

EN
ANNEX I

Copying, graphic and newsprint paper

FRAMEWORK

The aims of the criteria

The criteria aim, in particular, at reducing discharges of toxic or eutrophic substances into waters, reducing environmental damage or risks related to the use of energy (global warming, acidification, ozone depletion, depletion of non-renewable resources) by reducing energy consumption and related emissions to air, by reducing environmental damage through the reduction of emission to water and waste creation, by reducing environmental damage or risks related to the use of hazardous chemicals and by applying sustainable management principles in order to safeguard forests.

Criteria for awarding the EU Ecolabel to ' Copying, graphic and newsprint paper':

1. Emissions to water and air;
2. Energy use;
3. Fibres: conserving resources, sustainable forest management;
4. Excluded or limited substances and mixtures;
5. Waste management;
6. Fitness for use;
7. Information on the packaging;
8. Information appearing on the EU Ecolabel Packaging;

The ecological criteria cover the production of pulp including all constituent sub-processes from the point at which the virgin or recycled fibre enters the production site, to the point at which the pulp leaves the pulp mill. For the paper production processes, the ecological criteria cover all sub-processes in the paper mill from pulp preparation for paper making to winding the paper onto rolls.

The ecological criteria do not cover the transport and packaging of the raw materials (e.g. wood), pulp or paper. Paper conversion into other products is not included.

***Assessment and verification:** the specific assessment and verification requirements are indicated within each criterion.*

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

Competent bodies shall preferentially recognise attestations which are issued by bodies accredited according to the relevant harmonised standard for testing and calibration laboratories and verifications by bodies that are accredited according to

the relevant harmonised standard for bodies certifying products, processes and services.

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

Where appropriate, competent bodies may require supporting documentation and may carry out independent verifications or on-site inspections to check compliance with these criteria.

As a pre-requisite, the product must meet all respective legal requirements of the country (countries) in which the production site is located. The applicant shall declare the product's compliance with this requirement.

EU ECOLABEL CRITERIA

Criterion 1 — Emissions to water and air

Criterion 1(a) COD, Sulphur (S), NO_x, Phosphorous (P)

The requirement is based on information on emissions in relation to a specified reference value. The ratio between actual emissions and the reference value translates to an emissions score.

The score for any individual emission parameter shall not exceed 1.25 unless exceptional circumstances justify an individual score for one particular parameter being up to 1.5.

In all cases, the total number of points ($P_{\text{total}} = P_{\text{COD}} + P_{\text{S}} + P_{\text{NO}_x} + P_{\text{P}}$) shall not exceed 4,0.

Where pulp is the end product, the paper making factors shall be set to zero. In case of non-integrated production the applicant shall provide calculation that includes pulp and paper production.

For pulp and paper making as a whole, the calculation of P_{COD} shall be made as follows (the calculations of P_{S} , P_{NO_x} , P_{P} shall be made in exactly the same manner).

For each pulp ‘i’ used, the related measured COD emissions ($\text{COD}_{\text{pulp}, i}$ expressed in kg/air dried tonne — ADT), shall be weighted according to the proportion of each pulp used (pulp ‘i’ with respect to air dried tonne of pulp), and summed together. Air dried tonne assumes a 90% dry matter content for pulp, and 95% for paper.

The weighted COD_{emission} for the pulps is then added to the measured COD_{emission} from the paper production to give a total COD_{emission}, COD_{total}.

The weighted COD reference value for the pulp production shall be calculated in the same manner, as the sum of the weighted reference values for each pulp used and added to the reference value for the paper production to give a total COD_{reference} value COD_{reftotal}. The reference values for each pulp type used and for the paper production are given in the Table 1.

Finally, the total COD emission shall be divided by the total COD reference value as follows:

$$P_{\text{COD}} = \frac{\text{COD}_{\text{total}}}{\text{COD}_{\text{ref,total}}} = \frac{\sum_{i=1}^n [\text{pulp},i \times (\text{COD}_{\text{pulp},i})] + \text{COD}_{\text{papermachine}}}{\sum_{i=1}^n [\text{pulp},i \times (\text{COD}_{\text{ref pulp},i})] + \text{COD}_{\text{ref papermachine}}}$$

Table 1 Reference values for emissions from different pulp types and from paper production

Pulp Grade/Paper	Emissions (kg/ADT)			
	COD _{reference}	P _{reference}	S _{reference}	NO _x _{reference}
Bleached Chemical pulp (others than sulphite)	16	0,025 0,09 ⁽¹⁾	0,35	1,6
Bleached Chemical pulp (sulphite)	24	0,025	0,35	1,6

Pulp Grade/Paper	Emissions (kg/ADT)			
	COD _{reference}	P _{reference}	S _{reference}	NOx _{reference}
Unbleached chemical pulp	6,5	0.016	0,35	1,6
CTMP /CMP	16	0.008	0.2	0,25 / 0.7 ⁽²⁾
TMP/groundwood pulp	3	0.008	0.2	0.25
Recycled fibre pulp without de-inking	1.1	0.006	0.2	0.25
Recycled fibre pulp with de-inking	2.4	0.008	0.2	0.25
Paper (non-integrated mills where all pulps used are purchased market pulps)	1	0.008	0.3	0.7
Paper (Other mills)	1	0.008	0.3	0.7

⁽¹⁾Reference value unless condition that it is demonstrated that the higher level of P is due to P naturally occurring in the wood pulp.

⁽²⁾NOx emission value for non-integrated CTMP mills using flash-drying of pulp with biomass-based steam and recovery of impregnation chemicals

In cases where co-generation of heat and electricity occur at the same plant, the emissions of S and NOx resulting from onsite electricity generation can be subtracted from the total amount. The following equation can be used to calculate the proportion of the emissions resulting from electricity generation:

$$2 \times (MWh(electricity))/[2 \times MWh(electricity) + MWh(heat)]$$

The electricity in this calculation is the electricity produced at the co-generation plant. The heat in this calculation is the net heat delivered from the power plant to the pulp/paper production.

Assessment and verification: the applicant shall provide detailed calculations and test data showing compliance with this criterion, together with related supporting documentation which shall include test reports using the following continuous or periodical monitoring standard test methods (or equivalent standard methods that provide data of equivalent scientific quality): COD: ISO 15075 or ISO 6060; NOx: EN 14972 or ISO 11564; S(oxid.): EN 14971 or EPA no.8; S(red.): EPA no 15A,16A or 16B; S content in oil: ISO 8754; S content in coal: ISO 19579; S content in biomass: EN 15289; Total P: EN ISO 6878.

Rapid tests can also be used to monitor emissions so long as they are checked regularly (e.g. monthly) against the relevant aforementioned standards or suitable equivalents. In the case of COD emissions, continuous monitoring by the analysis of TOC (Total Organic Carbon) shall be accepted so long as a correlation between TOC and COD results has been established for the site in question.

The minimum measurement frequency shall be daily for COD emissions and weekly for Total P emissions. Emissions of S and NOx shall be taken on a continuous or

periodic basis. Data shall be averaged across a 12 month reporting period except in cases where:

- the production campaign is for a limited time period only,

- the production plant is new or has been rebuilt, in which case the measurements shall be based on at least 45 days subsequent days of stable running of the plant.

In either case, data may only be accepted if it is representative of the respective campaign and that a sufficient number of measurements for each emission parameter have been made.

The supporting documentation shall include an indication of the measurement frequency and the calculation of the points for COD, Total P, S and NO_x.

Emissions to air shall include all emissions of S and NO_x which occur during the production of pulp and paper, including steam generated outside the production site, but subtracting any emissions allocated to the production of electricity. Measurements shall include recovery boilers, lime kilns, steam boilers and destructor furnaces for strong smelling gases. Diffuse emissions shall also be taken into account. Reported emission values for S to air shall include both oxidised and reduced S emissions. The S emissions related to the heat energy generation from oil, coal and other external fuels with known S content may be calculated instead of measured, and shall be taken into account.

Measurements of emissions to water shall be taken on unfiltered and unsettled samples at the effluent discharge point of the mills wastewater treatment plant. In cases where mill effluent is sent to a municipal or other third party wastewater treatment plant, samples from the mill effluent sewer discharge point shall be analysed and results multiplied by a standard removal efficiency factor for the municipal or third party wastewater treatment plant. The removal efficiency factor to apply shall be based on information provided by the municipal or other third party wastewater treatment plant.

The period for the measurements shall be based on the production during 12 months. In the case of a new or a rebuilt production plant, the measurements shall be based on at least 45 subsequent days of stable running of the plant. The measurement shall be representative of the respective campaign.

For integrated mills, due to the difficulties in getting separate emission figures for pulp and paper, if only a combined figure for pulp and paper production is available, the emission values for pulp(s) shall be set to zero and the combined emissions shall be compared against the combined reference values for the relevant pulp and paper production.

For any individual emission score that exceeds 1.25 (but is less than 1.5), the Competent Body shall request, at its discretion, a satisfactory technical justification for this higher individual emission parameter.

Criterion 1(b) AOX

PROPOSAL 1

This criterion refers to ECF pulp

Unless separately specified, the AOX emissions from the production of each pulp used shall not exceed 0,16 kg/ADT.

The AOX emissions shall not exceed 0.17 kg/ADT when the total wood mix at the integrated mill contains at least 40% of wood species with high tannin content (i.e. chestnut, oak).

Note: the criterion is not applicable to plants that provide evidence that no AOX is generated or added via chemical additives and raw materials.

Assessment and verification: the applicant shall provide test reports using the following test method: AOX ISO 9562 accompanied by detailed calculations showing compliance with this criterion, together with related supporting documentation.

The supporting documentation shall include an indication of the measurement frequency. AOX shall only be measured in processes where chlorine compounds are used for the bleaching of the pulp. AOX need not be measured in the effluent from non-integrated paper production or in the effluents from pulp production without bleaching or where the bleaching is performed with chlorine-free substances.

Measurements shall be taken on unfiltered and unsettled samples either after treatment at the plant or after treatment by a public treatment plant. The period for the measurements shall be based on the production during 12 months, reported as an average from monthly measurements. In case of a new or a re-built production plant, the measurements shall be based on at least 45 subsequent days of stable running of the plant. The measurement shall be representative of the respective campaign.

PROPOSAL II

To incorporate AOX emission into the emission equation following the rules specified under Criterion 1 (a)

The criterion is not applicable to plants that provide evidence that no AOX is generated or added via chemical additives and raw materials.

The total number of points ($P_{\text{total}} = P_{\text{COD}} + P_{\text{S}} + P_{\text{NOx}} + P_{\text{P}} + P_{\text{AOX}}$) shall not exceed 5.0.

The specific AOX emissions from the production of pulp shall not exceed the following values for each type of pulp and for paper production:

Table 2 Proposed reference values for AOX emissions from different pulp types and from paper production

<i>Pulp types</i>	<i>Reference values kg AOX/ADt</i>
<i>Bleached sulphate pulp</i>	<i>0,14</i>
<i>Bleached sulphite pulp</i>	<i>0,14</i>

Assessment and Verification: the applicant shall provide test reports using the following test method: AOX ISO 9562 accompanied by detailed calculations showing compliance with this criterion, together with related supporting documentation. For bleached pulp, the documentation should include information on the bleaching sequence(s) applied.

The supporting documentation shall include an indication of the measurement frequency. AOX shall only be measured in processes where chlorine compounds are used for the bleaching of the pulp. AOX need not be measured in the effluent from pulp production without bleaching or where the bleaching is performed with chlorine-free substances.

Measurements shall be taken on unfiltered and unsettled samples either after treatment at the plant or after treatment by a public treatment plant. The period for the measurements shall be based on the production during 12 months, reported as an average from monthly measurements. In case of a new or a re-built production plant, the measurements shall be based on at least 45 subsequent days of stable running of the plant. The measurement shall be representative of the respective campaign.

Criterion 1c) CO₂

PROPOSAL 1:

To withdraw the criterion

PROPOSAL 2:

The emission of carbon dioxide from fossil fuels used for heating, and production of electricity (whether on-site or off-site) must not exceed the following limit values:

- 1,000 kg CO₂ /tonne paper for paper made from 100 % DIP/recycled pulp;
- 900 kg CO₂ /tonne paper for paper made from 100 % chemical pulp;
- 1,600 kg CO₂ /tonne paper for paper made from 100 % mechanical pulp;

For paper comprising of a mixture of cellulose pulp, recycled fibre and mechanical pulp, a weighted limit value is calculated, based on the proportion of each pulp type. The emissions shall be calculated as the sum of the emissions from the pulp and paper production taking into account the mix of pulps used.

For paper mill, the CO₂ emission of individual pulps shall be gathered from the pulp manufacturer.

Assessment and verification: the applicant shall provide detailed calculations showing compliance with this criterion, together with related supporting documentation.

The applicant shall provide data on the air emissions of carbon dioxide. This shall include all sources of non-renewable fuels during the production of pulp and paper, including the emissions from the production of electricity (whether on-site or off-site).

The following emission factors shall be used in the calculation of the CO₂ emissions from fuels:

Fuel	CO ₂ fossil emission	Unit
Coal	96	g CO ₂ fossil/MJ
Crude oil	73	g CO ₂ fossil/MJ
Fuel oil 1	74	g CO ₂ fossil/MJ
Fuel oil 2-5	77	g CO ₂ fossil/MJ
LPG	63	g CO ₂ fossil/MJ
Natural Gas	56	g CO ₂ fossil/MJ
Grid Electricity	384	g CO ₂ fossil/kWh

The period for the calculations or mass balances 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 45 subsequent days of stable running of the plant. The calculations shall be representative of the respective campaign.

For grid electricity, the value quoted in the table above (the European average) shall be used unless the applicant presents documentation establishing the average value for their suppliers of electricity (contracting supplier or national average), in which case the applicant may use this value instead of the value quoted in the table.

The amount of energy from renewable sources (1) purchased and used for the production processes will not be considered in the calculation of the CO₂ emissions. Appropriate documentation that this kind of energy is actually used at the mill or is externally purchased shall be provided by the applicant.

Criterion 2. Energy use

The requirement is based on information on actual energy use in production in relation to a specified reference values.

The energy consumption includes electricity and fuel consumption for heat production that shall be expressed in terms of points (P_{total}) as detailed below.

The total number of points (P_{total} = P_E + P_F) shall not exceed 2.5.

The reference values for the energy consumption calculation are given in Table 3.

In case of mixtures of pulps, the reference value for electricity and fuel consumption for heat production shall be weighted according to the proportion of each pulp used (pulp 'i' with respect to air dried tonne of pulp), and summed together.

Criterion 2(a) Electricity

The electricity consumption related to the pulp and the paper production shall be expressed in terms of points (P_E) as detailed below.

Calculation for pulp production: For each pulp i used, the related electricity consumption ($E_{pulp,i}$ expressed in kWh/ADT) shall be calculated as follows:

$E_{pulp,i}$ = Internally produced electricity + purchased electricity – sold electricity

Calculation for paper production: Similarly, the electricity consumption related to the paper production (E_{paper}) shall be calculated as follows:

E_{paper} = Internally produced electricity + purchased electricity – sold electricity

Finally, the points for pulp and paper production shall be combined to give the overall number of points (P_E) as follows:

$$P_E = \frac{\sum_{i=1}^n [\text{pulp},i \times E_{pulp,i}] + E_{paper}}{\sum_{i=1}^n [\text{pulp},i \times E_{ref pulp,i}] + E_{ref paper}}$$

In case of integrated mills, due to the difficulties in getting separate electricity figures for pulp and paper, if only a combined figure for pulp and paper production is available, the electricity values for pulp(s) shall be set to zero and the figure for the paper mill shall include both pulp and paper production.

Criterion 2(b) Fuel consumption for heat production

The fuel consumption related to the pulp and the paper production shall be expressed in terms of points (P_F) as detailed below.

Calculation for pulp production: For each pulp i used, the related fuel consumption ($F_{pulp,i}$ expressed in kWh/ADT) shall be calculated as follows:

$F_{pulp,i}$ = Internally produced fuel + purchased fuel – sold fuel – 1,25 × internally produced electricity

Note:

1. $F_{pulp,i}$ (and its contribution to P_F , pulp) need not be calculated for mechanical pulp unless it is market air dried mechanical pulp containing at least 90 % dry matter.
2. The amount of fuel used to produce the sold heat shall be added to the term "sold fuel" in the equation above.

Calculation for paper production: similarly, the fuel consumption related to the paper production (F_{paper} , expressed in kWh/ADT), shall be calculated as follows:

$F_{\text{paper}} = \text{Internally produced fuel} + \text{purchased fuel} - \text{sold fuel} - 1,25 \times \text{internally produced electricity}$

Finally, the points for pulp and paper production shall be combined to give the overall number of points (PF) as follows:

$$P_F = \frac{\sum_{i=1}^n [\text{pulp},i \times F_{\text{pulp},i}] + F_{\text{paper}}}{\sum_{i=1}^n [\text{pulp},i \times F_{\text{ref pulp},i}] + F_{\text{ref paper}}}$$

Table 3. Reference values for electricity and fuel

Pulp grade	Fuel kWh/ADT		Electricity kWh/ADT	
	Ereference		Ereference	
	Non-admp	admp	Non-admp	admp
Chemical pulp	3 650	4 650	750	750
Thermomechanical pulp (TMP)	0	900	2 200	2 200
Groundwood pulp (including Pressurised Groundwood)	0	900	2 000	2 000
Chemithermomechanical pulp (CTMP)	0	800	1 900	1 900
Recovered fibre pulp	1800	2800	1000	350
Paper grade				
Uncoated woodfree fine paper, Magazine paper (SC)		1 700		750
Coated woodfree fine paper Coated magazine paper (LWC, MWC)		1 700		800
Admp = air dried market pulp !				

Assessment and Verification (for both (a) and (b)): the applicant shall provide detailed calculations showing compliance with this criterion, together with all related supporting documentation. Reported details shall therefore include the total electricity and fuel consumption.

The applicant shall calculate all energy inputs, divided into heat/fuels and electricity used during the production of pulp and paper, including the energy used in the de-inking of waste papers for the production of recovered paper. Energy used in the transport of raw materials, as well as conversion and packaging, is not included in the energy consumption calculations.

Total heat energy includes all purchased fuels. It also includes heat energy recovered by incinerating liquors and wastes from on-site processes (e.g. wood waste, sawdust, liquors, waste paper, paper broke), as well as heat recovered from the internal

generation of electricity — however, the applicant need only count 80 % of the heat energy from such sources when calculating the total heat energy.

Electric energy means net imported electricity coming from the grid and internal generation of electricity measured as electric power. Electricity used for wastewater treatment need not be included.

Where steam is generated using electricity as the heat source, the heat value of the steam shall be calculated, then divided by 0, 8 and added to the total fuel consumption.

In case of integrated mills, due to the difficulties in getting separate fuel (heat) figures for pulp and paper, if only a combined figure for pulp and paper production is available, the fuel (heat) values for pulp(s) shall be set to zero and the figure for the paper mill shall include both pulp and paper production.

Criterion 3: Fibres – conserving resources, sustainable forest management

All fibres shall be covered by valid chain of custody certificates issued by an independent third party certification scheme such as the Forest Stewardship Council (FSC), the Programme for the Endorsement of Forest Certification (PEFC) or equivalent.

Any virgin fibres shall not originate from GMO species and shall be covered by valid sustainable forest management certificates issued by an independent third party certification scheme such as FSC, PEFC or equivalent.

Uncertified material shall be covered by a verification system which ensures that it is legally sourced, and meets any other requirement of the certification scheme with respect to uncertified material. The certification bodies issuing forest and/or chain of custody certificates shall be accredited or recognised by that certification scheme.

Criterion 3(a) Copying and graphic paper

Paper for Unless separately specified, where a certification scheme allows the mixing of uncertified fibres with certified and/or recovered fibres in a product or production line, a minimum of 70% (w/w) of the fibre content shall be sustainable certified virgin fibre and/or recovered fibre. With integrated pulp and paper mills, where raw materials are sourced within the vicinity of the mill and where there is a low availability of certified forests in the wider area, the minimum requirement for certified and/or recycled fibre content may be lowered to 55% (w/w), subject to approval by the relevant Competent Body.

Assessment and Verification: *the applicant shall provide a declaration of compliance supported by valid, independently certified chain of custody certificates for all fibres used in the product or production line and demonstrate that at least 70% of the fibre material (or 55% in exceptional cases for integrated mills) for copying and graphic paper, and originates from forests or areas managed according to Sustainable Forestry Management principles and/or from recovered sources that meet the requirements set out by the relevant independent chain of custody scheme. FSC, PEFC or equivalent schemes shall be accepted as independent third party certification.*

If the product or production line includes uncertified virgin material, proof shall be provided that the content of uncertified virgin material does not exceed 30% and is covered by a verification system which ensures that it is legally sourced and meets any other requirement of the certification scheme with respect to uncertified material. In case the scheme does not specifically require that all virgin material is sourced from non-GMO species, additional evidence shall be provided to demonstrate this.

Criterion 3(b) Paper for printing of newspaper

All fibres shall be covered by valid chain of custody certificates issued by an independent third party certification scheme such as the Forest Stewardship Council (FSC), the Programme for the Endorsement of Forest Certification (PEFC) or equivalent.

Any virgin fibres shall not originate from GMO species and shall be covered by valid sustainable forest management certificates issued by an independent third party certification scheme such as FSC, PEFC or equivalent.

Where a certification scheme allows the mixing of uncertified fibres with certified and/or recovered fibres in a product or production line, a minimum of 90% (w/w) of the fibre content shall be recovered fibre. Excluded from the calculation of recovered fibre content is the reutilisation of materials generated in a process and capable of being reclaimed within the same process that generated it (mill broke — own produced or purchased).

Uncertified material shall be covered by a verification system which ensures that it is legally sourced, and meets any other requirement of the certification scheme with respect to uncertified material. The certification bodies issuing forest and/or chain of custody certificates shall be accredited or recognised by that certification scheme.

Assessment and Verification: *the applicant shall provide a declaration of compliance supported by valid, independently certified chain of custody certificates for all fibres used in the product or production line and demonstrate that at least 90% of the fibre material is from recovered materials. The applicant shall also provide a declaration stating the average amount of different grades of recovered paper used for the product in accordance with EN 643 or an equivalent standard. The percentage of recovered fibres shall be calculated as the allocated inputs of recovered fibres divided by the total allocated input of fibres (virgin plus recovered) to the product or production line. The applicant shall also provide a declaration that no mill broke (own or purchased) was used for the calculation of the percentage recovered fibre fraction.*

If the product or production line includes certified or uncertified virgin material, proof shall be provided that the virgin material is covered by a verification system which ensures that it is legally sourced and meets any other requirement of the certification scheme with respect to uncertified material. In case the scheme does not specifically require that all virgin material is sourced from non-GMO species, additional evidence shall be provided to demonstrate this.

Criterion 4: Restricted hazardous substances and mixtures

The basis for demonstrating compliance with each of the sub-criteria under criterion 4 shall be the applicant providing a list of all the chemical products used in the pulp and

paper production process, together with appropriate documentation, such as Safety Data Sheets (SDSs). This list shall include the approximate quantities used per production volume, their function and the stages in the process where they are used.

Criterion 4a) Substance of Very High Concern (SVHC) restrictions

The paper product shall not contain substances that have been identified according to the procedure described in Article 59(1) of Regulation (EC) No 1907/2006 and included in the Candidate List for SVHCs in concentrations higher than 0.10% (weight by weight). No derogation from this requirement shall be given.

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

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

The applicant shall prove compliance with this criterion by providing Safety Data Sheets (SDSs) that are in accordance with Article 31 of Regulation (EC) No 1907/2006 showing that no SVHCs are listed in any SDS. In cases where a SVHC is listed in a SDS of a chemical used in the pulp or paper production process, data on the amount (kg/ADT paper produced) of SVHCs used in the process shall be provided. Unless demonstrated otherwise, it shall be assumed that 100% of any ingoing SVHCs remain in the final paper product.

Criterion 4b) CLP restrictions

The paper product shall not contain substances or mixtures meeting the criteria for classification with the hazard statements in accordance with Regulation (EC) No 1272/2008 specified below in concentrations higher than 0.10% (weight by weight):

- Group 1 hazards: Category 1A or 1B Carcinogenic, Mutagenic and/or Toxic for Reproduction (CMR): H340, H350, H350i, H360, H360F, H360D, H360FD, H360Fd, H360Df
- Group 2 hazards: Category 2 CMR: H341, H351, H361, H361f, H361d, H361fd, H362; Category 1 aquatic toxicity: H400, H410; Category 1 and 2 acute toxicity: H300, H310, H330; Category 1 aspiration toxicity: H304; Category 1 Specific Target Organ Toxicity (STOT): H370, H372, Category 1 Skin Sensitiser*: H317.
- Group 3 hazards: Category 2, 3 and 4 aquatic toxicity: H411, H412, H413; Category 3 acute toxicity: H301, H311, H331; Category 2 STOT: H371, H373; Other EU hazard classes: EUH029, EUH031, EUH032, EUH059, EUH070.

*H317 restrictions apply specifically to commercial dye formulations, surface finishing agents and coating materials applied to paper.

Assessment and verification: the applicant shall prove compliance with these criteria by providing data on the amount (kg/ADT paper produced) of substances or mixtures used in the process and by demonstrating that the substances or mixtures referred to

in this criterion are not retained in the final product above the concentration limits specified. The concentrations of substances and mixtures shall be specified in the Safety Data Sheets in accordance with Article 31 of Regulation (EC) No 1907/2006

Criterion 4c): Chlorine

Chlorine gas shall not be used as a bleaching agent. This requirement does not apply to chlorine gas related to the production and use of chlorine dioxide.

***Assessment and verification:** the applicant shall provide a declaration from the pulp producer(s) that chlorine gas has not been used as a bleaching agent. Note: while this requirement also applies to the bleaching of recycled fibres, it is accepted that the fibres in their previous life-cycle may have been bleached with chlorine gas.*

Criterion 4d) APEOs

Alkylphenol ethoxylates or other alkylphenol derivatives shall not be added to cleaning chemicals, de-inking chemicals, foam inhibitors, dispersants or coatings. Alkylphenol derivatives are defined as substances that upon degradation produce alkyl phenols.

***Assessment and verification:** the applicant shall provide a declaration(s) from their chemical supplier(s) that alkylphenol ethoxylates or other alkylphenol derivatives have not been added to these products.*

4e) Acrylamide

Acrylamide shall not be present in coatings, retention aids, strengtheners, water repellents or chemicals used in internal and external water treatment in concentrations higher than 700 ppm (calculated on the basis of their active solid content).

The competent body may exempt the applicant from these requirements in relation to chemicals used in external water treatment.

***Assessment and verification:** the applicant shall provide a declaration of compliance with this criterion, together with appropriate documentation (such as Safety Data Sheets).*

4f) Surfactants

All surfactants used in deinking processes shall demonstrate ready or inherent ultimate biodegradability (see test methods and pass levels below). The only exception to this requirement shall be the use of surfactants based on silicone derivatives upon the condition that paper sludge from the deinking process is incinerated.

***Assessment and verification:** the applicant shall provide a declaration of compliance with this criterion together with the relevant safety data sheets or test reports for each surfactant which shall indicate the test method, threshold and conclusion stated, using one of the following test method and pass levels:*

- *For ready biodegradability: OECD No 301 A-F (or equivalent ISO standards) with a percentage degradation (including absorption) within 28 days of at least 70% for 301 A and E, and of at least 60% for 301 B, C, D and F.*
- *For inherent ultimate biodegradability: OECD 302 A-C (or equivalent ISO standards), with a percentage degradation (including adsorption) within 28 days of at least 70 % for 302 A and B, and of at least 60 % for 302 C.*

In cases where silicone-based surfactants are used, the applicant shall provide a Safety Data Sheet for the chemicals used and a declaration that paper sludge from the deinking process is incinerated, including details of the incineration plant or plants.

4g) Biocidal product restrictions for slime control

The active substances in biocidal products used to counter slime-forming organisms in circulation water systems containing fibres shall have been approved, or under examination pending a decision on approval, under Regulation (EU) No 528/2012 and shall not be potentially bio-accumulative.

For the purposes of this criterion, the potential to bio-accumulate shall be characterised by log Kow (log octanol/water partition coefficient) > 3,0 or an experimentally determined bioconcentration factor (BCF) > 100.

***Assessment and verification:** the applicant shall provide a declaration of compliance with this criterion together with the relevant material safety data sheet or test report which shall indicate the test method, threshold and conclusion reached, using the following test methods: OECD 107, 117 or 305 A-E.*

4h) Azo dye restrictions

None of the aromatic amines listed in Directive 2002/61/EC shall be used during the paper production process and the use of other dyes that may cleave to form these aromatic amines during processing shall be avoided. (See Appendix II for a full list of banned aromatic amines and an indicative list of dyes that may cleave during processing to form these restricted aromatic amines).

If any of the dyes listed in Appendix II that may cleave to form the restricted aromatic amines during processing are used, testing of the dyed paper product shall be required.

***Assessment and verification:** the applicant shall provide a declaration of non-use of dyes or of compliance with the requirements of this criterion, supported by safety data sheets or other relevant documentation from chemical suppliers.*

In cases where testing is required, test reports from an accredited laboratory shall be provided showing the non-detection of the restricted aromatic amines listed in Appendix II according to extraction tests based on the methods provided in EN 645, EN 647, EN 15519 or equivalent standards.

4i) Metal complex dye stuffs or pigments

Dyes or pigments based on: aluminium, silver, arsenic, barium, cadmium, cobalt, chromium, copper, mercury, manganese, nickel, lead, selenium, antimony, tin or zinc shall not be used.

The restriction for copper shall be exempted in the case of copper phthalocyanine and for clarity, the restriction of aluminium is not intended to apply to aluminosilicates.

Assessment and verification: the applicant shall provide a declaration of compliance with the requirements of this criterion, supported by safety data sheets or other relevant documentation from chemical suppliers.

4j) Ionic impurities in dye stuffs

The levels of ionic impurities in the dyestuffs used shall not exceed the following: Silver 100 ppm; Arsenic 50 ppm; Barium 100 ppm; Cadmium 20 ppm; Cobalt 500 ppm; Chromium 100 ppm; Copper 250 ppm; Fe 2,500 ppm; Mercury 4 ppm; Manganese 1,000 ppm; Nickel 200 ppm; Lead 100 ppm; Selenium 20 ppm; Antimony 50 ppm; Tin 250 ppm; Zinc 1,500 ppm.

The restriction for copper impurities shall not apply to dye stuffs based on copper phthalocyanine.

Assessment and verification: the applicant shall provide a declaration of compliance with the requirements of this criterion, supported by safety data sheets or other relevant documentation from chemical suppliers.

Criterion 5: Waste Management

All pulp and paper production sites shall demonstrate to have a system for handling of waste arising from the production of the licensed product.

The application should provide a comprehensive waste minimisation and management plan that details the system and includes information on the following points:

- Procedures for waste prevention;
- Procedures for waste separation, reuse and recycling;
- Procedures for the safe handling of hazardous waste;
- Continuous improvement objectives and targets.

Assessment and verification: the applicant shall provide a waste minimisation and management plan for each of the sites concerned and a declaration of compliance with the criterion. The declaration should inform about the amount of waste generated per each class/category.

Criterion 6: Fitness for use

The paper product shall be suitable for its purpose.

Assessment and verification: the applicant shall provide appropriate documentation demonstrating compliance with the scope of the criteria. The product shall fulfil the

requirements for permanence in accordance with applicable standards. **The user manual will provide the list of norms and standards which shall be used for the permanence assessment.**

As alternative to the use of the above methods, the producers shall guarantee the fitness for use of their products providing appropriate documentation demonstrating the paper quality, in accordance with the standard EN ISO/IEC 17050-1:2004, which provides general criteria for suppliers' declaration of conformity with normative documents.

Criterion 7: Information on the packaging

The following information shall appear on the product packaging:

"Please print double sided" (applicable for paper for office printing purposes)

"Please collect use paper for recycling"

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

Criterion 8: Information appearing on the EU Ecolabel

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

- Low air and water pollution,
- Uses sustainable fibres,
- Low greenhouse gas emissions and energy use,
- Hazardous substances restricted'
- Contains xy% of recycled fibre (if applicable).

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>

Assessment and verification: the applicant shall provide a sample of the product packaging showing the label, together with a declaration of compliance with this criterion.