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**COMMISSION DECISION**

**of 16 August 2012**

**establishing the ecological criteria for the award of the EU Ecolabel for printed paper**

*(notified under document C(2012) 5364)*

**(Text with EEA relevance)**

(2012/481/EU)

(OJ L 223, 21.8.2012, p. 55)

Corrected by:

► **C1** Corrigendum, OJ L 125, 7.5.2013, p. 35 (2012/481/EU)

**COMMISSION DECISION****of 16 August 2012****establishing the ecological criteria for the award of the EU Ecolabel  
for printed paper***(notified under document C(2012) 5364)***(Text with EEA relevance)**

(2012/481/EU)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EC) No 66/2010 of the European Parliament and of the Council of 25 November 2009 on the EU Ecolabel<sup>(1)</sup>, and in particular Article 8(2) thereof,

After consulting the European Union Eco-labelling Board,

Whereas:

- (1) Under Regulation (EC) No 66/2010, the EU Ecolabel may be awarded to those products with a reduced environmental impact during their entire life cycle.
- (2) Regulation (EC) No 66/2010 provides that specific EU Ecolabel criteria are to be established according to product groups.
- (3) Since the chemicals used in the printed paper products may hinder recyclability of printed paper products, and may be hazardous for the environment and for human health, it is appropriate to establish EU Ecolabel criteria for the product group ‘printed paper’.
- (4) The measures provided for in this Decision are in accordance with the opinion of the Committee established by Article 16 of Regulation (EC) No 66/2010,

HAS ADOPTED THIS DECISION:

*Article 1*

1. The product group ‘printed paper’ shall comprise any printed paper product that consist of at least 90 % by weight of paper, paperboard or paper-based substrates, except for books, catalogues, pads, 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.

2. Fixed inserts to the printed paper product (not intended to be removed) shall fulfil the requirements of the Annex to this Decision. 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 this Decision only if the EU Ecolabel is intended to be placed on them.

<sup>(1)</sup> OJ L 27, 30.1.2010, p. 1.

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3. The product group ‘printed paper’ shall not include the following:
- (a) printed tissue papers;
  - (b) printed paper products used for packaging and wrapping;
  - (c) folders, envelopes, ring binders.

*Article 2*

For the purpose of this Decision, the following definitions shall apply:

- (1) ‘Books’ means yarn-bound and/or glue-bound printed paper products with hard or soft covers, such as school books, fiction or non-fiction books, notebooks, exercise books, spiral-bound notebook, reports, calendars with covers, handbooks and paperbacks. ‘Books’ do not include journals, brochures, magazines, catalogues published on a regular basis and annual reports.
- (2) ‘Consumables’ means 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.
- (3) ‘Folder’ means a folding case or cover for loose papers. Folders include products such as indices dividers, document wallets, square cut folders, suspension files, cardboard boxes and 3-flap folders.
- (4) ‘Halogenated organic solvent’ means an organic solvent which contains at least one atom of bromine, chlorine, fluorine or iodine per molecule.
- (5) An ‘insert’ means an extra leaf or section, printed independently from the printed paper product which is either placed within the pages of a printed paper product and may be removed (loose insert) or bound into the pages of the printed paper product and thus form an integral part thereof (fixed insert). Inserts include multipage advertisements, booklets, brochures, reply cards, or other promotional materials.
- (6) ‘Newspapers’ means a publication issued daily or weekly containing news and printed on newsprint paper grade that is made from pulp and/or recovered paper, the weight of which ranges between 40 and 65 g/m<sup>2</sup>.
- (7) ‘Non-paper components’ means all the parts of a printed paper product that do not consist of paper, paperboard or paper based substrates.
- (8) ‘Packaging’ means all products made of any materials of any nature to be used for the containment, protection, handling, delivery and presentation of goods, from raw materials to processed goods, from the producer to the user or the consumer.

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- (9) A ‘printed paper product’ means the product resulting from the processing of a printing material. The processing consists of printing onto paper. 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, journals, catalogues, books, leaflets, brochures, pads, posters, loose-leafs, business cards, and labels.
- (10) ‘Printing’ (or printing process) means a process whereby a printing material is processed into a printed paper product. Printing includes pre-press, press, and post-press operations.
- (11) ‘Recycling’ means any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original purpose or other purposes. It includes the reprocessing of organic material but does not include energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations.
- (12) ‘VOC’ (Volatile Organic Compounds) means any organic compound as well as the fraction of creosote, having at 293,15 K a vapour pressure of 0,01 kPa or more, or having a corresponding volatility under the particular conditions of use.
- (13) ‘Washing agents’ (also sometimes known as cleaning agents or cleaners) means the following: (a) liquid chemicals used to wash printing forms, both separate (off-press) and integrated (in-press), and printing presses to remove printing inks, paper dust and similar products; (b) cleaners for finishing machines and printing machines, such as cleaners to remove adhesive and varnish residues; (c) printing inks removers used in washing off dried printing inks. Washing agents do not include cleaning agents for cleaning other parts of the printing machine or for cleaning other machines than printing machines and finishing machines.
- (14) ‘Waste paper’ means paper generated during printing and finishing processes, or while shaving or cutting paper or during starting runs in the print workshop and the bindery, which does not form part of the finished printed paper product.

*Article 3*

In order to be awarded the EU Ecolabel under Regulation (EC) No 66/2010, an item of printed paper shall fall within the product group ‘Printed paper’ as defined in Article 1 of this Decision and shall comply with the criteria as well as the related assessment and verification requirements set out in the Annex to this Decision.

*Article 4*

The criteria for the product group ‘Printed paper’, as well as the related assessment and verification requirements, shall be valid for three years from the date of adoption of this Decision.

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*Article 5*

For administrative purposes the code number assigned to ‘printed paper’ shall be ‘028’.

*Article 6*

This Decision is addressed to the Member States.

*ANNEX***FRAMEWORK****The aims of the criteria**

The criteria aim, in particular, at promoting the environmental efficiency of de-inkability and recyclability for printed paper products, the reduction of VOC emissions, the reduction or prevention of risks for the environment and for human health related to the use of hazardous substances. The criteria are set at levels that promote the labelling of printed paper products that have a low environmental impact.

**CRITERIA**

These criteria are set for each of the following aspects:

1. Substrate
2. Excluded or limited substances and mixtures
3. Recyclability
4. Emissions
5. Waste
6. Energy
7. Training
8. Fitness for use
9. Information on the product
10. Information appearing on the EU Ecolabel

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.

These 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 ecolabelled products, criteria 2, 4, 5, 6 and 7 shall apply only to those processes.

The ecological criteria do not cover the transport of raw materials, consumables and final products.

**Assessment and verification requirements**

The specific assessment and verification requirements are indicated within each criterion.

All printing on the printed paper product shall fulfil the criteria. Parts of the product that are printed by a sub-contractor shall therefore also fulfil the printing requirements. The application shall include a list of all the printing houses and subcontractors involved in the production of the printed paper, and their geographic locations.

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The applicant shall provide a list of chemical products used in the printing house for the production of the printed paper products. This requirement applies to all consumables used during the printing, coating and finishing processes. The list provided by the applicant shall include the amount, function and supplier of any chemical product used, together with the Safety Data Sheet, designed in accordance with Commission Directive 2001/58/EC <sup>(1)</sup>.

Where the applicant is required to provide declarations, documentation, analyses, test reports, or other evidence to show compliance with the criteria, it is understood that those may originate from the applicant and/or his supplier(s) and/or their supplier(s), as appropriate.

Where appropriate, test methods other than those indicated for each criterion may be used if their equivalence is accepted by the competent body assessing the application.

Where possible, the testing should be performed by laboratories that meet the general requirements of EN ISO 17025 or equivalent.

Where appropriate, competent bodies may require supporting documentation and may carry out independent verifications.

### EU ECOLABEL CRITERIA

#### 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 <sup>(2)</sup>.
- (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 <sup>(3)</sup>.

*Assessment and verification:* the applicant shall provide the specifications of the printed paper products concerned, including the trade names, amounts and weight/m<sup>2</sup> of the paper used. The list shall also include the names of the suppliers of the papers used. The applicant shall provide a copy of a valid EU Ecolabel certificate for the paper used.

#### 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 <sup>(4)</sup> or Council Directive 67/548/EEC <sup>(5)</sup> or substances referred to in Article 57 of Regulation (EC) No 1907/2006 of the European Parliament and of the Council <sup>(6)</sup> 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.

<sup>(1)</sup> OJ L 212, 7.8.2001, p. 24.

<sup>(2)</sup> Decision of 7 June 2011 on establishing the ecological criteria for the award of the EU Ecolabel for copying and graphic paper (OJ L 149, 8.6.2011, p. 12).

<sup>(3)</sup> Decision of 12 July 2012 establishing the ecological criteria for the award of the EU Ecolabel for newsprint paper (OJ L 202, 28.7.2012, p. 26).

<sup>(4)</sup> OJ L 353, 31.12.2008, p. 1.

<sup>(5)</sup> OJ 196, 16.8.1967, p. 1.

<sup>(6)</sup> OJ L 396, 30.12.2006, p. 1.

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List of hazard statements and risk phrases:

Hazard Statement ( <sup>1</sup> )	Risk Phrase ( <sup>2</sup> )
H300 Fatal if swallowed	R28
H301 Toxic if swallowed	R25
H304 May be fatal if swallowed and enters airways	R65
H310 Fatal in contact with skin	R27
H311 Toxic in contact with skin	R24
<b>▼<u>C1</u></b> H330 Fatal if inhaled	R23 or R26
<b>▼<u>B</u></b> H331 Toxic if inhaled	R23
H340 May cause genetic defects	R46
H341 Suspected of causing genetic defects	R68
H350 May cause cancer	R45
H350i May cause cancer by inhalation	R49
H351 Suspected of causing cancer	R40
H360F May damage fertility	R60
H360D May damage the unborn child	R61
H360FD May damage fertility. May damage the unborn child	R60; R61; R60-61
H360Fd May damage fertility. Suspected of damaging the unborn child	R60-R63
H360Df May damage the unborn child. Suspected of damaging fertility	R61-R62
H361f Suspected of damaging fertility	R62
H361d Suspected of damaging the unborn child	R63
H361fd Suspected of damaging fertility. Suspected of damaging the unborn child	R62-63
H362 May cause harm to breast fed children	R64
H370 Causes damage to organs	R39/23; R39/24; R39/25; R39/26; R39/27; R39/28
H371 May cause damage to organs	R68/20; R68/21; R68/22
H372 Causes damage to organs through prolonged or repeated exposure	R48/25; R48/24; R48/23
H373 May cause damage to organs through prolonged or repeated exposure	R48/20; R48/21; R48/22
H400 Very toxic to aquatic life	R50
H410 Very toxic to aquatic life with long-lasting effects	R50-53
H411 Toxic to aquatic life with long-lasting effects	R51-53
H412 Harmful to aquatic life with long-lasting effects	R52-53
H413 May cause long-lasting harmful effects to aquatic life	R53



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Hazard Statement <sup>(1)</sup>	Risk Phrase <sup>(2)</sup>
EUH059 Hazardous to the ozone layer	R59
EUH029 Contact with water liberates toxic gas	R29
EUH031 Contact with acids liberates toxic gas	R31
EUH032 Contact with acids liberates very toxic gas	R32
EUH070 Toxic by eye contact	R39-41

<sup>(1)</sup> As provided for in Regulation (EC) No 1272/2008.

<sup>(2)</sup> As provided for in 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 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.

*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.

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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.

(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)(a) of Regulation (EC) No 66/2010 shall be granted concerning substances identified as substances of very high concern and included in the list provided for 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 %.

*Assessment and verification:* 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 can be found here:

[http://echa.europa.eu/chem\\_data/authorisation\\_process/candidate\\_list\\_table\\_en.asp](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 the criterion 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<sup>(1)</sup> 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.

*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 final product.

(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);

<sup>(1)</sup> OJ L 200, 30.7.1999, p. 1.

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- (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.

*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.

*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.

*Assessment and verification:* the applicant shall provide a declaration of compliance with this criterion as well as declarations from ingredient suppliers.

**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.

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(c) Coating varnishes and lamination, including polyethene and/or polyethene/polypropylene, may be used only for covers of books, pads, magazines and catalogues, exercise books.

(d) The de-inkability shall be proved.

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*Assessment and verification:* the applicant shall provide the test result of the recyclability for wet strength agents and removability for adhesives. The reference test methods are PTS method PTS-RH 021/97 (for wet strength agents), INGEDE Method 12 (for non-soluble adhesive removability) or equivalent test methods. The deinkability shall be proven by using the 'Deinking Scorecard' <sup>(1)</sup> of the European Recovered Paper Council or equivalent test methods. Testing must be performed on three types of paper: uncoated, coated and surface-sized paper. If a type of printing ink is only sold for one or two specific types of paper, it is sufficient to test the paper type(s) in question. The applicant shall provide a declaration that coated and laminated printed paper products are in compliance with point 3(c). Where a part of a printed paper product is easily removable (for instance a plastic cover or a reusable exercise book 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.

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(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.

*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 m<sup>2</sup> and 400 mg per m<sup>2</sup> of printing cylinder surface area used in the press.

*Assessment and verification:* 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. 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. The cylinder surface used in the press during printing is calculated by multiplying the cylinder surface ( $= 2\pi rL$ , 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).

<sup>(1)</sup> Assessment of Print Product Recyclability — Deinkability Score — User's Manual, [www.paperrecovery.org](http://www.paperrecovery.org), 'Publications'.

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## (b) Emissions to air

Volatile Organic Compounds (VOC)

The following criterion must be met:

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

Where:

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

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

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

The  $R_{\text{VOC}}$  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:

$P_{\text{VOC}}$  = 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:

$P_{\text{VOC}}$  = 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.

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*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.

## (c) Emissions from publication rotogravure printing

- (i) Publication rotogravure printing emissions of VOC to air shall not exceed 50 mg C/Nm<sup>3</sup>.

*Assessment and verification:* the applicant shall provide appropriate documentation showing compliance with this criterion.

- (ii) Equipment for reduction of emission to air of Cr<sup>6+</sup> shall be installed.

- (iii) Emissions of Cr<sup>6+</sup> to air shall not exceed 15 mg/tonne paper.

*Assessment and verification:* the applicant shall provide a description of the system in place, together with a documentation related to the control and the monitoring of Cr<sup>6+</sup> emissions. The documentation shall include the test results related to the reduction of Cr<sup>6+</sup> emissions to the air.

## (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/Nm<sup>3</sup>.

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.

*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,

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(iii) handling, collection, separation and disposal of hazardous waste, as defined by the relevant local and national regulatory authorities.

*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.

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(b) Waste paper

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

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

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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'.

*Assessment and verification:* the applicant shall provide a description of the calculation of the amount of waste paper, 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.

**▼ B****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.

*Assessment and verification:* the applicant shall provide the register of energy consuming devices together with the improvement programme.

**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.

*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.

**Criterion 8 — Fitness for use**

The product shall be suitable for its purpose.

*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.

**▼ C1****Criterion 9 — Information on the product**

The following information shall appear on the product:

‘Please collect used paper for recycling’.

*Assessment and verification:* the applicant shall provide a sample of the product bearing the information required.

**▼ B****Criterion 10 — Information appearing on the EU Ecolabel**

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

- This printed product 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 the use of the EU Ecolabel logo’ on the website:

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

*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.