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[...](2012) **XXX** draft

COMMISSION DECISION

of **XXX**

establishing the ecological criteria for the award of the EU Ecolabel for indoor and outdoor paints and varnishes

(Text with EEA relevance)

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COMMISSION DECISION

of **XXX**

establishing the ecological criteria for the award of the EU Ecolabel for **indoor and outdoor** paints and varnishes

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

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

Having regard to Regulation (EC) No 66/2010 of the European Parliament and of the Council of 25 November 2009 on the EU Ecolabel¹, and in particular Article 8(2) thereof,

After consulting the European Union Eco-labelling Board,

Whereas:

- (1) Under Regulation (EC) No 66/2010, the EU Ecolabel may be awarded to products which have a reduced environmental impact during their entire life cycle.
- (2) Regulation (EC) No 66/2010 provides that specific EU Ecolabel criteria are to be established according to product groups.
- (3) Since **(to be completed)** it is appropriate to establish EU Ecolabel criteria for the product group of 'indoor and outdoor paints and varnishes'.
- (4) The measures provided for in this Decision are in accordance with the opinion of the Committee established by Article 16 of Regulation (EC) No 66/2010,

¹ OJ L 27, 30.1.2010, p. 1.

HAS ADOPTED THIS DECISION:

Article 1

1. The product group ‘**indoor and outdoor** paints and varnishes’ shall comprise both indoor and outdoor decorative paints and varnishes, woodstains and related products, as defined in paragraph 2, intended for use by do-it-yourself and professional users (please note that these are not industrial coatings).
2. 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 consumer’s needs, including wood paints, wood and decking stains, masonry coatings and metal finishes primers and undercoats of such product systems as defined within Directive 2004/42/CE Annex I 1.1.d and 1.1.g.
3. The product group shall not comprise:
 - (a) anti-fouling coatings
 - (b) wood preservation products
 - (c) coatings for particular industrial and professional uses, including heavy-duty coatings
 - (d) ~~powder coatings~~
 - (e) UV curable paint systems
 - (f) paints primarily intended for vehicles
 - (g) products that do not form film over the substrate: putties for holes, cracks (fillers), road-marking paints, oils and waxes.

Deleted: <#>facade coatings¶

Article 2

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

- (1) ‘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.
- (2) ‘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.
- (3) ‘Decorative paints and varnishes’ means paints and varnishes that are applied to buildings, their trim and fittings, for decorative and protective purposes. They are

applied in-situ. While their main function is decorative in nature, they also have a protective role.

- (4) 'Woodstains' (lasures) means coatings producing a transparent or semi-transparent (using substantially non-white pigment) film for decoration and protection of wood against weathering, which enables maintenance to be carried out easily.
- (5) 'Tinting systems' is a method of preparing coloured paints by mixing a 'base' with coloured tints.
- (6) '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.
- (7) Binding primer's are coatings designed to stabilise loose substrate particles or impact hydrophobic properties and/or to protect wood against blue stain.

Furthermore, the following definitions shall be used:

- Transparent and semi-transparent contrast ratio < 98% at 120µ,
- Opaque contrast ratio >98% at 120µ,
- White and light coloured paints are those with a tri-stimulus (Y-value) >70%.

Deleted: <#>Semi Transparent contrast ratio 90-98% at 120µ¶

Article 3

The criteria for awarding the EU Ecolabel under Regulation (EC) No 66/2010, for a product falling within the product group "paints and varnishes" defined in Article 1 of this Decision as well as the related assessment and verification requirements are set out in the Annex to this Decision.

Article 4

The criteria and the related assessment requirements set out in the Annex, shall be valid for four years from [insert date - the date of adoption of this Decision].

Article 5

For administrative purposes, the code number assigned to the product group 'indoor and outdoor paints and varnishes' shall be "x".

Article 6

Decisions 2009/543/EC and 2009/544/EC are repealed.

Article 7

4. By derogation from Article 6, applications for the EU Ecolabel for products falling within the product group 'indoor paints and varnishes' or 'outdoor paints and varnishes' submitted before the date of adoption of this Decision shall be evaluated in accordance with the conditions laid down in Decisions 2009/543/EC or 2009/544/EC.
5. Applications for the EU Ecolabel for products falling within the product group 'paints and varnishes' submitted from the date of adoption of this Decision but by xxx at the latest may be based either on the criteria set out in Decision 2009/543/EC or 2009/544/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.
6. Where the Ecolabel is awarded on the basis of an application evaluated in accordance with the criteria set out in Decision 2009/543/EC or 2009/544/EC, that Ecolabel may be used for 12 months from the date of adoption of this Decision.

Article 8

This Decision is addressed to the Member States.

Done at Brussels,

For the Commission
Janez POTOČNIK
Member of the Commission

ANNEX

EU ECOLABEL CRITERIA AND ASSESSMENT AND VERIFICATION REQUIREMENTS

The aim of the criteria

The criteria aim, in particular at promoting:

- products that have a lower environmental impact along their life cycle,
- ~~products that have high quality, very good performance and long durability.~~
- products which contain a limited amount of hazardous substances,
- products which emit a reduced amount of volatile organic compounds,
- ~~the efficient use of the product.~~

Deleted: <#>indoor products which ensure a higher indoor air quality↑

Deleted: and the minimization of waste

Criteria for awarding the EU Ecolabel to paints and varnishes are set for each of the following aspects:

1. White pigment
2. Titanium dioxide
3. Efficiency in use
 - (a) Spreading rate
 - (b) Wet scrub resistance
 - (c) Resistance to water
 - (d) Adhesion
 - (e) Abrasion
 - (f) Weathering
 - (g) Water vapour permeability
 - (h) Liquid water permeability
 - (i) Fungal resistance
 - (j) Crack bridging
 - (k) Alkali resistance
 - (l) **Corrosion resistance**
4. Volatile Organic Compounds (VOC)
~~Indoor air quality~~
5. Metals
6. Hazardous substances and mixtures

- 6a. Restricted substances and mixtures list
- 6b. Substitution of hazardous substances and mixtures
- 7. Formaldehyde
- 8. Phthalates
 - ~~Unused Paint~~
 - ~~Recycled content~~
- 9. Consumer information
- 10. Information appearing on the EU Ecolabel

Assessment and verification

(a) 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, these may originate from the applicant and/or his supplier(s) and/or their supplier(s), as appropriate,

Deleted: or his supplier or both

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 possible, the testing shall be performed by laboratories that meet the general requirements of European Standard EN ISO 17025² or equivalent.

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

Deleted: 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).

(b) Measurement thresholds

Unless otherwise indicated compliance with the ecological criteria is required for substances and mixtures intentionally added, as well as for by-products and impurities from raw materials, the concentration of which equals or exceeds 0,01 % by weight of final formulation.

(c) The exact formulation of the product (trade name, chemical name, CAS no.), the function and the form of all ingredients intentionally used as well the ingoing quantity shall be provided to the competent body. Any ingredient, including known impurities, present in concentrations greater than 0,01 % shall be reported unless a lower concentration is specified elsewhere in the criteria.

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

² ISO/IEC 17025:2005 General requirements for the competence of testing and calibration laboratories

Safety data sheets for each ingredient shall be submitted to the competent body in accordance with Regulation (EC) No 1907/2006 of the European Parliament and of the Council.

(d) For Ecolabelled awarded products so far the applicant declares that minor (or none) changes in its paint formula (i.e. due to replacement or reduce of hazardous materials, slight VOC reduction etc.) cannot alter the technical performance (efficiency of use criteria), then the already «submitted» performance testing reports could be accepted for verification, if the period goes back up to 5 years back.

ECOLOGICAL CRITERIA

All criteria except criterion concerning VOC limits shall apply to the paint or varnish in its packaging. In line with Directive 2004/42/EC of the European Parliament and of the Council (2) 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 colorants and/or thinners. For this calculation, data supplied by the raw material suppliers regarding solids content, VOC content and product density will be required.

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

For tinting systems, criteria 1 and 2 apply only to the white base (the base containing the most TiO₂). In cases where the white base is unable to achieve the requirement of at least 8 m² per litre at a hiding power of 98 %, the criteria shall be met after tinting to produce the standard colour RAL 9010.

Criteria 1 and 2 do not apply to transparent coatings.

Criterion 1. White pigment

Indoor wall and ceiling paints for which a wet scrub resistance claims are made shall have a white pigment content (white inorganic pigments with a refractive index higher than 1.8) lower or equal to that described in the table below per m² of dry film, with 98 % opacity.

Wet scrub resistance	Indoor limit (g/m ²)
Class 1	40
Class 2	36
Class 3 and 4	25

Paints that have no wet scrub resistance claim as well as, limed paints, silicate paints, primers, anti-corrosive paints and facade paints shall comply with the above “white pigment” limits of 36 g/m² for indoor products and 38g/m² for outdoor products.

Due to the large potential range of possible tinting colours, this criterion will be restricted to the testing of the white base (the base containing the most TiO₂).

Assessment and verification: the applicant shall either provide a declaration of non-use or provide documentation showing the content of white pigments, the spreading rate and the assessment and verification criteria set out for the wet scrub resistance criterion, together with the detailed calculation showing compliance with this criterion.

Criterion 2. Titanium dioxide

If the product contains more than 3.0 weight % of 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)):

The sulphate process:

- SO_x calculated as SO₂: 7.0 kg/ton TiO₂ pigment
- Sulphate waste: 500 kg/ton TiO₂ pigment

The chloride process:

- If natural rutile ore is used, 103 kg chloride waste/ton TiO₂ pigment
- If synthetic rutile ore is used: 179 kg chloride waste /ton TiO₂ pigment
- If slag ore is used: 329 kg chloride waste /ton TiO₂ pigment

If more than one type of ore is used, the values will apply in proportion to the quantity of the individual ore types used.

Note:

SOx emissions only apply to the sulphate process.

For the avoidance of doubt, the Waste Framework Directive 2008/98/EC, article 3 defines waste. If the TiO₂ producer can satisfy article 5 (by-product production) of the Waste Framework Directive for its solid wastes then, the wastes shall be exempted.

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, together with the titanium dioxide content of the product, showing compliance with this criterion.

Criterion 3. Efficiency in use

Deleted: USE PHASE¶

Dependant on the claims made on the properties of the paint or the varnish, the following tests (as given in below table) shall be undertaken:

<u>Criteria</u>	<u>Indoor (a, b)²</u>	<u>Masonry paint (c)²</u>	<u>Trim and cladding (d)²</u>	<u>Indoor and outdoor paint (a, b, c)²</u>	<u>Thick decorative coating indoor and outdoor (c)²</u>	<u>Varnish and woodstain (e, f)²</u>	<u>Floor covering and paint (i)²</u>	<u>Primer (g)²</u>	<u>Undercoat and primer (h)²</u>
<u>Spreading rate (only on white and not tinting bases) – ISO 6504/1</u>	<u>8 m²/L</u>	<u>4 m²/L (elastomeric paint) 6 m²/L (masonry paint)</u>	<u>6 m²/L</u>	<u>8 m²/L</u>	<u>1 kg/m²</u>	<u>=</u>	<u>=</u>	<u>6 m²/L</u>	<u>8 m²/L</u>
<u>Wet scrub resistance – EN 13300 / EN ISO 11998</u>	<u>Minimum class 4 on white and tinting bases without colorants</u>	<u>=</u>	<u>=</u>	<u>Minimum class 4 on white and tinting bases without colorants</u>	<u>=</u>	<u>=</u>	<u>=</u>	<u>=</u>	<u>=</u>
<u>Resistance to water – ISO 2812-3</u>	<u>=</u>	<u>=</u>	<u>=</u>	<u>=</u>	<u>=</u>	<u>x</u>	<u>x</u>	<u>=</u>	<u>=</u>
<u>Adhesion – EN 24624</u>	<u>=</u>	<u>=</u>	<u>=</u>	<u>=</u>	<u>=</u>	<u>=</u>	<u>Score 2</u>	<u>=</u>	<u>=</u>
<u>Abrasion – EN ISO 7784-2</u>	<u>=</u>	<u>=</u>	<u>=</u>	<u>=</u>	<u>=</u>	<u>=</u>	<u>70 mg</u>	<u>=</u>	<u>=</u>
<u>Weathering – EN 11507 / EN 927-6</u>	<u>=</u>	<u>1 000 h</u>	<u>500 h</u>	<u>500 h</u>	<u>500 h (outdoor)</u>	<u>500 h</u>	<u>=</u>	<u>=</u>	<u>=</u>
<u>Water vapour permeability¹ – EN ISO 7783-2</u>	<u>=</u>	<u>Class II</u>	<u>=</u>	<u>Class II</u>	<u>Class II (outdoor)</u>	<u>=</u>	<u>=</u>	<u>=</u>	<u>=</u>
<u>Liquid water permeability¹ – EN 1062-3</u>	<u>=</u>	<u>Class III (elastomeric paint) Class II (masonry paint)</u>	<u>=</u>	<u>Class II</u>	<u>Class II (outdoor)</u>	<u>=</u>	<u>=</u>	<u>=</u>	<u>=</u>
<u>Fungal resistance¹ – BS 3900:G6</u>	<u>=</u>	<u>Score 2</u>	<u>=</u>	<u>Score 2</u>	<u>Score 2 (outdoor)</u>	<u>=</u>	<u>=</u>	<u>=</u>	<u>=</u>
<u>Crack bridging¹ – EN 1062-7</u>	<u>=</u>	<u>A1 (elastomeric paint only)</u>	<u>=</u>	<u>=</u>	<u>=</u>	<u>=</u>	<u>=</u>	<u>=</u>	<u>=</u>
<u>Alkali resistance¹ – ISO 2812-4</u>	<u>=</u>	<u>=</u>	<u>=</u>	<u>=</u>	<u>=</u>	<u>=</u>	<u>=</u>	<u>=</u>	<u>x</u>

Notes:

¹ Only required where marketing claims are made about the paints

² Subcategories of the Directive 2004/CE/42

(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 8m² per litre of product for indoor paints and 6m² for outdoor paints. Products marketed for both – indoor and outdoor shall have a spreading rate (at a hiding power of 98 %) of at least 8m² per litre. For tinting systems, this criterion applies only to the white base (the base containing the most TiO₂). In cases where the white base is unable to achieve this requirement, 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 TiO₂, which are unable to achieve the requirement of at least 8m² 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 bearing the Community 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 6m² per litre of product.

Thick decorative coatings (paints that are specially designed to give a three-dimensional decorative effect and are therefore characterised by a very thick coat) shall alternatively have a spreading rate of 1m² per kg of product.

Elastomeric paints shall have a spreading rate (at a hiding power of 98 %) of at least 4m² per litre of product.

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

Deleted: floor coatings, floor paints

Assessment and verification: the applicant shall provide a test report using the method ISO 6504/1 (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 of how the end-user will be advised to use a primer and/or grey (or other relevant shade) of undercoat before application of the product.

(b) Wet scrub resistance

All indoor wall paints (finishes) shall achieve class 4 or better in wet scrub resistance (WSR) according to EN 13300.

Ceiling paints and matt indoor paints does not need be tested but the consumer shall be informed that in this case the product has not been tested for WSR.

Wall paints for which claims are made (whether on the product or in related marketing material) that they are washable, cleanable or brushable shall have a wet scrub resistance as measured by EN 13300 and EN ISO 11998 of class 2 or class 1.

For paints of class 3 and class 4 no reference shall be presented (it is not allowed to claim WSR) on the label and other marketing documentation concerning wash ability properties of such paints.

Due to the large potential range of possible tinting colors, this criterion will be restricted to the testing of tinting bases (base paints).

Assessment and verification: the applicant shall provide a test report according to EN 13300 using the method EN ISO 11998 (Test for cleanability and scrub resistance) or an evidence (on the product packaging or related marketing material) that the end-user is informed that the product has not been tested for wet scrub resistance in the case of ceiling paints and matt indoor paints.

(c) Resistance to water

All varnishes, floor coatings and floor paints shall have 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 2812-3³.

(d) Adhesion

Pigmented masonry primers shall score a pass in the EN 24624 (ISO 4624) pull-off test where the cohesive strength of the substrate is less than the adhesive strength of the paint, otherwise the adhesion of the paint must be in excess of a pass value of 1,5MPa.

Floor coatings, floor paints, floor undercoats, metal and wood undercoats shall score at least 2 in the EN 2409 test for adhesion.

³ Paints and varnishes — determination of resistance to liquids — Part 3: Method using an absorbent medium. This test procedure is due for revision during the lifetime of this criterion. If there is a substantive change to this procedure, a decision by the Competent Body Forum shall be taken on the appropriate test standard used.

Transparent primers are not included in this requirement.

The applicant shall evaluate the primer and/or finish alone or both applied together. When testing the finish alone this shall be considered the worst case scenario concerning adhesion.

Deleted: as part of a system

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

(e) Abrasion

Floor coatings and floor paints shall have an abrasion resistance not exceeding 70 mg weight loss after 1000 test cycles with a 1000 g load and a CS10 wheel according to EN ISO 7784-2.

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

(f) 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. They shall be exposed to test conditions for 1 000 hours (including varnishes). Test conditions are: UVA 4h/60 °C + humidity 4h/50 °C.

Deleted: shall be exposed to test conditions for 500 hours.

Alternatively, outdoor wood finishes and wood varnishes shall be exposed to weathering for for 12 weeks in the QUV accelerated weathering apparatus with cyclic exposure with UV(A) radiation and spraying according to EN 927-6.

According to ISO 7724 3, the colour change of samples exposed to weathering shall not be greater than $\Delta E^* = 4$. It is not applicable to transparent varnishes and bases.

Deleted: To determine colour change of woodstains, a separate sample shall be prepared using an inert substrate and undergo weathering using a standard protocol outlined above.

Decrease of gloss for varnishes and high-gloss and satin paints exposed to weathering shall not be greater than 30 % of its initial value and shall be measured using ISO 2813. This requirement is not applicable to matt-finishes (i.e. having an initial gloss value less than 60%).

Deleted: paints and

Chalking shall be tested using method EN ISO 4628-6 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; flake density 2 or less, flake size 2 or less
- Cracking according to ISO 4628-4; crack quantity 2 or less, crack size 3 or less
- Blistering according to ISO 4628-2; blister density 3 or less, blister size 3 or less.

Tests should be performed on tinted paints.

Deleted: 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 ISO 11507 according to the specified parameters or EN 927-6, or both (if relevant). The applicant shall provide test reports using EN ISO 4628-2, 4, 5, 6 where applicable. Additionally, the applicant shall provide a test report in conformance to ISO 7724-3⁴ (where applicable).

(g) 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.

Deleted: -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.

(h) 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 EN 1062-3.

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 EN 1062-3.

Assessment and verification: the applicant shall provide a test report using methodology EN 1062-3.

⁴ This test procedure is due to be superseded by ISO 11664 during the lifetime of these criteria. If substantial changes to this procedure have been made, a decision by the Competent Body Forum shall be taken on the appropriate test standard to be used..

(i) Fungal resistance

Where claims are made that exterior masonry finish coatings and wood 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.

(j) 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 EN 1062.

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.

(k) 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. The evaluation is done after 24 hours drying-recovery.

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

(l) Corrosion resistance

Anti-corrosion paints for steel and zinc substrates shall at least meet ratings of 2 for blistering and 3 for rusting according to method ISO 4628.

Simulated corrosion stresses shall be applied to a substrate for the purpose of rating according to the appropriate atmospheric corrosivity category or categories in EN ISO 12944-2 and the accompanying test procedures specified in EN ISO 12944-6. The selection of atmospheric corrosivity category shall be based on the intended application and market for the paint.

Assessment and verification: the applicant shall provide testing and rating reports using the methodologies ISO 12944-6 and ISO 4628.

Criterion 4. Volatile Organic Compounds (VOC)

Deleted: EMISSIONS DURING USE

Volatile Organic Compounds content shall not exceed:

Description	VOC limits (g/l including water)
Indoor matt walls and ceilings (Gloss <25@60°)	15
Indoor glossy walls and ceilings (Gloss >25@60°)	40
Outdoor walls of mineral substrate	25
Indoor/Outdoor trim and cladding paints for wood and metal	80
Indoor trim varnishes and woodstains, including opaque woodstains	65
Outdoor trim varnishes and woodstains, including opaque woodstains	75
Indoor and Outdoor minimal build woodstains	50
Primers	15
Binding primers	15
One-pack performance coatings	80
Two-pack reactive performance coatings for specific end use such as floors	80
Decorative effect coatings	80
Anti-corrosion paints	80

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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 in Directive 2004/42/EC. The subcategories for paints and varnishes of the Directive are used for defining VOC limits. These values shall be measured at the point of application and must include any additional solvent added to the paint prior to application.

SVOCs are defined as organic substances or mixtures with a boiling range between 250 and 400°C. The total Semi Volatile Organic Compound (SVOC) shall be limited to 30 g/l including water for indoor white paints and 40g/l for outdoor paints and for tinting systems (i.e. the shades produced from tinting bases shall have a maximum of 40g/l for each tinting base. The producer shall declare the shade with the max SVOCs as the worst case scenario).

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

Criterion 5. Indoor air quality

Each indoor paint shall undergo testing for Indoor air quality and meet Class A+ as defined within French Decree NOR : DEVL1104875A. This requirement is restricted to the lightest colour paint within a series or, in tinting systems, the base paint.

Assessment and verification: the applicant shall provide test results using the methodology described within NOR : DEVL1104875A.

Criterion 5. Metals

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

Cobalt pigments and cobalt used as siccative in alkyd paints are exempted from this requirement.

For pigments that contains antimony integrated in TiO₂ rutile lattice, documentation shall be submitted proving that the molecular structure are inert and that the environmental and health effects from the pigment are on the same level as, or better than, the results for C.I Pigment Brown 24 (CAS no 68186-90-3) and C.I Pigment Yellow 53 (CAS no 8007-18-9) in the report UNEF Publications, OECD SIDS Initial Assessment Profile^{5, 6}.

It is accepted that raw materials (ingredients) may contain traces of these metals up to 0.01 % deriving from impurities in the raw materials and can be present at these quantities for each metal for each ingredient.

Assessment and verification: the applicant shall provide a declaration of compliance with this criterion as well as declarations from raw materials (ingredients) suppliers (where applicable).

Criterion 6. Hazardous substances and mixtures

Sub-criterion 6a. Restricted substances and mixtures list

The products shall not contain the hazardous substances listed in the restricted substances and mixtures list at or above the specified concentration limits. The list can be found in Annex 1. In accordance with Article 6(7) of Regulation (EC) No 66/2010 the list requires that the final product and any ingoing ingredient shall not contain substances that:

- a) Meet the criteria in Article 57 of Regulation (EC) No 1907/2006 and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH);

⁵ Available at: www.inchem.org.

⁶ See also restricted substances criterion

- b) Have been identified according to the procedure described in Article 59(1) which establishes the Candidate List for Substances of Very High Concern.

No derogation shall be given concerning substances that meet either one or both of these conditions, and which are present in a paint or varnish at concentrations higher than 0,10 % (weight by weight). Specific concentration limits determined in accordance with Article 10 of Regulation (EC) No 1272/2008 shall apply in cases where the concentration is lower than 0.1%.

Assessment and verification: The applicant shall provide a declaration of compliance with this criterion, together with related documentation, such as declarations of compliance signed by their suppliers, and copies of relevant Safety Data Sheets for substances or mixtures in accordance with Annex II to Regulation (EC) No 1907/2006 for substances or mixtures.

Compliance shall be based on a screening of the ingoing substances against the restricted substances and mixtures list, the current ECHA Candidate List for Substances of Very High Concern and the criteria in Article 57 of Regulation (EC) No 1907/2006. Concentration limits shall be specified in the Safety Data Sheets in accordance with Article 31 of Regulation (EC) No 1907/2006 for substances and mixtures.

Sub-criterion 6b. Substitution of hazardous substances and mixtures

The product, and all ingoing substances or mixtures present at greater than 0.010% or at specific concentration limits in the product, shall not meet the criteria for classification as toxic, hazardous to the environment, carcinogenic, mutagenic or toxic for reproduction (CMR) in accordance with Regulation (EC) No 1272/2008 or Directive 67/548/EC and as interpreted according to the hazard statements and risk phrases listed within this criterion.

The hazard classes and risk phrases listed below generally apply to substances. However, where information on substances cannot be obtained, the classification rules for mixtures shall be applied.

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

The most up to date classifications and associated threshold limits adopted by the European Union shall take precedence over the listed hazard classes and risk phrases. Applicants shall therefore ensure that the classification of substances is based on the most recent rules on classification.

Acute toxicity	
H300 Fatal if swallowed (R28)	H301 Toxic if swallowed (R25)
H310 Fatal in contact with skin (R27)	H311 Toxic in contact with skin (R24)
H330 Fatal if inhaled (R23/26)	H331 Toxic if inhaled (R23)
H304 May be fatal if swallowed and enters airways (R65)	EUH070 Toxic by eye contact (R39/41)
H370 Causes damage to organs (R39/23/24/25/26/27/28)	H371 May cause damage to organs (R68/20/21/22)
H372 Causes damage to organs (R48/25/24/23)	H373 May cause damage to organs (R48/20/21/22)
Sensitisers	
H317 (1A): May cause allergic skin reaction (R43)	H317 (1B): May cause allergic skin reaction (R43)
H334 (1A): May cause allergy or asthma symptoms or breathing difficulties if inhaled (R42)	H334 (1B): May cause allergy or asthma symptoms or breathing difficulties if inhaled (R42)
CMR	
H340 May cause genetic defects (R46)	H341 Suspected of causing genetic defects (R68)
H350 May cause cancer (R45)	H351 Suspected of causing cancer (R49)
H350i May cause cancer by inhalation (R49)	
H360F May damage fertility (R60)	H361f Suspected of damaging fertility (R62)
H360D May damage the unborn child (R61)	H361d Suspected of damaging the unborn child (R63)
H360FD May damage fertility. May damage the unborn child (R60/61/60-61)	H361fd Suspected of damaging fertility. Suspected of damaging the unborn child (R62/63)
H360Fd May damage fertility. Suspected of damaging the unborn child (R60/63)	H362 May cause harm to breast fed children (R64)
H360Df May damage the unborn child. Suspected of damaging fertility (R61/62)	
Environmental hazards	
H400 Very toxic to aquatic life (R50)	H411 Toxic to aquatic life with long-lasting effects (R51/53)
H410 Very toxic to aquatic life with long-lasting effects (R50/53)	H412 Harmful to aquatic life with long-lasting effects (R52/53)
H413 May cause long-lasting effects to aquatic life (R53)	EUH059 Hazardous to the ozone layer (R59)

Paints and varnishes derogation rules

For the purpose of this product group the derogation of hazard classifications will apply to substance groups and will be subject to specific rules set out below and in Annex 2. These rules differentiate between classifications relating to the paint or varnishes production and use:

- 1) Classification of ingoing product ingredients: Substances and mixtures which are an ingoing ingredient of the paint or varnish at or above the generic or specific concentrations referred to in Regulation (EC) No 1272/2008 for the listed classifications shall, where applicable, be derogated according to the rules for each substance group.
- 2) Classification of the final product mixture: The final product shall not be labelled with the hazard classes listed in the rules for each substance group. Classification of the product shall be determined according to the methodologies for the classification of mixtures referred to in Regulation (EC) No 1272/2008 and all amending legislation.

Derogations of ingoing ingredients that are classified with Category 1 and 2 hazards will also be subject to the following additional rules:

- The applicant shall submit evidence of the health and safety procedures relating to handling of ingoing substance(s) classified as acutely toxic or CMR at production sites of the original paint and varnish manufacturer.
- Where they exist European Occupational Exposure Limit Values for the substances shall be met for all production sites handling the classified ingoing substance(s).
- Substances to which the classification applies to their dry form shall demonstrate that the user cannot come into contact with the substance in this form during use of the paint.

Assessment and verification: The applicant shall demonstrate compliance with this criterion by providing a declaration of the classification and/or non-classifications of each substance and mixture that forms an ingoing ingredient of the paint or varnish according to the hazard categories referred to above and, as far as this can be determined, as a minimum, based on information meeting the requirements listed in Annex VII of REACH Regulation (EC) 1907/2006.

This declaration shall be supported by a technical report which identifies the substances and mixtures that are contained within the final product at concentrations of greater than a cut-off value of 0.010% w/w. Substances and mixtures that may have specific concentration limits listed under Regulation (EC) No 1272/2008 which may fall below this cut-off value shall also be identified.

Substances and mixtures should be characterised in accordance with that specified in section 10, 11 and 12 of Annex II of Regulation (EC) 1907/2006 (Requirements for the Compilation of Safety Data Sheets). The technical report should also identify substances that are proposed for derogation by the applicant, accompanied by justifications and supporting information as to how the derogation requirements are met.

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Criterion 7. Formaldehyde

Free formaldehydes shall not be added. Formaldehyde donators 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% by weight⁷.

Assessment and verification: the applicant shall provide a declaration of compliance with this criterion. In addition, the in-can concentration shall be determined using a standard based on High-Performance Liquid Chromatography using a [national standard or validated method](#). The applicant shall provide test results on the concentration of in-can formaldehyde [for white base, each tinting bases and one tinted paint that applicant estimate the most representative \(i.e. with the highest amount of formaldehyde donor\).](#) [Alternatively, the applicant shall provide test results from raw materials suppliers using the VdL-RL 03 test method \(VdL Guideline03\) '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 % by weight.](#)

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Criterion 8. Phthalates

[Intentional addition of the following phthalates shall not be added intentionally. The sum of the prohibited phthalates shall be lower than 0.1% by weight.](#)

<u>Name</u>	<u>CAS number</u>	<u>Acronym</u>
<u>Di-iso-nonylphthalate</u>	<u>28553-12-0 68515-48-0</u>	<u>DINP</u>
<u>Di-n-octylphthalate</u>	<u>117-84-0</u>	<u>DNOP</u>
<u>Di(2-ethylhexyl)-phthalate</u>	<u>117-81-7</u>	<u>DEHP</u>
<u>Diisodecylphthalate</u>	<u>26761-40-0 68515-49-1</u>	<u>DIDP</u>
<u>Butylbenzylphthalate</u>	<u>85-68-7</u>	<u>BBP</u>
<u>Dibutylphthalate</u>	<u>84-74-2</u>	<u>DBP</u>
<u>Di-iso-butylphthalate</u>	<u>84-69-5</u>	<u>DIBP</u>
<u>Di-C6-8-branched alkyphthalates</u>	<u>71888-89-6</u>	<u>DIHP</u>
<u>Di-C7-11-branched alkylphthalates</u>	<u>68515-42-4</u>	<u>DHNUP</u>
<u>Di-n-hexylphthalate</u>	<u>84-75-3</u>	<u>DHP</u>
<u>Di-(2-methoxyethyl)-phthalate</u>	<u>117-82-8</u>	<u>DMEP</u>

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

END OF LIFE PHASE

Criterion 10. Unused Paint

⁷ See also the restricted substances criterion.

~~Applicants shall encourage paint reuse/recycling equivalent to at least 2%, by volume, of all their Ecolabelled paint sold per annum. This can be achieved by one or with combination of the following options:~~

- ~~(a) — supporting reuse collection systems through third parties~~
- ~~(b) — accepting unwanted paint for recycling or reuse~~
- ~~(c) — supporting retailers with take-back systems.~~

~~The user should be respectively advised on the available options on how to deal with the unused paint.~~

~~**Assessment and verification:** applicant shall either provide direct evidence of having a reuse scheme in place that reuses at least 2% by volume of paint per annum or provide evidence of substantial financial, logistical or physical support to a third party scheme that reuses 2%. It is not a requirement that the paint reused has obtained the EU Ecolabel. In addition, the applicant shall provide evidence through literature and packaging that instructs the end user where unused paint can be taken for reuse/recycling. These instructions should also be made available via the manufacturer website.~~

Criterion 11. Recycled content

~~Plastic paint pots shall be made of a minimum 25% (m/m) post-consumer recycled material, be made of one polymer or be of compatible polymers for recycling and have the relevant ISO11469 marking.~~

~~This criterion does not apply to paint systems that deliver greater than 25 litres.~~

~~**Assessment and verification:** the applicant shall provide a declaration of compliance with this criterion along with evidence of marking.~~

Criterion 9. Consumer information

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

- “Unused paint is not waste”. It shall be recommended to preserve and reuse the unused paint as well to calculate the amount of paint needed prior purchase for minimizing environmental impacts.
- 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 indoor 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 bearing the Community Eco-label)
- (Indoor only) — for thick decorative coatings a text informing that these are paints specially designed to give a three-dimensional decorative effect
- Text advising that unused paint requires specialist handling for safe environmental disposal and therefore it should not be thrown away with household refuse. The consumer should be informed on the provided and/or supported by the manufacture option for dealing the unused paint as given in criterion "unused paint".
- 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 EU Ecolabel please visit the web-site: <http://ec.europa.eu/environment/ecolabel>'.

Assessment and verification: the applicant shall declare that the product complies with the requirement and provide the competent body with an art work (as PDF or other electronic form) or samples of the user information and/or a link to a manufacturer's website containing this information as part of the application. The information in which is given advice on how to deal with the "unused paint" should also be available via the manufacturer website.

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Criterion 10. Information appearing on the EU Ecolabel

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

- Good performance for indoor use (where indoor criteria has been met)
- Good performance for outdoor use (where outdoor criteria has been met)
- Good performance for both indoor and outdoor use (where both indoor and outdoor criteria have been met)
- Minimised use of hazardous substances
- Low volatile organic compounds (VOCs)..

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

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

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

Annex 1

Restricted substances and mixtures list

Substance group	Scope of restriction	Limit values	Verification requirements and testing methods
Substances of Very High Concern (SVHC's)			
Substances that have been entered onto the ECHA Candidate List. <i>Applicability:</i> All products	SVHC's that appear on the Candidate List that is current at the time of application and which may appear in the final product shall not be present at concentrations of more than 0.1% w/w The current Candidate List can be consulted at: http://echa.europa.eu/web/guest/candidate-list-table	0.1% w/w	<i>Verification:</i> Documentation of Candidate List screening. <i>Test method:</i> To be specified according to each substance.
Residuals and contaminants			
Formaldehyde <i>Applicability:</i> All products.	Intentionally added free formaldehyde Total content arising from formaldehyde donors Residual formaldehyde from polymer production Total contribution from donors and carry-over residue	0,0% 0,010% w/w x,x% w/w x,x% w/w	<i>Verification:</i> Laboratory testing for white base, each tinting base and the tinted paint which has the maximum theoretical amount of formaldehyde. <i>Test method:</i> Determination of the in

			can concentration using high-performance liquid chromatography or the VdL-RL 03 test method (VdL Guideline03) ‘In-can concentration of formaldehyde determined by the acetyl-acetone method’
Monomer from binder	Acrylic acid that may be present at concentrations more than 0.01% in Paints Directive 2004/14/EC classes c,d,e and i	0.05%	<i>Verification:</i> To be determined <i>Test method:</i> To be determined
Surfactants			
APEO's <i>Applicability:</i> All products.	Alkylphenoethoxylates (APEOs) and their derivatives shall not be used in any paint or varnish preparations or formulations and are subject to limit values for the presence of the following substances in the final product: - Polyoxyethylated octyl phenol 9002-93-1 - Polyoxyethylated nonyl phenol 9016-45-9 - Polyoxyethylated p-nonyl phenol 26027-38-3	0.005% total sum	<i>Verification:</i> SDS to be provided for all surfactants used. <i>Test method:</i> C65 Solvent extraction HPLC MS

<p>PFAS's <i>Applicability:</i> Colorant and tinting bases</p>	<p>The PFAS (perfluoroalkyl sulfonate) group of substances shall not be used. <i>The following trace limits apply:</i> PFOS (perflourooctane sulfonate and its derivatives) All other PFAS forms</p>	<p>Trace per substance 20.0 µg/kg</p>	<p><i>Verification:</i> SDS to be provided for all surfactants used. <i>Test method:</i> Solvent extraction GC-MS or HPLC-MS</p>
Pigments			
<p>Metals and their compounds <i>Applicability:</i> All products.</p>	<p>The following metals shall not be used as an ingredient of the product or tint (if applicable) whether as a substance or part of a mixture itself: Cadmium, lead, chromium VI, mercury, arsenic, barium, selenium and antimony. The following derogations apply: - Barium sulphate - Nepheline syenite (containing barium) - Antimony nickel within an insoluble TiO₂ lattice - Cobalt blue pigment</p>	<p>x.x% w/w x.x% w/w 3.0% w/w x.x% w/w</p>	<p><i>Verification:</i> Documented testing demonstrating that the pigment chromophore is bonded within a crystal lattice and is insoluble. <i>Test method:</i> To be determined</p>
Biocides			
<p>In-can and dry film preservatives <i>Applicability:</i> As specified.</p>	<p>The following active substances or active substance combinations may be used for the specified function, subject to the specified concentration limits: a) Titanium dioxide (80%)/silver chloride (20%) - In can preservative (indoor paint) - In can preservative (outdoor paint) - Dry film preservative (indoor paints)</p>	<p>50 ppm 500 ppm 500 ppm</p>	<p><i>Verification:</i> Applicant shall provide SDS for ingoing preservatives. <i>Test method:</i> n/a</p>

	- Dry film preservative (outdoor paints)	2000 ppm	
	b) 2-methyl-2H- isothiazol-3-one (MIT) / 1,2-benzisothiazol-3(2H)-one (BIT) in a ratio of 1:1 - In can preservative	200 ppm	
	c) 5-chloro-2-methyl-4-isothiazolin-3-one (CIT) / 2-methyl-4-isothiazolin-3-one (MIT) in a ratio of 3:1 - In can preservative	15 ppm	
	d) 3-iodo-2-propynyl butylcarbamate (IPBC) - In can preservative - Dry film preservative (outdoor wood paints)	60 ppm 450 ppm	
	e) 1,2- benzisothiazol-3(2H)-one - In can preservative	200 ppm	
	f) 2-bromo-2-nitropropane-1,3-diol (BNPD) - In can preservative	200 ppm	
	g) BNPD + CIT/MIT (3:1) - In can preservative (all paints) for the three combinations of limit values	130 ppm + 15 ppm 150 ppm + 10 ppm 170 ppm + 5 ppm	
	h) MIT/BIT(1:1) + CIT/MIT (3:1) - In can preservative (all paints)	150 ppm + 12,5 ppm 125 ppm + 15 ppm	

	i) 1,2-dibromo-2,4-dicyanobutane (DBDCB) - In can preservative (all paints)	500 ppm	
	j) BIT + CIT/MIT (3:1) - In can preservative (all paints)	150 ppm + 12,5 ppm	
	k) BNPD + MIT/BIT (1:1) - In can preservative (all paints)	120 ppm + 75 ppm	
	l) Zinc pyrithione (ZNP) - In-can preservative (outdoor paints for facades) - In-can preservative (all paints) - Dry film preservative (outdoor paints for facades)	250 ppm	
	m) Zinc pyrithione (ZNP) + BIT	100 ppm + 100 ppm	
	n) Zinc pyrithione (ZNP) + MIT/BIT (1:2 to 1:1)	50 ppm + 150 ppm	
	q) BNPD + BIT - In-can preservative (all paints)	100 ppm + 100 ppm	
	r) Sodium pyrithione (NaP) + BIT - In-can preservative (all paints)	50 ppm + 150 ppm	
Phthalates			
Plasticisers in paint and varnish <i>Applicability:</i> All paints	<i>The following phthalates shall not be intentionally added as plasticisers:</i> DEHP (Bis-(2-ethylhexyl)-phthalate) BBP (Butylbenzylphthalate) DBP (Dibutylphthalate)	Sum total 0.1% w/w	<i>Verification:</i> SDS shall be provided for plasticisers used in the paint mixture.

	DMEP (Bis2-methoxyethyl) phthalate DIBP (Diisobutylphthalat) DIHP (Di-C6-8-branched alkylphthalates) DHNUP (Di-C7-11-branched alkylphthalates) DHP (Di-n-hexylphthalate)		<i>Test method:</i> DIN EN 15777:2009-12
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Annex 2

Derogated classifications for hazardous substances and mixtures

Substances that impart function to the final product

Substance group	Derogated classifications			Derogation conditions
	Indoor paint	Outdoor paint	Varnish	
Preservatives Only preservatives that are authorised under Biocide Directive 98/8/EC and Biocide Regulation (EC) No 528/2012, or for which a dossier has been submitted for evaluation pending a decision on authorisation or non-inclusion, are permitted for use. <i>Applicants should consult the most current authorisation list:</i> http://ec.europa.eu/environment/biocides/annexi_and_ia.htm				
In-can	H331 (R23), H317 (R43), H400 (R50), H410 (R50/53), H411 (R51/53), H412 (R52/53) Substances classified with H400 (R50) shall be non-bioaccumulative. Non-bioaccumulative substances shall have a Log Kow > 3.2 and a Bioconcentration Factor (BCF) < 100. Concentration limit: 0.050% w/w			<ul style="list-style-type: none"> ○ The final product shall not be classified as acutely toxic, a skin sensitiser (Category 1A/B) or hazardous to the environment. ○ Formaldehyde concentrations in the final product shall not exceed 0.010% (see annex I for testing and verification).
Dry film	H317 (R43) H400 (R50), H410 (R50/53), H411 (R51/53), H412 (R52/53) Substances classified with H400 (R50) shall be non-bioaccumulative. Non-bioaccumulative substances shall have a Log Kow > 3.0 and a Bioconcentration Factor (BCF) < 100. Concentration limit: 0.1% w/w sum total in the product			<ul style="list-style-type: none"> ○ The final product shall not be classified as a skin sensitiser (Category 1A/B) or hazardous to the environment.

Substance group	Derogated classifications			Derogation conditions
	Indoor paint	Outdoor paint	Varnish	
Drying and anti-skinning agents				
Driers	H317 (R43) H411 (R51/53), H412 (R52/53), H413 (R53) <i>Concentration limit: 0.10% w/w with the exception of cobalt driers at 1.0%</i>			○ The final product shall not be classified as a skin sensitiser (Category 1A/B) or hazardous to the environment.
Anti-skinning	H412 (R52/53), H413 (R53), H317 (R43) <i>Concentration limit: 0.40% w/w</i>			○ The final product shall not be classified as a skin sensitiser (Category 1A) or hazardous to the environment.
UV protectors and stabilisers				
Stabilising agents for outdoor paints	H317 (R43) H411 (R51/53), H412 (R52/53), H413 (R53), <i>Concentration limit: 0.60% w/w</i>			○ The final product shall not be classified as a skin sensitiser (Category 1A) or hazardous to the environment.
Corrosion inhibitors				
Anti corrosion pigments	H410 (R50/53), H411 (R51/53), H412 (R52/53), H413 (R53) <i>Concentration limit: 2.0% w/w</i> <i>With exception of Paints Directive 2004/14/EC classes d,i and j: 8.0%</i>	n/a		○ The final product shall not be classified as hazardous to the environment.
Verdigris prevention	H412 (R52/53), H413 (R53) <i>Concentration limit: 0.5% w/w</i>	n/a		○ The final product shall not be classified as hazardous to the environment.
Miscellaneous functional substances				

Pigments	Pigments containing metal chromophores are to be derogated based on how the metal is bonded within the pigment. See restricted substances and mixtures list (annex 1).	<ul style="list-style-type: none"> ○ Pigments in which the metal chromophore is bonded within a crystal lattice and is insoluble.
Surfactants in and colourant and tinting bases	H412 (R52/53), H413 (R53) Concentration limit: 2.0% w/w	<ul style="list-style-type: none"> ○ The final product shall not be classified as hazardous to the environment.
Silicon resin emulsion in colourant and tinting bases	H412 (R52/53), H413 (R53) Concentration limit: 2.0% w/w	<ul style="list-style-type: none"> ○ The final product shall not be classified as hazardous to the environment.
Optical brighteners	H413 (R53) Concentration limit: 0.1% w/w	<ul style="list-style-type: none"> ○ The final product shall not be classified as a skin sensitiser (Category 1A/B)

Residual substances that may be contained in the final product

Substance group	Derogated classifications			Derogation conditions
	Indoor paint	Outdoor paint	Varnish	
Neutralising agents	H311 (R24), H331 (R23), H400 (R50), H412 (R52/53), H413 (R53) Concentration limit: 0.20% w/w With the exception of floor lacquers: 1.0% w/w			<ul style="list-style-type: none"> ○ The final product shall not be classified as acutely toxic or hazardous to the environment
Solvents present in some ingredients	H304 (R65) Concentration limit: to be determined% w/w			<ul style="list-style-type: none"> ○ The final product shall not be classified as a category 1 aspiration toxin