

COMMISSION DECISION

of 9 July 2009

establishing the ecological criteria for the award of the Community Eco-label for tissue paper

(notified under document number C(2009) 4596)

(Text with EEA relevance)

(2009/568/EC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Regulation (EC) No 1980/2000 of the European Parliament and of the Council of 17 July 2000 on a revised Community eco-label award scheme⁽¹⁾, and in particular the second subparagraph of Article 6(1) thereof,

After consulting the European Union eco-labelling Board,

Whereas:

- (1) Under Regulation (EC) No 1980/2000 the Community eco-label may be awarded to a product possessing characteristics which enable it to contribute significantly to improvements in relation to key environmental aspects.
- (2) Regulation (EC) No 1980/2000 provides that specific eco-label criteria, drawn up on the basis of the criteria drafted by the European Union eco-labelling Board, are to be established according to product groups.
- (3) It also provides that the review of the eco-label criteria, as well as of the assessment and verification requirements related to those criteria, is to take place in due time before the end of the period of validity of the criteria specified for the product group concerned.
- (4) Pursuant to Regulation (EC) No 1980/2000, a timely review has been carried out of the ecological criteria, as well as of the related assessment and verification requirements established by Commission Decision 2001/405/EC of 4 May 2001 establishing ecological criteria for the award of the Community eco-label for tissue paper products⁽²⁾. Those ecological criteria and the related assessment and verification requirements are valid until 4 January 2010.
- (5) In the light of that review, it is appropriate, in order to take account of scientific and market developments, to modify the definition of the product group and to establish new ecological criteria.

- (6) The ecological criteria, as well as the related assessment and verification requirements, should be valid for four years from the date of adoption of this Decision.
- (7) Furthermore, in order to specify that products covered by Council Directive 76/768/EEC of 27 July 1976 on the approximation of the laws of the Member States relating to cosmetic products⁽³⁾ should be excluded from the scope of the product group concerned, it is necessary to modify the definition of the product group laid down in Decision 2001/405/EC.
- (8) Decision 2001/405/EC should therefore be replaced.
- (9) A transitional period should be allowed for producers whose products have been awarded the Eco-label for tissue paper based on the criteria contained in Decision 2001/405/EC, so that they have sufficient time to adapt their products to comply with the revised criteria and requirements. Producers should also be allowed to submit applications set out under the criteria set in Decision 2001/405/EC or set out under the criteria set in this Decision until the lapse of validity of that Decision.
- (10) Measures provided for in this Decision are in accordance with the opinion of the Committee instituted by Article 17 of Regulation (EC) No 1980/2000,

HAS ADOPTED THIS DECISION:

Article 1

The product group 'tissue paper' shall comprise sheets or rolls of tissue paper fit for use for personal hygiene, absorption of liquids and/or cleaning of soiled surfaces. The tissue product consists of creped or embossed paper in one or several plies. The fibre content of the product shall be at least 90 %.

That product group shall not comprise any of the following:

- (a) wet wipes and sanitary products;
- (b) tissue products laminated with other materials than tissue paper;
- (c) products as referred to in Directive 76/768/EEC.

⁽¹⁾ OJ L 237, 21.9.2000, p. 1.

⁽²⁾ OJ L 142, 29.5.2001, p. 10.

⁽³⁾ OJ L 262, 27.9.1976, p. 169.

Article 2

In order to be awarded the Community Eco-label for products falling within the product group tissue paper under Regulation (EC) No 1980/2000, a tissue paper shall comply with the criteria set out in the Annex to this Decision.

Article 3

The ecological criteria for the product group 'tissue paper', as well as the related assessment and verification requirements, shall be valid for four years from the date of adoption of this Decision.

Article 4

For administrative purposes the code number assigned to the product group 'tissue paper' shall be '004'.

Article 5

Decision 2001/405/EC is repealed.

Article 6

1. Applications for Eco-label for products falling within the product group tissue paper submitted before the date of adoption of this Decision shall be evaluated in accordance with the conditions laid down in Decision 2001/405/EC.

2. Applications for Eco-label for products falling within the product group tissue paper submitted from the date of adoption of this Decision but by 4 January 2010 at the latest may be based either on the criteria set out in Decision 2001/405/EC or on the criteria set out in this Decision.

Those applications shall be evaluated in accordance with the criteria on which they are based.

3. Where the Eco-label is awarded on the basis of an application evaluated according to the criteria set out in Decision 2001/405/EC, that Eco-label may be used for twelve months from the date of adoption of this Decision.

Article 7

This Decision is addressed to the Member States.

Done at Brussels, 9 July 2009.

For the Commission

Stavros DIMAS

Member of the Commission

ANNEX

FRAMEWORK**The aims of the criteria**

These criteria aim in particular at:

- the reduction of discharges of toxic or eutrophic substances into waters,
- the reduction of 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,
- the reduction of environmental damage or risks related to the use of hazardous chemicals,
- encouraging the use of sustainable fibres,
- the application of sustainable management principles in order to safeguard forests,

The criteria are set at levels that promote the labelling of tissue-paper products which have a lower environmental impact.

Assessment and verification requirements

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, it is understood that these may originate from the applicant and/or his supplier(s) and/or their supplier(s), et cetera, 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, testing should be performed by appropriately accredited laboratories that meet the general requirements expressed in standard EN ISO 17025.

Where appropriate, Competent Bodies may require supporting documentation and may carry out independent verifications.

The Competent Bodies are recommended to take into account the implementation of recognised environmental management schemes, such as EMAS or ISO14001, when assessing applications and monitoring compliance with the criteria (*Note: it is not required to implement such management schemes.*)

ECOLOGICAL CRITERIA

The ecological criteria cover the production of pulp including all constituent sub-processes from the point at which the fibre raw-material/recycled paper passes the plant gates, to the point at which the pulp leaves the pulp mill. For the paper production processes all sub-processes from the beating of the pulp (disintegration of the recycled paper) to winding the paper onto rolls.

Transport, converting and packaging of the pulp, paper or raw materials are not included.

Recycled fibre is defined as fibre obtained through recycling of used paper and board from the printing or consumer stages. Purchased and own broke from virgin fibre production is not included in the definition.

1. Emissions to water and air**(a) Chemical Oxygen demand (COD), Phosphorus (P), Sulphur (S), Nitrogen oxides (NO_x)**

For each of these parameters, the emissions to air and/or water from the pulp and the paper production shall be expressed in terms of points (P_{COD} , P_{P} , P_{S} , P_{NO_x}) as detailed below.

None of the individual points P_{COD} , P_p , P_S , or P_{NOx} shall exceed 1,5.

The total number of points ($P_{\text{total}} = P_{\text{COD}} + P_p + P_S + P_{\text{NOx}}$) shall not exceed 4,0.

The calculation of P_{COD} shall be made as follows (the calculations of P_p , P_S , and P_{NOx} shall be made in exactly the same manner with the corresponding reference values).

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 tissue 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, $\text{COD}_{\text{total}}$.

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 $\text{COD}_{\text{reftotal}}$. The reference values for each pulp type used and for the paper production are given in the table 1

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

$$P_{\text{COD}} = \frac{\text{COD}_{\text{total}}}{\text{COD}_{\text{reftotal}}} = \frac{\sum_{i=1}^n [\text{pulp}_i * (\text{COD}_{\text{pulp},i})] + \text{COD}_{\text{papermachine}}}{\sum_{i=1}^n [\text{pulp}_i * (\text{COD}_{\text{refpulp},i})] + \text{COD}_{\text{refpapermachine}}}$$

Table 1

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

(kg/ADT) ⁽¹⁾

Pulp Grade/Paper	Emissions			
	COD _{reference}	P _{reference}	S _{reference}	NOX _{reference}
Chemical pulp (others than sulphite)	18,0	0,045	0,6	1,6
Chemical pulp (sulphite)	25,0	0,045	0,6	1,6
Unbleached chemical pulp	10,0	0,02	0,6	1,6
CTMP	15,0	0,01	0,3	0,3
Recycled fibre pulp	3,0	0,01	0,03	0,3
Tissue Paper	2,0	0,01	0,03	0,5

⁽¹⁾ ADT = Air dry tonne means 90 % dry matter content for pulp. The actual dry matter content for paper is usually around 95 %. In the calculations the reference values for the pulps shall be adjusted to correspond the dry fibre content of the paper that most often is more than 90 %.

In case of a co-generation of heat and electricity at the same plant the emissions of NOx and S shall be allocated and calculated according to following equation:

The share of the emissions from the electricity generation = $2 \times (\text{MWh}(\text{electricity})) / [2 \times \text{MWh}(\text{electricity}) + \text{MWh}(\text{heat})]$

The electricity in this calculation is the net electricity, where the part of the working electricity that is used at the power plant to generate the energy is excluded i.e. the net electricity is the part that is delivered from the power plant to the pulp/paper production.

The heat in this calculation is the net heat, where the part of the working heat that is used at the power plant to generate the energy, is excluded i.e. the net heat is the part that is delivered from the power plant to the pulp/paper production.

Assessment and verification: The applicant shall provide detailed calculations showing compliance with this criterion, together with related supporting documentation, which shall include test reports using the specific test methods for each parameter or equivalent as indicated below:

COD: ISO 6060; DIN 38409 part 41, NFT 90101 ASTM D 125283, Dr Lang LCK 114, Hack or WTW

P: EN ISO 6878, APAT IRSA CNR 4110 or Dr Lange LCK 349

NO_x: ISO 11564

S(oxid.): EPA no.8

S(red.): EPA no 16A

S content in oil: ISO 8754

S content in coal: ISO 351.

The supporting documentation shall include an indication of the measurement frequency and the calculation of the points for COD, P, S and NO_x. It 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, except those emissions related to the production of electricity. Measurements shall include recovery boilers, limekilns, steam boilers and destructor furnaces for strong smelling gases. Diffuse emissions shall be taken into account. Reported emission values for S to air shall include both oxidised and reduced S emissions (dimethyl sulphide, methyl mercaptan, hydrogen sulphide and the like). 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.

Samples of the emissions to water 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. In the case of a new, or a rebuilt production plant, when emission measurements are not available for a 12-month period, the results shall be based on emission measurements taken once a day for 45 consecutive days, after the plants emissions values have stabilised.

(b) **AOX**

The weighted average value of AOX released from the productions of the pulps used in the eco-labelled tissue product must not exceed 0,12 kg/ADT paper. AOX emissions from each individual pulp used in the paper must not exceed 0,25 kg/ADT pulp.

Assessment and verification: The applicant shall provide test reports using the following test method: AOX ISO 9562 (1989) from the pulp supplier together with 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. In the case of a new, or a rebuilt production plant, when emission measurements are not available for a 12-month period, the results shall be based on emission measurements taken once a day for 45 consecutive days, after the plants emissions values have stabilised.

(c) **CO₂**

The emissions of carbon dioxide from non-renewable sources shall not exceed 1 500 kg per ADT paper produced, including emissions from the production of electricity (whether on-site or off-site).

The fuels used for converting the tissue paper into a product and transport in distributing this product, pulps or other raw materials shall not be included in the calculations.

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:

Table 2

Fuel	CO ₂ emission	Unit
Coal	95	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	62,40	g CO ₂ fossil/MJ
Natural gas	56	g CO ₂ fossil/MJ
Grid electricity	400	g CO ₂ fossil/kWh

For all grid electricity, the value quoted in the table above (the European average) shall be used, unless the applicant presents documentation establishing that electricity from renewable sources according to Directive 2001/77/EC of the European Parliament and of the Council (1) is used in which case the applicant may exclude the renewable electricity from the calculation.

2. Energy use

The total consumption of electricity related to the tissue-paper product shall be calculated as the sum of the electricity used in the pulp and the tissue paper production stages and shall not exceed 2 200 kWh electricity per ADT of paper produced.

The applicant shall calculate all inputs of electricity used during the production of pulp and tissue paper, including the electricity used in the de-inking of waste papers for the production of recycled paper.

The electricity calculation does not include energy consumed in transporting raw materials or in converting and packaging.

Electricity means net imported electricity coming from the grid and internally generated electricity measured as electric power. Electricity used for waste-water treatment and air cleaning need not be included.

Assessment and verification: The applicant shall provide detailed calculations showing compliance with this criterion, together with all related supporting documentation. Reported details should therefore include the total electricity consumption.

3. Fibres — Sustainable forest management

- (a) The pulp and paper producer/s shall have a policy for sustainable wood and fibre procurement and a system to trace and verify the origin of wood and tracking it from forest to the first reception point.

The origin of all virgin fibres shall be documented. The pulp and paper producer must ensure that all wood and fibre originate from legal sources. The wood and fibre shall not come from protected areas or areas in the official process of designation for protection, old growth forests and high conservation value forests defined in national stakeholder processes unless the purchases are clearly in line with the national conservation regulations.

- (b) The fibre raw material in the paper may be recycled or virgin fibre. 50 % of any virgin fibre must, however, originate from sustainably managed forests which have been certified by independent third party schemes fulfilling the criteria listed in paragraph 15 of the Council Resolution of 15 December 1998 on a Forestry Strategy for the EU and further development thereof.

Assessment and verification: The applicant shall provide appropriate documentation from the paper supplier indicating the types, quantities and precise origins of fibres used in the pulp and the paper production. Where virgin fibres from forests are used, the applicant shall provide appropriate certificate(s) from the paper/pulp supplier showing that the certification scheme correctly fulfils the requirements as laid down in paragraph 15 of the Council Resolution of 15 December 1998 on a Forestry Strategy for the EU.

(1) OJ L 283, 27.10.2001, p. 33.

4. Hazardous Chemical substances

(a) 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.

(b) 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 or the chemical supplier/s shall provide relevant declaration(s) that alkylphenol ethoxylates or other alkylphenol derivatives have not been added to these products.

(c) Surfactants in de-inking formulations for recycled fibres

Where surfactants are used in quantities of at least 100 g/ADT (summed over all the surfactants used in the all the different formulations used in de-inking return fibres), each surfactant shall be readily biodegradable. Where such surfactants are used in quantities of less than 100 g/ADT, each surfactant shall be either readily biodegradable or ultimately biodegradable (see test methods and pass levels below).

Assessment and verification: The applicant or the chemical supplier/s 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 methods and pass levels: for ready biodegradability OECD 301 A-F (or equivalent ISO standards), with a percentage degradation 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 ultimate biodegradability OECD 302 A-C (or equivalent ISO standards⁽¹⁾), 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.

(d) Biocides

The active components in biocides or biostatic agents used to counter slime-forming organisms in circulation water systems containing fibres shall not be potentially bio-accumulative.

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

(e) Wet strength agents

Wet strength aids must not contain more than 0,7 % of the chloro-organic substances epichlorohydrin (ECH), 1,3-dichloro-2-propanol (DCP) and 3-monochloro-1,2-propanediol (MCPD), calculated as the sum of the three components and related to the dry content of the wet strength agent.

Wet strength agents that contain glyoxal must not be used in the production of the eco-labelled tissue paper.

Assessment and verification: The applicant or the chemical supplier/s shall provide a declaration(s) that the content of the epichlorohydrin (ECH), 1,3-dichloro-2-propanol (DCP) and 3-monochloro-1,2-propanediol (MCPD), calculated as the sum of the three components and related to the dry content of the wet strength agent is not higher than 0,7 %.

⁽¹⁾ e.g. EN ISO Standard 14593:1999 — Water quality — Evaluation of ultimate aerobic biodegradability of organic compounds in aqueous medium — Method by analysis of inorganic carbon in sealed vessels (CO₂ headspace test). Pre-adaptation is not to be used. The 10-day window principle is not applied (reference method) based on Commission Regulation (EC) No 907/2006 of 20 June 2006 amending Regulation (EC) No 648/2004 of the European Parliament and of the Council on detergents, in order to adapt Annexes III and VII thereto (OJ L 168, 21.6.2006, p. 5).

(f) Softeners, lotions, fragrances and additives of natural origin

None of the constituent substances or preparations/mixtures in the softeners, lotions, fragrances and additives of natural origin must meet the classification as hazardous to the environment, sensitising, carcinogenic or mutagenic with risk phrases R42, R43, R45, R46, R50, R51, R52 or R53 (or and combination thereof) in accordance with Council Directive 67/548/EEC ⁽¹⁾ or Directive 1999/45/EC of the European Parliament and of the Council ⁽²⁾ and its amendments. Any substances/fragrances that in accordance with Directive 2003/15/EC of the European Parliament and of the Council ⁽³⁾ (7th amendment to Directive 76/768/EEC, Annex III, part I), requires the fragrance to be labelled on a product/packaging, shall not be used in the eco-labelled product (concentration limit 0,01 %).

Any ingredient added to the product as a fragrance must have been manufactured, handled and applied in accordance with the code of practice of the International Fragrance Association.

Assessment and verification: The applicant shall provide a list of softeners, lotions and additives of natural origin that have been added to the tissue product together with a declaration for each added preparation that the criterion is met.

A declaration of compliance with each part of this criterion shall be provided to the Competent Body by the fragrance manufacturer.

5. Product Safety

Products made from recycled fibres or mixtures of recycled and virgin fibres shall fulfil requirements on hygiene as follows:

The tissue paper shall not contain more than:

Formaldehyde: 1 mg/dm² according to test method EN 1541

Glyoxal: 1,5 mg/dm² according to test DIN 54603

PCP: 2 mg/kg according to test method EN ISO 15320.

All tissue products shall fulfil the following requirements:

Slimicides and antimicrobial substances: No growth retardance of micro-organisms according to test method EN 1104

Dyes and optical brighteners: No bleeding according to test method EN 646/648 (level 4 is required)

Dyes and inks:

— Dyes and inks used in the production of tissue paper shall not contain azo-substances that may cleave to any of the amines listed in the table 3,

— Dyes and inks used in the production of tissue paper shall not be based on Cd or Mn,

Table 3

Dyestuffs shall not shed the following amines according to the Directive 2002/61/EC of the European Parliament and of the Council ⁽⁴⁾

Amine	CAS-number
4-amino-biphenyl	92-67-1
Benzidine	92-87-5
4-chloro-toluidine	95-69-2
2-naphtylamine	91-59-8
o-aminoazo-toluene	97-56-3
2-amino-4-nitro-toluene	99-55-8

⁽¹⁾ OJ 196, 16.8.1967, p. 1.

⁽²⁾ OJ L 200, 30.7.1999, p. 1.

⁽³⁾ OJ L 66, 11.3.2003, p. 26.

⁽⁴⁾ OJ L 243, 11.9.2002, p. 15.

Amine	CAS-number
p-chloroaniline	106-47-8
2,4-diamino-anisol	615-05-4
2,4'-diamino-diphenylmethane	101-77-9
3,3'-dichlorobenzidine	91-94-1
3,3'-dimethoxybenzidine	119-90-4
3,3'-dimethylbenzidine	119-93-7
3,3'-dimethyl-4,4'-diamino-diphenylmethane	838-88-0
p-cresidine	120-71-8
4,4'-methylenebis(2-chloroaniline)	101-14-4
4,4'-oxydianiline	101-80-4
4,4'-thiodianiline	139-65-1
o-toluidine	95-53-4
2,4-toluenediamine	95-80-7
2,4,5-trimethylaniline	137-17-7
0-anisidinedimethoxyaniline	90-04-0
2,4-xylidine	95-68-1
4,6-xylidine	87-62-7
4-aminoazobenzene	60-09-3

Assessment and verification: The applicant or the chemical supplier/s shall provide a declaration of compliance with this criterion.

6. Waste Management

All producers of pulp, paper and converted tissue products shall have a system for the handling of waste and residual products arising from the production plants. The system shall be documented or explained in the application and shall include at least the following points:

- procedures for separating and recycling materials from the waste stream,
- procedures for recovering materials for other uses, such as incineration for raising process steam, or agricultural use,
- procedures for the handling of hazardous waste,

Assessment and verification: The applicant shall provide a description of the waste management for the sites concerned and a declaration of compliance with the criterion.

7. Fitness for use

The product shall be fit for use

8. Consumer information

Box 2 of the Eco-label shall include the following text:

- uses sustainable fibre,
- low water and air pollution,
- low greenhouse gas emissions and electricity use.

In addition, next to the Eco-label, the manufacturer shall either provide a statement indicating the minimum percentage of recycled fibres, and/or a statement indicating the percentage of certified fibres.