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**COMMISSION DECISION**

**of 13 August 2008**

**establishing the ecological criteria for the award of the Community eco-label to outdoor paints and varnishes**

*(notified under document number C(2008) 4452)*

**(Text with EEA relevance)**

(2009/543/EC)

(OJ L 181, 14.7.2009, p. 27)

Amended by:

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► <b><u>M1</u></b>	Commission Decision 2011/740/EU of 14 November 2011	L 297	64	16.11.2011
► <b><u>M2</u></b>	Commission Decision 2013/295/EU of 17 June 2013	L 167	57	19.6.2013

**COMMISSION DECISION****of 13 August 2008****establishing the ecological criteria for the award of the Community eco-label to outdoor paints and varnishes***(notified under document number C(2008) 4452)***(Text with EEA relevance)****(2009/543/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<sup>(1)</sup>, and in particular the second subparagraph of Article 6(1) thereof,

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 are to be established according to product groups.
- (3) It is appropriate to adopt a new decision establishing ecological criteria for the award of the Community eco-label to outdoor paints and varnishes.
- (4) The ecological criteria, as well as the related assessment and verification requirements, should be valid for a period of four years.
- (5) The measures provided for in this Decision are based on the draft criteria developed by the European Union Ecolabelling Board established under Article 13 of Regulation (EC) No 1980/2000.
- (6) The 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*

1. The product group 'outdoor paints and varnishes' shall comprise outdoor decorative and protective paints and varnishes, woodstains and related products for use on buildings and outdoor furniture, floors and fencing in accordance with paragraph 2, for use by do-it-yourself and professional users; and that are primarily developed for outdoor use and marketed as such.

<sup>(1)</sup> OJ L 237, 21.9.2000, p. 1.

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This includes, inter alia, floor coatings and floor paints; products which are tinted by distributors at the request of amateur or professional decorators; tinting systems; decorative paints in liquid or paste formulas which may have been pre-conditioned, tinted or prepared by the manufacturer to meet consumers needs, including wood paints, wood and decking stains, masonry coatings and metal finishes (excluding anti-corrosion finishes and primers) as well as primers (and undercoats) of such product systems.

2. 'Paint' means a pigmented coating material, in liquid or in paste or powder form, which when applied to a substrate, forms an opaque film having protective, decorative or specific technical properties.

'Varnish' means a clear coating material which when applied to a substrate forms a solid transparent film having protective, decorative or specific technical properties.

After application, the paint or varnish dries to a solid, adherent and protective coating.

Decorative paints and varnishes are paints and varnishes that are applied to buildings, their trim and fittings, as well as outdoor furniture, floors and fencing for decorative and protective purposes. They are applied *in situ*. Their function is decorative whilst providing a protective role.

Woodstains (lasures) are coatings producing a transparent or semi-transparent film for decoration and protection of wood against weathering, which enables maintenance to be carried out easily.

Masonry coatings are coatings that produce a decorative and protective film for use on concrete, (paintable) brickwork, blockwork, rendering, calcium silicate or fibre-reinforced cement. They are intended principally for exterior use, but may also be used internally, or on soffits and balcony ceilings.

'Tinting systems' is a method of preparing coloured paints by mixing a 'base' with coloured tints.

3. The following products are not included in the product group:

- (a) anti-corrosion coatings;
- (b) anti-fouling coatings;
- (c) wood preservation products;
- (d) coatings for particular industrial and professional uses, including heavy-duty coatings;
- (e) any product primarily developed for indoor use and marketed as such.

*Article 2*

1. In order to be awarded the Community eco-label under Regulation (EC) No 1980/2000 and subject to paragraphs 2 and 3 of this Article, paints and varnishes must fall within the product group 'outdoor paints and varnishes' as defined in Article 1, and must comply with the ecological criteria set out in the Annex to this Decision.

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2. Two-pack reactive performance coatings for specific end uses shall comply with the following conditions:
- (a) both components thereof must individually comply with the ecological criteria set out in the Annex (with the exception of the criterion for Volatile Organic Compounds);
  - (b) they must be accompanied by information explaining that the individual components must not be used separately or mixed with other products;
  - (c) the final ready-for-use product, however, must also meet the ecological criteria, including the criterion for VOC.
3. Coatings marketed for both indoor and outdoor use must satisfy both the criteria set out in this Decision for outdoor paints and varnishes and the criteria set out in Commission Decision 2009/544/EC <sup>(1)</sup> for indoor paints and varnishes.

**▼ M2***Article 3*

The ecological criteria for the product group ‘outdoor paints and varnishes’, as well as the related assessment and verification requirements, shall be valid until 30 June 2014.

**▼ B***Article 4*

For administrative purposes the code number assigned to the product group ‘outdoor paints and varnishes’ shall be ‘33’.

*Article 5*

This Decision is addressed to the Member States.

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<sup>(1)</sup> See page 39 of this Official Journal.



## ANNEX

### A. FRAMEWORK

#### The aims of the criteria

These criteria aim in particular at:

- the efficient use of the product and the minimisation of waste,
- reducing the environmental and other risks (such as tropospheric ozone) by reducing solvent emissions,
- reducing the discharges of toxic or otherwise polluting substances into waters. The criteria are set at levels that promote the labelling of exterior paints and varnishes 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), etc. 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 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 EN ISO14001, when assessing applications and monitoring compliance with the criteria (*Note*: it is not required to implement such management schemes).

Where ingredients are referred to in the criteria, this includes substances and preparations. The definitions of 'substances' and 'preparations' are given in the REACH Regulation (Regulation (EC) No 1907/2006 of the European Parliament and of the Council <sup>(1)</sup>).

The exact formulation of the product should be provided to the competent body for all ingoing substances that are used by the applicant. Any substance, including impurities, present in concentrations greater than 0,01 % (m/m) should be reported unless a lower concentration is specified elsewhere in the criteria.

### B. ECOLOGICAL CRITERIA

All criteria except criterion 3 concerning VOC limits shall apply to the paint or varnish in its packaging. In line with the Directive 2004/42/EC of the European Parliament and of the Council <sup>(2)</sup> the VOC limits relate to the ready-to-use product and so the maximum VOC content should be calculated based on any recommended additions such as colourants and/or thinners. For this calculation, data supplied by the raw material suppliers regarding solids content, VOC content and product density will be required.

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

<sup>(2)</sup> OJ L 143, 30.4.2004, p. 87.

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Criteria 1 and 2 apply only to white paints and light coloured paints, (including finishes, primers, undercoats and/or intermediates).

For tinting systems, criteria 1 and 2 apply only to the white (the base containing the most TiO<sub>2</sub>). In cases where the white base is unable to achieve the requirement of at least 6 m<sup>2</sup> per litre at a hiding power of 98 % according to criterion 7(a), the criteria shall be met after tinting to produce the standard colour RAL 9010.

Criteria 1 and 2 do not apply to transparent coatings.

**1. White pigments**

**White pigment content** (white inorganic pigments with a refractive index higher than 1,8): Paints shall have a white pigment content lower or equal to 38 g per m<sup>2</sup> of dry film, with 98 % opacity. This requirement does not apply to varnishes and woodstains.

*Assessment and verification:* The applicant shall either provide a declaration of non-use or provide the content of white pigments and the spreading rate, together with the detailed calculation showing compliance with this criterion.

**2. Titanium dioxide**

**Titanium dioxide:** The emissions and discharges of wastes from the production of any titanium dioxide pigment used shall not exceed the following (as derived from the Reference Document on Best Available Technology for the Manufacture of Large Volume Inorganic Chemicals (BREF) (August 2007)):

- SO<sub>x</sub> emissions (expressed as SO<sub>2</sub>): 266 mg per m<sup>2</sup> of dry film (98 % opacity),
- sulphate wastes: 19 g per m<sup>2</sup> of dry film (98 % opacity),
- chloride wastes: 3,9, 6,8 and 12,5 g per m<sup>2</sup> of dry film (98 % opacity) respectively for natural rutile, synthetic rutile and slag ores.

*Assessment and verification:* The applicant shall either provide a declaration of non-use or provide the supporting documentation indicating the respective levels of emissions and discharges of wastes for these parameters, the titanium dioxide content of the product, the spreading rate, together with the detailed calculations showing compliance with this criterion.

**3. Volatile organic compounds (VOC)**

**VOC** content shall not exceed:

Product Classification (Directive 2004/42/EC)	VOC limits (g/l including water)
Coatings for exterior walls of mineral substrate	40
Exterior trim and cladding paints for wood and metal including undercoats	90
Exterior trim varnishes and wood-stains, including opaque woodstains	90
Exterior minimum build woodstains	75
Primers (for exterior use)	15
Binding Primers (for exterior use)	15
1 Pack performance coatings	100
Two-pack reactive performance coatings for specific end use such as floors	100

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In this context volatile organic compounds (VOC) means any organic compounds having an initial boiling point less than or equal to 250 °C measured at a standard pressure of 101,3 kPa as defined Directive 2004/42/EC. The subcategories for paints and varnishes of the Directive are used for defining VOC limits. Only the categories relevant to outdoor coatings are displayed here.

*Assessment and verification:* The applicant shall provide a declaration of compliance with this criterion. For all products the applicant shall indicate the VOC content.

**4. Volatile aromatic hydrocarbons (VAH)**

Volatile aromatic hydrocarbons shall not be directly added to the product before or during tinting (where applicable); however ingredients containing VAH may be added up to such a limit that the VAH content in the end product will not exceed 0,1 % (m/m).

In this context volatile aromatic hydrocarbon (VAH) means any organic compound, as defined in Directive 2004/42/EC, having an initial boiling point less than or equal to 250 °C measured at a standard pressure of 101,3kPa and having at least one aromatic nucleus in its developed structural formula.

*Assessment and verification:* The applicant shall provide a declaration of compliance with this criterion stating that VAH has not been added other than in prefabricated ingredients and where applicable declarations from the suppliers of the ingredient confirming their VAH content.

**5. Heavy metals**

The following heavy metals or their compounds shall not be used as an ingredient of the product or tint (as applicable) (whether as a substance or as part of any preparation used): cadmium, lead, chromium VI, mercury, arsenic, barium (excluding barium sulphate), selenium, antimony.

Cobalt shall also not be added as an ingredient with the exception of cobalt salts used as a siccative in alkyd paints. These may be used up to a concentration not exceeding 0,05 % (m/m) in the end product, measured as cobalt metal. Cobalt in pigments is also exempted from this requirement.

It is accepted that ingredients may contain traces of these metals up to 0,01 % (m/m) 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 (where applicable).

**6. Dangerous substances**

(a) **The product:** The product shall not be classified as very toxic, toxic, dangerous to the environment, carcinogenic, toxic for reproduction, harmful, corrosive, mutagenic or irritant (only where this is caused by the presence of ingredients labelled with R43) in accordance with Directive 1999/45/EC of the European Parliament and of the Council<sup>(3)</sup> before or after tinting (where applicable).

*Assessment and verification:* The applicant shall provide a declaration of compliance with this criterion, together with a product material safety data sheet meeting the requirements of Annex II to REACH Regulation.

<sup>(3)</sup> OJ L 200, 30.7.1999, p. 1.

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(b) **Ingredients (very toxic, toxic, carcinogenic, mutagenic, toxic for reproduction):** No ingredient including those used in tinting (if applicable) shall be used that is assigned or may be assigned at the time of application any of the following risk phrases (or combinations thereof):

- R23 (toxic by inhalation),
- R24 (toxic in contact with skin),
- R25 (toxic if swallowed),
- R26 (very toxic by inhalation),
- R27 (very toxic in contact with skin),
- R28 (very toxic if swallowed),
- R33 (danger of cumulative effects),
- R39 (danger of very serious irreversible effects),
- R40 (limited evidence of carcinogenic effect),
- R42 (may cause sensitisation by inhalation),
- R45 (may cause cancer),
- R46 (may cause heritable genetic damage),
- R48 (danger of serious damage to health by prolonged exposure),
- R49 (may cause cancer by inhalation),
- R60 (may impair fertility),
- R61 (may cause harm to the unborn child),
- R62 (possible risk of impaired fertility),
- R63 (possible risk of harm to the unborn child),
- R68 (possible risk of irreversible effects),

as laid down in Council Directive 67/548/EEC <sup>(4)</sup>, and its subsequent amendments. Active ingredients used as preservatives in the formula and that are assigned any of the risk phrases R23, R24, R25, R26, R27, R28, R39 R40 or R48 (or combinations thereof) may nevertheless be used up to a limit of 0,1 % (m/m) of the total paint formulation.

Alternatively, the Globally Harmonised System (GHS) of classification may be considered <sup>(5)</sup>. In this case the ingredients, including those used in tinting (if applicable), classified as the following (or combinations thereof) shall not be used:

- Acute Toxicity (oral) — Category I, II, III,
- Acute Toxicity (dermal) — Category I, II, III,
- Acute Toxicity (inhalation) — Category I, II, III,

<sup>(4)</sup> OJ 196, 16.8.1967, p. 1.

<sup>(5)</sup> On 27 June 2007, the European Commission adopted the 'Proposal for a Regulation of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures, and amending Directive 67/548/EEC and Regulation (EC) No 1907/2006' (COM(2007) 355 final). For further information relating to the overlap between the existing system and GHS refer to Annex VII to Volume III of the proposal that has been adopted: [http://ec.europa.eu/enterprise/reach/docs/ghs/ghs\\_prop\\_vol\\_iii\\_en.pdf](http://ec.europa.eu/enterprise/reach/docs/ghs/ghs_prop_vol_iii_en.pdf)



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- Respiratory Sensitisation — Category I,
- Mutagenic Substances — Category I, II,
- Carcinogenic Substances — Category I, II,
- Substances Toxic for Reproduction — Category I, II,
- Specific Target Organ Systemic Toxicity (single exposure) — Category I, II,
- Specific Target Organ Systemic Toxicity (repeated exposure) — Category I, II,

as laid down in ST/SG/AC.10/30<sup>(6)</sup> and revised in ST/SG/AC.10/34/Add.3 on the Globally Harmonised System of Classification and Labelling of Chemicals. Active ingredients used as preservatives in the formula and that are assigned any of the following GHS categories may nevertheless be used up to a limit of 0,1 % (m/m) of the total paint formulation:

- Acute Toxicity (oral, dermal, inhalation) — I, II, III (only oral and dermal),
- Specific Target Organ Systemic Toxicity (single and/or repeated exposure) — I, II (or combinations thereof) and,
- Carcinogenicity category II.

Methyl Ethyl Ketoxime may be used in alkyd paints up to a limit of 0,3 % (m/m).

*Assessment and verification:* The applicant shall provide a declaration of compliance with this criterion, together with a product material safety data sheet meeting the requirements of Annex II to REACH Regulation.

(c) **Ingredients (dangerous for the environment):** No ingredient shall exceed 2 % (m/m), including those used in tinting (if applicable), that is assigned or may be assigned at the time of application any of the following risk phrases:

- N R50 (very toxic to aquatic organisms),
- N R50/53 (very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment),
- N R51/53 (toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment),
- N R52/53 (harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment),
- R51 (toxic to aquatic organisms),
- R52 (harmful to aquatic organisms),
- R53 (may cause long-term adverse effects in the aquatic environment),

as laid down in Directive 67/548/EEC or Directive 1999/45/EC.

<sup>(6)</sup> United Nations Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonised System of Classification and Labelling of Chemicals: <http://www.unece.org/trans/main/dgdb/dgcomm/ac10rep.html>

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Alternatively, the Globally Harmonised System (GHS) of classification may be considered<sup>(7)</sup>. In this case no ingredient shall exceed 2 % (m/m), including those used in tinting (if applicable), that is assigned or may be assigned at the time of application any of the following classifications:

Aquatic Toxicity categories (and combinations thereof):

— Acute I, II, III,

— Chronic I, II, III, IV,

as laid down in ST/SG/AC.10/30 and revised in ST/SG/AC.10/34/Add.3 on the Globally Harmonised System of Classification and Labelling of Chemicals.

In either case, the sum total of all ingredients that are assigned or may be assigned at the time of application any of these risk phrases (or combinations thereof) or GHS classifications shall not exceed 4 % (m/m).

This requirement does not apply to ammonia or alkyl ammonia.

This requirement does not affect the obligation to fulfil the requirement set out in criterion 6(a) above.

*Assessment and verification:* The applicant shall provide a declaration of compliance with this criterion, together with a list of ingredients and material safety data sheets of each ingredient meeting the requirements of Annex II to REACH Regulation.

- (d) **Alkylphenolethoxylates (APEOs):** APEOS shall not be used in the product before or during tinting (if applicable).

*Assessment and verification:* The applicant shall provide a declaration of compliance with this criterion.

- (e) **Isothiazolinone compounds:** The content of isothiazolinone compounds in the product shall not exceed 0,05 % (m/m) before or after tinting (if applicable). For wood coatings isothiazolinone compounds shall not exceed 0,2 % (m/m). Likewise the content of the mixture of 5-chloro-2-methyl-2H-isothiazol-3-one (EC No 247-500-7) and 2-methyl-2H-isothiazol-3-one (EC No 220-239-6) (3:1) shall not exceed 0,0015 % (m/m).

*Assessment and verification:* The applicant shall provide a declaration of compliance with this criterion, indicating the amounts (if used).

- (f) **Perfluorinated alkyl sulfonates (PFAS), perfluorinated carboxylic acids (PFCA)** including Perfluorooctanoic Acid (PFOA) and related substances listed in the OECD 'Preliminary lists of PFOS, PFAS, PFOA, PFCA, related compounds and chemicals that may degrade to PFCA (as revised in 2007)' are not permitted in the product. The OECD list is provided in the Annex to this criteria document.

*Assessment and verification:* The applicant shall provide a declaration of compliance with this criterion.

- (g) **Formaldehyde:** Free formaldehydes shall not be added. Formaldehyde donors may only be added in such quantities as will ensure that the resulting total content after tinting (if applicable) of free formaldehyde will not exceed 0,001 % (m/m).

<sup>(7)</sup> See footnote 5.

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*Assessment and verification:* The applicant shall provide a declaration of compliance with this criterion. In addition the applicant shall provide test results from raw materials suppliers using the VdL-RL 03 test method (VdL Guide-line03) 'In-can concentration of formaldehyde determined by the acetyl-acetone method' and calculations relating the data from these tests to the final product in order to indicate that the final maximum possible concentration of formaldehyde released by formaldehyde releasing substances is not higher than 0,001 % (m/m). Alternatively, formaldehyde resulting from formaldehyde donors can be measured in the end product based on High-performance liquid chromatography, by using a national standard or validated method as described in ISO/IEC 17025.

- (h) **Halogenated Organic Solvents:** Notwithstanding criteria 6a, 6b and 6c, only halogenated compounds that at the time of application have been risk assessed and have not been classified with the risk phrases (or combinations thereof): R26/27, R45, R48/20/22, R50, R51, R52, R53, R50/53, R51/53, R52/53 and R59 in accordance with Directives 67/548/EEC and 1999/45/EC may be used in the product before or during tinting (if applicable).

*Assessment and verification:* The applicant shall provide a declaration of compliance with this criterion.

- (i) **Phthalates:** Notwithstanding criteria 6a, 6b and 6c, only phthalates that at the time of application have been risk assessed and have not been classified with the phrases (or combinations thereof): R60, R61, R62, R50, R51, R52, R53, R50/53, R51/53, R52/53, in accordance with Directive 67/548/EEC and its amendments, may be used in the product before or during tinting (if applicable). Additionally DNOP (di-n-octyl phthalate), DINP (di-isononyl phthalate), DIDP (di-isodecyl phthalate) are not permitted in the product.

*Assessment and verification:* The applicant shall provide a declaration of compliance with this criterion.

## 7. Fitness for use

- (a) **Spreading rate:** White paints and light-coloured paints (including finishes, primers, undercoats and/or intermediates) shall have a spreading rate (at a hiding power of 98 %) of at least 6 m<sup>2</sup> per litre of product.

For tinting systems, this criterion applies only to the white base (the base containing the most TiO<sub>2</sub>). In case the white base is unable to achieve the requirement of at least 6 m<sup>2</sup> per litre at a hiding power of 98 %, the criterion shall be met after tinting the white base to produce the standard colour RAL 9010. For all other bases used to produce tinted products — these are bases which as a rule contain less TiO<sub>2</sub>, which are unable to achieve the requirement of at least 6 m<sup>2</sup> per litre of product at a hiding power of 98 % — the criterion shall not apply. For paints that are a part of a tinting system, the applicant must advise the end-user on the product packaging and/or POS which shade or primer/undercoat (if possible carrying the European Eco-label) should be used as a basecoat before applying the darker shade.

Primers with specific blocking/sealing, penetrating/binding properties and primers with special adhesion properties for aluminium and galvanised surfaces shall have a spreading rate (at a hiding power of 98 %) of at least 6 m<sup>2</sup> per litre of product.

Elastomeric paints shall have a spreading rate (at a hiding power of 98 %) of at least 4 m<sup>2</sup> per litre of product.

This requirement does not apply to varnishes, woodstains, floor coatings, floor paints, undercoats, other adhesion primers or any other transparent coatings.

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*Assessment and verification:* The applicant shall provide a test report using the method ISO6504/1 (Paints and varnishes — determination of hiding power — Part 1: Kubelka-Munk method for white and light-coloured paints) or 6504/3 (Part 3: determination of contrast ratio (opacity) of light-coloured paints at a fixed spreading rate), or (for paints specially designed to give a three-dimensional decorative effect and characterised by a very thick coat) the method NF T 30 073 (or equivalent). For bases used to produce tinted products not evaluated according to the abovementioned requirements, the applicant shall produce evidence that the end-user is advised to use a primer and/or grey (or other relevant shade) of undercoat before application of the product.

- (b) **Resistance to water:** Varnishes, floor coatings and floor paints shall have a resistance to water, as determined by ISO 2812-3 such that after 24 hours' exposure and 16 hours' recovery no change of gloss or of colour occurs.

*Assessment and verification:* The applicant shall provide a test report using the method ISO 2812-3 (Paints and varnishes — determination of resistance to liquids — Part 3: Method using an absorbent medium).

- (c) **Adhesion:** Masonry paints (excluding transparent primers) shall score a pass in the EN 24624 (ISO 4624) pull-off test for adhesion and floor coatings, floor paints and undercoats for concrete, wood and metal coatings shall score at least a 2 in the EN 2409 cross-cut method for adhesion. When carrying out EN 24624 where the cohesive strength of the substrate is less than the adhesive strength of the paint then this is considered a pass, otherwise the adhesion of the paint must be in excess of a pass value of 1,5MPa.

The applicant shall evaluate the primer and/or finish alone or both as part of a system (the system when tested shall concern products if possible labelled with the European Eco-label (with the exception of systems designed for metal surfaces)). When testing the finish alone this shall be considered the worst case scenario concerning adhesion.

*Assessment and verification:* The applicant shall provide a test report using the method EN ISO 2409 or EN 24624 (ISO 4624) as applicable.

- (d) **Abrasion:** Floor coatings and floor paints shall have an abrasion resistance not exceeding 70 mg weight loss after 1 000 test cycles with a 1 000 g load and a CS10 wheel according to EN ISO 7784-2:2006.

*Assessment and verification:* The applicant shall provide a test report showing compliance with this criterion using the method EN ISO 7784-2:2006.

- (e) **Weathering:** Masonry finish paints and wood and metal finishes including varnishes shall be exposed to artificial weathering in apparatus including fluorescent UV lamps and condensation or water spray according to 11507:2007. Masonry paints shall be exposed to test conditions for 1 000 hours, wood and metal finishes (including varnishes) shall be exposed to test conditions for 500 hours. Test conditions are: UVA 4h/60degC + humidity 4h/50degC.

Alternatively, wood finishes and wood varnishes may be exposed to weathering for 500 hours in the QUV accelerated weathering apparatus with cyclic exposure with UV(A) radiation and spraying according to EN 927-6.

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The colour change of samples exposed to weathering shall not be greater than  $\Delta E^* = 4$  and decrease in gloss for varnishes shall not be greater than 30 % of its initial value. The gloss shall be measured using ISO 2813. The criterion for colour change is not applicable to transparent varnishes and bases.

Chalking shall be tested using method EN ISO 4628-6:2007 on masonry finish coats and wood and metal finishes (where applicable) after the samples have been exposed to weathering. Coatings shall achieve a score of 1,5 or better (0,5 or 1,0) in this test. In the standard there are illustrated references.

The following parameters shall also be evaluated on masonry finish coats and wood and metal finishes after the samples have been exposed to weathering:

- Flaking according to ISO 4628-5:2003; flake density 2 or less, flake size 2 or less,
- Cracking according to ISO 4628-4:2003; crack quantity 2 or less, crack size 3 or less,
- Blistering according to ISO 4628-2:2003; blister density 3 or less, blister size 3 or less.

Due to the large number of possible tinting colours, these tests will be restricted to the base paint used.

*Assessment and verification:* The applicant shall provide test reports using either ISO11507:2007 according to the specified parameters or EN 927-6, or both (if relevant). Additionally the applicant shall provide test reports using EN ISO 4628-2, 4, 5, 6 where applicable. The applicant shall also provide a declaration that (where applicable) the colour change of the coating is within the parameter set in this document.

- (f) **Water vapour permeability:** Where claims are made that exterior masonry and concrete paints are breathable the paint shall be classified as Class II (medium vapour permeability) or better according to the test method EN ISO 7783-2. Due to the large number of potential tinting colours, this criterion will be restricted to testing of the base paint; this requirement is not applicable to transparent primers.

*Assessment and verification:* The applicant shall provide a test report using methodology EN ISO 7783-2.

- (g) **Liquid water permeability:** Where claims are made that exterior masonry and concrete paints are water repellent or elastomeric, the coating shall be classified as Class III (low liquid permeability) according to method DIN EN 1062-3:1999. Due to the large number of potential tinting colours, this criterion will be restricted to the testing of the base paint. All other masonry paints shall be classified as Class II (medium liquid permeability) or better according to the test method DIN EN 1062-3:1999.

*Assessment and verification:* The applicant shall provide a test report using methodology DIN EN 1062-3:1999.

- (h) **Fungal resistance:** Where claims are made that masonry finish coatings have anti-fungal properties, the coating shall have a score of 2 or better (less than 10 % fungal coverage), as determined by method BS 3900:G6. Due to the large number of possible tinting colours, this criterion will be restricted to the testing of the base paint.

*Assessment and verification:* The applicant shall provide a test report using methodology BS 3900:G6.

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- (i) **Crack bridging:** Where claims are made that masonry (or concrete) paint has elastomeric properties, it shall be at least classified as A1 at 23 °C according to DIN EN 1062-7:2004. Due to the large number of potential tinting colours, this criterion will be restricted to the testing of the base paint.

*Assessment and verification:* The applicant shall provide a test report using methodology DIN EN 1062-7:2004.

- (j) **Alkali resistance:** Masonry paints and primers shall show no noticeable damage when the coating is spotted for 24 hours with 10 % NaOH solution according to method ISO 2812-4:2007. The evaluation is done after 24 hours drying-recovery.

*Assessment and verification:* The applicant shall provide a test report using methodology ISO 2812-4:2007.

#### 8. Consumer information

The following information shall appear on the packaging or attached to the packaging:

- the use, substrate and conditions of use for which the product is intended. This shall include advice on preparatory work, etc., such as correct substrate preparation, advice on outdoor use (where appropriate), or temperature,
- recommendations for cleaning tools and appropriate waste management (in order to limit water pollution). These recommendations shall be adapted to the type of product in question and field of application in question and may make use of pictograms if appropriate,
- recommendations concerning product storage conditions after opening (in order to limit solid waste), including safety advice if appropriate,
- for darker coatings for which criterion 7(a) does not apply, advice is given concerning the use of the correct primer or base paint (if possible carrying the European Ecolabel),
- text advising that unused paint requires specialist handling for safe environmental disposal and that it should not therefore be thrown away with household refuse or poured away. Advice regarding disposal and collection should be sought from the local authority,
- recommendations on preventive protection measures for the painter. The following text (or equivalent text): shall appear on the packaging or attached to the packaging:

For more information as to why this product has been awarded the Flower please visit the web-site: <http://ec.europa.eu/environment/ecolabel>.

*Assessment and verification:* A sample of the product packaging shall be provided on application, together with a corresponding declaration of compliance with these criteria, as appropriate.

#### 9. Information appearing on the eco-label

Box 2 of the eco-label shall contain the following text:

- good performance for outdoor use,
- hazardous substances restricted,
- low solvent content.

*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.