comply with the requirements set out above.

The applicant shall provide appropriate documentation on the recovery efficiency of the closed/encapsulated installation/recovery system, or any equivalent system, that has been put in place to deal with the use of toluene in rotogravure printing processes.

In order to demonstrate that the recovery efficiency of the closed/encapsulated installation/recovery system, or any equivalent system, is at least 92%, the rotogravure printer shall provide the last years calculation of the solvent management plan.

Please note that the calculation method is laid down in part 7 (Solvent management plan) of Annex VII of Directive 2010/75/EU, of 24 November 2010, on industrial emissions (Integrated pollution prevention and control).

Sub criterion 2(a) only applies to consumables that could end up in the final printed paper product. Thereby, as washing agents don't end up in the final printed paper product, they are not covered by this requirement.

b) Substances listed in accordance with article 59(1) of Regulation (EC) No 1907/2006

No derogation from the prohibition set out in Article 6(6) of Regulation (EC) No 66/2010 shall be granted concerning substances identified as substances of very high concern and included in the list provided in Article 59 of Regulation (EC) No 1907/2006, present in mixtures in concentrations higher than 0,1%. Specific concentration limits determined in accordance with Article 10 of Regulation (EC) No 1272/2008 shall apply where the concentration is lower than 0,1%.

As an assessment and verification, the applicant shall provide the list of substances identified as substances of very high concern and included in the candidate list in accordance with Article 59 of Regulation (EC) No 1907/2006, which can be found here:

http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp

Reference to the list shall be made on the date of application.

The applicant shall prove compliance with this criterion by providing data on the amount of substances used for the printing of the printed paper products and a declaration stating that the

substances referred to in this criterion are not retained in the final product above the concentration limits specified. The concentration shall be specified in the safety data sheets in accordance with Article 31 of Regulation (EC) No 1907/2006.

c) Biocides

Biocides, either as part of the formulation or as part of any mixture included in the formulation, that are used to preserve the product and that are classified H410/R50-53 or H411/R51-53 in accordance with Directive 67/548/EEC, Council Directive 1999/45/EC (1) or Regulation (EC) No 1272/2008, are permitted only if their bioaccumulation potentials are characterised by log Pow (log octanol/water partition coefficient) < 3,0 or an experimentally determined bioconcentration factor (BCF) ≤ 100.

As an assessment and verification, the applicant shall provide copies of the material safety data sheets for all biocides used during the different production stages, together with a documentation of the concentrations of the biocides in the consumable.

Documentation regarding log Pow or BCF shall be provided to the Competent Body, on either the Material Safety Data Sheet or by a separate test report.

d) Washing agents

Washing agents used for cleaning in printing processes and/or sub-processes that contain aromatic hydrocarbon shall only be allowed if they are in compliance with point 2(b) and if one of the following conditions is fulfilled:

- (i) The amount of aromatic hydrocarbons in the washing agent products used does not exceed 0,1 % (w/w);*
- (ii) The amount of aromatic hydrocarbon-based washing agent used annually does not exceed 5 % of the total amount of washing agent used in one calendar year.*

This criterion shall not apply to toluene used as washing agent in rotogravure printing.

As an assessment and verification, the applicant shall provide the Safety Data Sheet for each washing agent used in a printing house during the year to which the annual consumption refers. The washing agent suppliers shall provide declarations of the aromatic hydrocarbon contents in the washing agents.

e) Alkyl phenol ethoxylates – Halogenated solvents – Phthalates

The following substances or preparations shall not be added to inks, dyes, toners, adhesives, or washing agents or other cleaning chemicals used for the printing of the printed paper product:

- Alkyl phenol ethoxylates and their derivatives that may produce alkyl phenols by degradation.*
- Halogenated solvents that at the time of application are classified in the hazard or risk categories listed in point 2(a).*

— *Phthalates that at the time of application are classified with risk phrases H360F, H360D, H361f in accordance with Regulation (EC) No 1272/2008.*

As an assessment and verification, the applicant shall provide a declaration of compliance with this criterion.

f) Printing inks, toners, inks, varnishes, foils and laminates

The following heavy metals or their compounds shall not be used in printing inks, toners, inks, varnishes, foils and laminates (whether as a substance or as part of any preparation used): cadmium, copper (excluding copper-phthalocyanine), lead, nickel, chromium VI, mercury, arsenic, soluble barium, selenium, antimony. Cobalt can only be used up to 0,1 % (w/w). Ingredients may contain traces of those metals up to 0,01 % (w/w) deriving from impurities in the raw materials.

As an assessment and verification, the applicant shall provide a declaration of compliance with this criterion as well as declarations from ingredient suppliers.

Required Documentation for Assessment and Verification

The applicant shall provide a declaration of compliance and if required (s)he provides also a safety data sheet or test report which shall indicate the test method, threshold and conclusion stated, using the test methods mentioned in each sub-criterion. See specific requirements on the assessment and verification in the a) to f) sub-criterion of the criterion 2.

Information on the consumables used for printing, coating and finishing of the printed paper product should be provided to the Competent Body in Form 2, along with their SDS (safety data sheets), containing:

1. Name (trade name and functional name)
2. CAS number
3. Function of the chemical
4. Name of supplier (producer/importer)
5. Annual amount of chemical used (liters/year)
6. VOC content (%)
7. VOC amount (kg/year)

Criterion 3 - Recyclability

The printed paper product shall be recyclable. The printed paper shall be de-inkable and the non-paper components of the printed paper product shall be easily removable to ensure that those components will not hinder the recycling process.

(a) Wet strength agents may be used only if the recyclability of the finished product can be proved.

- (b) *Adhesives may be used only if their removability can be proved.*
- (c) *Coating varnishes and lamination, including polyethene and/or polyethene/polypropylene, may be used only for covers of books, magazines and catalogues.*
- (d) *The de-inkability shall be proved.*

Required Documentation for Assessment and Verification

The applicant shall provide the test result of the recyclability for wet strength agents and removability for adhesives.

The test methods to be used are:

Parameter	Test method
Wet strength agents	PTS method PTS-RH 021/97
Non-soluble adhesive removability	INGEDE Method 12 or equivalent
De-inkability	'Deinking Scorecard' ⁽¹⁾ of the European Recovered Paper Council or equivalent

⁽¹⁾ Assessment of Print Product Recyclability — Deinkability Score — User's Manual, www.paperrecovery.org, 'Publications'.

Testing must be performed on a final product representative of the worst case reference.

Regarding sub criterion 3(a), if the paper producer(s) declare(s) that 'wet strength agents' were not used in the paper production process, there is no need to provide to the Competent Body any test report.

The applicant shall provide a declaration that coated and laminated printed paper products, if used in the reference product, are in compliance with criterion 3(c).

The term 'coating varnish' covers the following varnishes: water-based varnishes, oil-based varnishes and UV-varnishes.

Where a part of a printed paper product is easily removable (for instance a plastic cover), the recyclability test may be made without this component. The easiness of removal of the non-paper components shall be proven via a declaration of the paper collecting company, the recycling company or an equivalent organisation. Test methods shown by a competent and independent third party as giving equivalent results may also be used.

Please note that 'INGEDE Method 12' (Assessment of the Recyclability of Printed Paper Products – Testing of the Fragmentation Behaviour of Adhesive Applications), June 2009, applies only for non-soluble adhesives application and intends to measure the success of mechanical screening. Thereby, water-based adhesives don't need to be tested.

The 'Deinking Scorecard' was adopted by the European Recovered Paper Council (ERPC) to promote the eco-design of printed products, which will ensure their recyclability and also promote sustainable production processes. A positive score is sufficient to prove compliance with sub criterion 3(d).

Score	Evaluation of Deinkability
71 to 100 Points	Good
51 to 70 Points	Fair
0 to 50 Points	Poor
Negative (fails one threshold or more)	Not suitable for deinking

Criterion 4 - Emissions

(a) Emissions to water

Rinsing water containing silver from film processing, as well as from plate production, and photo-chemicals shall not be discharged to a sewage treatment plant.

As an assessment and verification, the applicant shall provide a declaration of compliance with this criterion, together with a description of the management of photo-chemicals and silver containing rinsing water on site. Where the film processing and/or the plate production are outsourced, the sub-contractor shall provide a declaration of compliance with this criterion, together with a description of the management of photo-chemicals and silver containing rinsing water at the subcontractors.

The amount of Cr and Cu discharged into a sewage treatment plant must not exceed, respectively, 45 mg per m² and 400 mg per m² of printing cylinder surface area used in the press.

As an assessment and verification, the discharges of Cr and Cu into the sewage shall be checked at rotogravure printing plants after treatment and before their release. A representative sample of Cr and Cu discharges shall be collected each month. At least one annual analytical test shall be carried out by an accredited laboratory to determine the content of Cr and Cu in a representative sub-sample of these samples.

Please note that rotogravure printers which concentrate their chromium-containing waste water by evaporation and therefore do not discharge any chromium into the sewage system are excluded from the requirement concerning chromium measurements and chromium calculations.

Compliance with this criterion shall be assessed by dividing the content of Cr and Cu, as determined by the annual analytical test, by the cylinder surface used in the press during the printing.

Representative samples of Cr and Cu discharges shall be collected each month, stored and after twelve months, mixed proportionally together. An accredited laboratory should determine the content of Cr and Cu of the mixed waste water.

The test methods to be used are:

Parameter	Test method
Cr	EN ISO 11885 (Water quality. Determination of selected elements by inductively coupled plasma optical emission spectrometry (ICP-OES) EN 1233 (Water quality. Determination of chromium. Atomic absorption spectrometric methods)
Cu	EN ISO 11885 (Water quality. Determination of selected elements by inductively coupled plasma optical emission spectrometry (ICP-OES)

The Cr and Cu concentration determined in the last analytical test by an accredited laboratory, is multiplied by the waste water amount discharged into the sewage, which will lead to the yearly amount of Cr and Cu sent to the sewage.

This amount is divided by the galvanized cylinder surface area produced for all print jobs in the year. The cylinder surface used in the press during printing is calculated by multiplying the total cylinder surface of a machine (= number of cylinders x $2\pi rL$, where r is the radius and L the length of the cylinder) by the number of printing productions during a year (= number of different printing jobs).

Please note that the calculation of the total surface is complex because in rotogravure printing, the length and radius of the produced cylinders for print jobs is selectable. Therefore, the result obtained by multiplying the total surface area of an average cylinder set by the number of print jobs in the last year could also be accepted.

(b) Emissions to air

Volatile Organic Compounds (VOC)

The following criterion must be met:

$$(P_{VOC} - R_{VOC}) / P_{paper} < 5 \text{ [kg/tonnes]}$$

Where:

P_{VOC} = *the annual total kilograms of VOC contained in the purchased chemical products used for the annual total production of printed products*

R_{VOC} = *the annual total kilograms of VOC destroyed by abatement, recovered from printing processes and sold, or reused*

P_{paper} = *the annual total tonnes of paper purchased and used for the production of printed products.*

Where a printing house uses different printing technologies, this criterion shall be fulfilled for each one separately.

The P_{VOC} term shall be calculated from SDS information related to VOC content or from an equivalent declaration provided by the supplier of chemical products.

The R_{VOC} term shall be calculated from the declaration on the content of VOC contained in the chemical products sold or from the internal counting register (or any other equivalent document) reporting the annual amount of VOC recovered and reused on site.

Specific conditions for heat-set printing:

(i) For heat-set offset printing with an integrated after-burner unit in place for the drying unit, the following calculation method shall apply:

P_{VOC} = 90% of the annual total kilograms of VOC contained in damping solutions used for the annual production of printed products + 85% of the annual total kilograms of VOC contained in washing agents used for the annual production of printed products.

(ii) For heat-set offset printing, without an integrated after-burner unit in place for the drying unit, the following calculation method shall apply:

P_{VOC} = 90 % of the annual total kilograms of VOC contained in damping solutions used for the annual production of printed products + 85% of the annual total kilograms of VOC contained in washing agents used for the annual production of printed products + 10% of annual total kilograms of VOC contained in the printing inks used for the annual production of printed products.

For (i) and (ii), proportionately lower percentages than 90% and 85% may be used in this calculation if more than 10% or 15% respectively of annual total kilograms of VOC contained in the damping solutions or washing agents used for the annual production of printed products are shown to be abated in the treatment system for combusting gases from the drying process.

As an assessment and verification, a declaration of the VOC content in alcohols, washing agents, inks, damping solutions or other corresponding chemical products shall be provided by the chemical supplier. The applicant shall provide evidence of the calculation according to the criteria laid down above. The period for the calculations shall be based on the production during 12 months. In case of a new or a rebuilt production plant, the calculations shall be based on at least three months of representative running of the plant.

Specific conditions concerning 'heat-set printing' were established taking into account the following:

- VOC contained in damping solutions is very highly volatile. Therefore, it is assumed that 90% of those evaporate during printing processes and only 10% are destroyed in the 'emission control system'.
- Washing agents are mixed with water in the printing machine and VOC contained in those washing agents are collected directly in the printing machine. Therefore, only 15% of VOC contained in washing agents reaches the 'emission control system' and are destroyed there.
- In machines with an integrated afterburner unit, it is assumed that 100% of VOC contained in the printing inks is destroyed, as the automatic temperature regulation ensures that the production process stop if the abatement system fails.

- In machines without an integrated afterburner (external afterburner), it is assumed that VOC contained in the printing inks are not completely destroyed. In this case, it is therefore assumed that only 90% of VOC contained in the printing inks is destroyed, because there is a risk of a failure in the external afterburner that will not enable the automatic stop of the production process, which will result in VOC emissions that are not abated in the treatment system.
- R_{VOC} corresponds to the VOC contained in the solvent that is collected and disposed as waste.

Please note that:

- P_{VOC} term shall be calculated from SDS information related to VOC content or from an equivalent declaration provided by the supplier of the consumable.
- R_{VOC} term shall be calculated from the declaration on the VOC contained in the consumable sold or from the internal counting register (or any equivalent document) reporting the annual amount of VOC recovered and reused on site.

(c) Emissions from publication rotogravure printing

(i) Publication rotogravure printing emissions of VOC to air shall not exceed 50 mg C/Nm³.

As an assessment and verification, the applicant shall provide appropriate documentation showing compliance with this criterion.

In publication rotogravure printing, the only consumable which can emit VOC is toluene.

As most of the toluene is extracted from the waste gas through the toluene recovery plant, the cleaned waste gas sent to the chimney will only contain traces of toluene. The chimney waste gas should be monitored for toluene and the average value of the last year should be below 50 mg C/Nm³.

Please note that 50 mg C/Nm³ is equivalent to 54,2 mg toluene/ Nm³.

(ii) Equipment for reduction of emission to air of Cr⁶⁺ shall be installed.

(iii) Emissions of Cr⁶⁺ to air shall not exceed 15 mg/tonne paper.

As an assessment and verification, the applicant shall provide a description of the system in place (photo and technical drawing of the equipment), together with a documentation related to the control and the monitoring of Cr⁶⁺ emissions. The documentation shall include the test results related to the reduction of Cr⁶⁺ emissions to the air.

Test results of chromium concentration should be measured at the chimney according to the test method EN 14385:2004 (Stationary source emissions. Determination of the total emission of As, Cd, Cr, Co, Cu, Mn, Ni, Pb, Sb, TI and V) or with an equivalent test method.

The amount of chromium emitted to air per year is given by multiplying the concentration of chromium with the estimated yearly waste gas amount coming through the chimney. Finally, the

chromium amount is divided by the total annual tonnes of paper used for the production of the ecolabelled printed paper product.

Please note that the standard method EN 14385:2004 measures Cr in all its states. Therefore, this amount could be higher than the amount of only Cr⁶⁺ emissions to air per year.

(d) Printing processes to which no legislative measures apply

Volatile solvents from the drying process of heat-set offset and flexography printing shall be managed by means of recovery or combustion or any equivalent system. In all cases where no legislative measures apply, the emissions of VOC to air must not exceed 20 mg C/Nm³.

This requirement does not apply to screen printing and digital printing. Moreover it does not apply to heat-set and flexography installations with solvent consumption lower than 15 tonnes per year.

As an assessment and verification, the applicant shall provide a description of the system in place together with documentation and test results related to the control and the monitoring of emissions to air.

Criterion 5 - Waste

(a) Waste management

The facility where the printed paper products are produced shall have in place a system for handling waste, including residual products derived from the production of the printed paper products, as defined by local and national relevant regulatory authorities.

The system shall be documented or explained and shall include information on at least the following procedures:

- (i) handling, collection, separation and use of recyclable materials from the waste stream,*
- (ii) precovery of materials for other uses, such as incineration for raising process steam or heating, or agricultural use,*
- (iii) handling, collection, separation and disposal of hazardous waste, as defined by the relevant local and national regulatory authorities.*

As an assessment and verification, the applicant shall provide a declaration of compliance with this criterion, together with a description of the procedures adopted for waste management. Where appropriate, the applicant shall provide the corresponding declaration to the local authority every year. Where the waste management is outsourced, the sub-contractor shall provide a declaration of compliance with this criterion as well.

(b) Waste paper

The amount of waste paper 'X' produced shall be:

<i>Printing method</i>	<i>Maximum waste paper (%)</i>
<i>Sheet offset</i>	<i>23</i>
<i>Coldset, newspaper</i>	<i>10</i>
<i>Coldset, form printing</i>	<i>18</i>
<i>Coldset rotation (except newspapers and forms)</i>	<i>19</i>
<i>Heatset rotation</i>	<i>21</i>
<i>Gravure printing</i>	<i>15</i>
<i>Flexography (except corrugated fibreboard)</i>	<i>11</i>
<i>Digital printing</i>	<i>10</i>
<i>Flexography, corrugated fibreboard</i>	<i>17</i>
<i>Screen printing</i>	<i>23</i>

where:

$X =$ *annual tonnes of waste paper produced during the printing (including finishing processes) of the ecolabelled printed paper product, divided by annual tonnes of paper purchased and used for the production of ecolabelled printed paper product.*

Where the printing house carries out finishing processes on behalf of another printing house, the amount of waste paper produced in those processes shall not be included in the calculation of 'X'.

Where the finishing processes are outsourced to another company, the amount of waste paper resulting from the outsourced work shall be calculated and declared in the calculation of 'X'.

As an assessment and verification, the applicant shall provide a description of the calculation of the amount of waste paper from the production of the ecolabelled printed paper product, together with a declaration from the contractor collecting the waste paper from the printing house. The outsourcing terms and calculations on the amount of paper waste involved in the finishing processes shall be provided. The period for the calculations shall be based on the production during 12 months. In case of a new or a rebuilt production plant, the calculations shall be based on at least three months of representative running of the plant.

Alternatively, the applicant may provide calculations regarding the total amount of waste paper produced annually in the printing house, and declare that these results can be assumed as valid for the EU Ecolabelled production.

Criterion 6 - Energy use

The printing house shall establish a register of all energy consuming devices (including machinery, lightning, air conditioning, cooling) and a programme consisting of measures for improvement of energy efficiency.

Required Documentation for Assessment and Verification

The applicant shall provide the register of energy consuming devices together with the improvement programme.

Examples of the most relevant 'energy consuming devices' include:

- Printing machines;
- Finishing equipment;
- Systems for transport of waste paper;
- Ventilation systems;
- Cooling systems;
- Heating systems;
- Process air systems.

The reason concerning the choice of the relevant energy consuming devices shall be presented to the Competent Body.

Criterion 7 - Training

All members of staff participating in day-to-day operation shall be given the knowledge necessary to ensure that the Ecolabel requirements are fulfilled and continuously improved.

Required Documentation for Assessment and Verification

The applicant shall provide a declaration of compliance with this criterion, together with details of the training programme, its content, and an indication of which staff have received what training and when. The applicant shall provide to the Competent Body also a sample of training material.

The 'training programme' can either be done internally or by an external body, and should be applicable to the staff and to the departments considered as relevant to the fulfilment of the EU Ecolabel criteria.

Criterion 8 - Fitness for use

The product shall be suitable for its purpose.

Required Documentation for Assessment and Verification

The applicant shall provide appropriate documentation in compliance with this criterion. National or commercial standards, where relevant, may be used by the applicant to prove the fitness for use of the printed paper products.

Alternatively, the applicant can prove the fitness for use of the printing paper products by presenting:

- The conditions of sales of its company, setting out the terms of the contract between the printer and its customers, namely the parts describing the quality of the printed paper product.
- A valid ISO 9001 certificate issued by a certification body and respective record of complaints required by the ISO 9001 standard specification.

Criterion 9 - Information on the product

The following information shall appear on the product:

'Please collect used paper for recycling'.

As an assessment and verification, the applicant shall provide a sample of the product bearing the information required.

Alternatively, the applicant can provide a draft on how and where the text *'Please collect used paper for recycling'* will appear (front or back cover, colophon, etc).

No alternative to the quoted text shall be accepted by the Competent Body.

Criterion 10 - Information appearing on the EU Ecolabel

The optional label with text box shall contain the following text:

- *This printed paper is recyclable*
- *It is printed using paper with low environmental impact*
- *Emissions of chemicals to air and water of paper production and printing process have been limited*

The guidelines for the use of the optional label with the text box can be found in the "Guidelines for use of the Ecolabel logo" on the website:

<http://ec.europa.eu/environment/ecolabel/promo/pdf/logo%20guidelines.pdf>

Required Documentation for Assessment and Verification

The applicant shall provide a sample of the printed paper product showing the label, together with a declaration of compliance with this criterion.

Alternatively, the applicant can provide a draft on how the EU Ecolabel will appear on or in the printed paper product and indicate how the license number will appear.



ANNEX

Form 1: Information on the substrate paper used for printed paper products

Producer: _____ Date: _____

Trade name	Supplier (Producer / Importer)	Annual amount of paper used (kg/year)	Weight (g/m ²)	EU ECOLABEL registration number	Validity of the EU ECOLABEL certificate
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					

