EN

ANNEX III

EU Ecolabel criteria for awarding the EU Ecolabel to water-based aerosol spray paints

The EU Ecolabel criteria target the best paint and varnish products on the market, in terms of environmental performance. The criteria focus on the main environmental impacts associated with the life cycle of these products and promote circular economy aspects.

Assessment and verification requirements

For the EU Ecolabel to be awarded to a specific product, the product shall comply with each requirement. The applicant shall provide a written confirmation stating that all the criteria are fulfilled.

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 their supplier(s) as appropriate.

Competent bodies shall preferentially recognise attestations that are issued by bodies accredited in accordance with the relevant harmonised standard for testing and calibration laboratories, and verifications by bodies that are accredited in accordance with the relevant harmonised standard for bodies certifying products, processes, and services.

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

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

Changes in suppliers and production sites pertaining to products to which the EU Ecolabel has been awarded shall be notified to competent bodies, together with supporting information to enable verification of continued compliance with the criteria.

As pre-requisite, the product shall meet all respective legal requirements of the country or countries in which the product is intended to be placed on the market. The applicant shall declare the product's compliance with this requirement.

The following information shall be provided together with the application for the EU Ecolabel:

(a) A description of the product formulation(s), with a % composition of the ingredients used (this shall be subject to a non-disclosure agreement between the applicant and the Competent Body).

(b) Safety data sheets for the ingredients used in the paint and varnish formulations.

(c) If deemed necessary, details of the ingredient composition of supplied ingredients and materials, or any other information associated with the production of supplied ingredients and materials that is necessary for demonstrating compliance with the EU Ecolabel criteria, shall be provided by the suppliers or producers of those ingredients and materials.

(d) A description of the packaging format(s) used, the volume(s) of product held and the packaging material(s) used.

(e) The number of individual products associated with the same base formulation covered by the same EU Ecolabel license shall be clearly stated, for example, each different packaging size shall be counted as an individual product, as shall each individual colour that is based on the same base paint formulation.

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

(1) 'Binding primers', according to Directive 2004/42/CE, means coatings designed to stabilize loose substrate particles or impart hydrophobic properties and/or to protect wood against blue stain.

(2) 'Coatings for exterior walls of mineral substrate' means, according to Directive 2004/42/CE, coatings designed for application to outdoor walls of masonry, brick, or stucco;

(3) 'Dead matt paints' are those which at an angle of incidence of 85° show a reflectance of < 5;

(4) 'Dry-film preservatives' are active substances within the meaning of Article 3(1)(c) of Regulation (EU) No 528/2012 that are for use in product-type 7 as described in Annex V to that Regulation, in particular for the preservation of films or coatings by the control of microbial deterioration or algal growth in order to protect the initial properties of the surface of materials or objects;

(5) 'Gloss paints' are those which at an angle of incidence of 60° show a reflectance of ≥ 60;

(6) 'Impurities' means unintended constituents (residuals, pollutants, contaminants, by-products etc.) that remain in the EU Ecolabelled product in concentrations less than 100 ppm (0,0100 % w/w, 100 mg/kg). Impurities in ingredients means unintended constituents (residuals, pollutants, contaminants, by-products etc.) that remain in the supplied ingredient in concentrations less than 1000 ppm (0,100 % w/w, 1000 mg/kg).

(7) 'In-can preservatives' are active substances within the meaning of Article 3(1)(c) of Regulation (EU) No 528/2012 of the European Parliament and of the Council that are for use in product-type 6 as described in Annex V to that Regulation. They are in particular used for the preservation of manufactured products during storage by the control of microbial deterioration to ensure their shelf life and used for the preservation of tints that will be dispensed from machines;

(8) 'Ingoing substances' means constituents (as pure substances or as part of a mixture, and regardless of amount) that are intentionally added to achieve or influence certain properties of the final product or its ingredients. Substances known to be released from ingoing substances after addition (e.g. formaldehyde from preservatives and arylamine from azodyes and azopigments) shall also be regarded as ingoing substances. Impurities present in the final product or in supplied ingredients in concentrations above the limits permitted for being considered as impurities, shall instead be considered as ingoing substances."

(9) 'Interior/exterior trim and cladding paints for wood, metal or plastic', according to Directive 2004/42/CE, means coatings designed for application to trim and cladding which produce an opaque film. These coatings are designed for either a wood, metal, or plastic substrate;

(10) ’Interior/exterior trim varnishes and woodstains’, according to Directive 2004/42/CE, means coatings designed for application to trim which produce a transparent or semi-transparent film for decoration and protection of wood, metal, and plastics;
(11) ‘Lasure’, according to ISO 4618:2014, means a coating material containing small amounts of a suitable pigment and/or extender and used to form a transparent or semi-transparent film for decoration and/or protection of the substrate;
(12) ‘Light-coloured paint’, according to ISO 6504-1:2019, means a coating with tristimulus values Y and Y_{10} greater than 25, measured with a spectrophotometer on a black and white substrate, where tristimulus values are meant, as defined in ISO 11664-2.2007, as amounts of the three reference stimuli, in a given trichromatic system, required to match the colour of the stimulus considered (in CIE standard colorimetric systems, the tristimulus values are represented by the symbols, X, Y, Z, X_{10}, Y_{10} and Z_{10}.
(13) ‘Masonry coating’ means a coating that produce a decorative and protective film for use on concrete, paintable brickwork, blockwork, rendering, calcium silicate board or fibre-reinforced cement;
(14) ’Matt or glossy coatings for interior walls and ceilings’ means coatings designed for application to indoor walls and ceilings, which deliver a dead matt, matt, semi-matt, satin, semi-gloss, or gloss finish;
(15) ‘Matt paints’ are those which at an angle of incidence of 85° show a reflectance of < 10 and ≥ 5;
(16) ‘Microplastics’ means small pieces of plastic, usually smaller than 5mm;
(17) ‘Mid sheen paints’ (also referred to as semi-gloss, satin, semi matt) are those which at an angle of incidence of 60° or at 85° show a reflectance of < 60 and ≥ 10;
(18) ’Minimal build woodstains’, according to Directive 2004/42/CE, means woodstains which, in accordance with EN 927-1:1996, have a mean thickness of less than 5 µm when tested according to ISO 2808:1997, method 5A;
(19) ‘Opaque’ means a film with a contrast ratio of ≥ 98 % at 120µ wet film thickness.
(20) ‘PFAS’ means per- and polyfluoroalkyl substances (PFASs) defined as: Any substance that contains at least one fully fluorinated methyl (CF3-) or methylene (-CF2-) carbon atom (without any H/Cl/Br/I attached to it)
(21) ‘Semi volatile organic compounds’ (SVOCs) means any organic compound having a boiling point greater than 250 °C and less than 370 °C measured at a standard pressure of 101,3 kPa and which, in a capillary column are eluting with a retention range after n-Tetradecane ($C_{14}H_{30}$) and up to and including n-Docosane ($C_{22}H_{46}$);
(22) ‘Transparent’ and ‘semi-transparent’ means a film with a contrast ratio of < 98 % at 120µ wet film thickness;
(23) ‘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 and which, in a capillary column, are eluting up to and including n-Tetradecane ($C_{14}H_{30}$);
(24) ‘White and light coloured’ paints are those with a tri-stimulus (Y- value) > 70 %.

Criterion 1: Titanium Dioxide production

If the product contains more than 3,0 % w/w of titanium dioxide (TiO_2), the emissions to air and water from the production of any titanium dioxide pigment used shall meet the relevant requirements listed below for the respective production processes:

Table 1: Requirements for Titanium Dioxide production

Parameter and analytical method	**Sulphate process**	**Chloride process**
Emissions of dust to air (EN 13284)	0,40 kg/t TiO2 pigment	0,66 kg/t TiO2 pigment
Emissions of SO2 to air (EN 14791)	4,5 kg/t TiO2 pigment	n/a
Emissions of HCl to air (ISO 15713)	n/a	0,70 kg/t TiO2 pigment
Emissions of SO4 to water (ISO 22743)	300 kg SO_4^{2-}/t TiO_2 pigment	n/a
Emissions of Cl to water (ISO 9279)	n/a	103 kg Cl^-/t TiO_2 pigment(1) 179 kg Cl^-/t TiO_2 pigment(2) 329 kg Cl^-/t TiO_2 pigment(3)
Low dust working environment	To be demonstrated	To be demonstrated
(1) When ore used is >95% TiO2 content (2) When ore use is 90-95% TiO2 content (3) When ore used is <90% TiO2 content		

In cases where limits are different depending on the purity of the ore used, and when the ore(s) used vary in percentages during the period that data was reported for, the limit values will apply in proportion to the weighted average % TiO2 content of the different ores used.

Emissions to air shall be counted from point source(s)[1] where emissions can be continuously or periodically monitored from a fixed sampling point after any exhaust gas abatement system(s). Emissions to water shall be monitored by sampling of the effluent prior to its entry into any natural watercourse or settling lagoon.

A low dust working environment shall, as a minimum, include the follows aspects:

— A risk assessment for the workplace that identifies all the main areas of potential dust emission and worker exposure to dust.

[1] Point sources for the chloride process are considered as milling, chlorination, oxidation and micronisation stages. Point sources for the sulphate process are considered as the milling, digestion, calcination and micronisation stages.

— Storage and handling of dry and powdered raw materials in enclosed areas and/or in closed spaces maintained under a negative air pressure differential and with any suspended dust being collected in cyclones, bag filters or similar dust separation systems.

— Cleaning protocols for regular cleaning of dust from indoor surfaces using either water sprays or vacuum devices for dust removal (sweeping of dry dust should not be carried out). Any vacuum devices should be fitted with HEPA filters[2], not standard filters.

— Provision of an enclosed storage area for all dewatered sludge or filter cake prior to recovery operations, prior to sale, prior to shipment for reuse, prior to reuse onsite or prior to shipment and disposal to landfill.

— Provision of appropriate training to employees about good practice for dust control.

— Provision of adequate personal protective equipment to employees and visitors.

Assessment and verification

The applicant shall declare the content of TiO_2 used in each of the product formulations subject to the EU Ecolabel license application. For any products with more than 3,0 % w/w TiO_2 pigment content, the applicant shall also declare the supplier or suppliers of the TiO_2 used in those products.

The applicant declaration shall be supported by declarations from their TiO_2 supplier(s) (and the original TiO_2 producer(s), if different) stating the measures in place to ensure a low dust working environment, the type of TiO_2 production process used, the applicable TiO_2 content range of ore, if necessary, used and a statement of annual average emissions to air and water for the relevant parameters listed in the table above. If test data for emissions has not been collected using the EN or ISO standards defined in the table above, a statement from the testing laboratory must be provided saying which standard method was used instead and why that method can be considered as equivalent or more comprehensive than the methods listed above.

The declaration from the TiO2 producer shall include a basic calculation about how the annual average emissions for the last complete calendar year or rolling 12-month period were obtained. In cases of continuous monitoring, the annual average emission concentrations shall be derived from daily average concentrations. For periodically monitored emissions, at least 3 samples must be taken in each 12-month period and the average results shall be considered as representative of the production process. Any periodic sampling must be taken during periods of stable operation that are representative of normal performance for the production of the TiO2 pigments used in the EU Ecolabel paint products.

For emissions to air, concentrations shall be expressed in units of mg/Nm3 at XX% O_2 content and multiplied by a specific emission air flow rate in units of Nm3/tonne TiO_2 pigment production for the same time period that the data was collected. If there is more than one exhaust gas abatement system for major point sources of emissions to air, emissions from the clean air from each abatement system shall be counted and added.

For emissions to water, measured concentrations in units of g/m3 shall be multiplied by a specific wastewater flow rate in units of m3/tonne TiO_2 pigment production for the same time period that the data was collected.

[2] HEPA filter standards for “High Efficiency Particulate Air” filter.

Criterion 2: Efficiency in use requirements

2(a) Spreading rate

Aerosol spray paints shall have a spreading rate of at least 2,0 m^2 per litre of product while ensuring a hiding power of at least 98 % according to ISO 6504-1 or ISO 6504-3.

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).

2(b) Efficiency in spraying

Aerosol spray paints shall have an efficiency in spraying, considered as the fraction of contents that can be sprayed from the can under acceptable spray performance, of 97% according to [INSERT TEST STANDARD HERE].

Assessment and verification: the applicant shall provide a test report according to [INSERT TEST STANDARD HERE]. In cases of families of products, test data for a worst case product can be used to cover the entire family of products if a suitable justification can be provided for why that product is the worst case example.

Criterion 3: Content of Volatile and Semi-volatile Organic Compounds (VOCs, SVOCs)

a) Aerosol spray paints shall not have VOC contents higher than 300 g/L, as determined by either the calculation based on the ingredients and raw materials, or by using the methods given in ISO 11890-2.

Products with a VOC content that is in accordance with the limits in Table X may display the text ‘reduced VOC content’ and the VOC content in g/l next to the Ecolabel.

Assessment and verification: The applicant shall provide a declaration of compliance supported by calculations of VOC content based on the ingredients and raw materials used in the ready to use product. Alternatively, the VOC content of the ready to use product shall be communicated via a representative test report or reports using the methods given in ISO 11890-2 and containing results that demonstrate compliance with the relevant limit.

b) Aerosol spray paints shall not contain more than 28% (weight by weight) flammable ingredients.

Assessment and verification: The applicant shall provide a declaration of compliance with the requirement supported by a calculation based on the list of ingredients, their relative masses used in the formulation and a statement about whether they are flammable or not. These statements shall be supported by safety data sheets for each of the ingredients.

Criterion 4: Restriction of hazardous substances and mixtures

4.1. Restrictions on Substances of Very High Concern (SVHCs)

The aerosol spray paint formulation shall not contain any ingoing substances or mixtures that meet the criteria referred to in Article 57 of Regulation (EC) No 1907/2006 that have been

identified according to the procedure described in Article 59 of that Regulation and included in the candidate list for substances of very high concern for authorisation.

Assessment and verification:

The applicant shall provide a signed declaration that the final product and any supplied ingredients therein do not contain any SVHCs as ingoing substances. The declaration shall be supported by safety data sheets of all supplied ingredients used to produce the final product and declarations from the chemical suppliers.

The list of substances identified as SVHCs and included in the candidate list in accordance with Article 59 of Regulation (EC) No 1907/2006 can be found here:

https://www.echa.europa.eu/candidate-list-table

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

For impurities identified as SVHCs in ingredients, the concentration of the impurity and an assumed retention factor of 100% shall be used to estimate the quantity of the SVHC impurity remaining in the final product. Impurities that are SVHCs cannot be present in the paint or varnish product above 0.0100% w/w or in any ingredient in concentrations exceeding 0,100% w/w. Any deviation from a retention factor of 100% for an SVHC impurity (e.g. solvent evaporation or chemical modification) must be supported by adequate justifications.

4.2. General restrictions based on classifications according to specific hazard classifications defined in Regulation (EC) No 1272/2008.

(a) Final product

The final product shall not be classified as being acutely toxic, a specific target organ toxicant, a respiratory or skin sensitiser, carcinogenic, mutagenic or toxic for reproduction, or hazardous to the aquatic environment and associated with any of the hazard statement codes stated in Table X.

(b) Ingoing substances

Unless derogated in Table Y, any ingoing substances or mixtures that are present in concentrations exceeding 0,010 % weight by weight of the final product formulation shall not have been assigned any of the hazard classes, categories and associated hazard statement codes stated in Table X, in accordance with Regulation (EC) No 1272/2008.

Table X. Excluded hazard classes, categories and associated hazard statement codes

Carcinogenic, mutagenic or toxic for reproduction	
Categories 1A and 1B	**Category 2**
H340: May cause genetic defects	H341: Suspected of causing genetic defects
H350: May cause cancer	H351: Suspected of causing cancer
H350i: May cause cancer by inhalation	
H360F: May damage fertility	H361f: Suspected of damaging fertility
H360D: May damage the unborn child	H361d: Suspected of damaging the unborn child
H360FD: May damage fertility. May damage the unborn child	H361fd: Suspected of damaging fertility. Suspected of damaging the unborn child
H360Fd: May damage fertility. Suspected of damaging the unborn child.	H362: May cause harm to breast fed children

H360Df: May damage the unborn child. Suspected of damaging fertility.	
Acute toxicity	
Categories 1 and 2	**Category 3**
H300: Fatal if swallowed	H301: Toxic if swallowed
H310: Fatal in contact with skin	H311: Toxic in contact with skin
H330: Fatal if inhaled	H331: Toxic if inhaled
H304: May be fatal if swallowed and enters airways	EUH070: Toxic by eye contact
Specific target organ toxicity	
Category 1	**Category 2**
H370: Causes damage to organs	H371: May cause damage to organs
H372: Causes damage to organs through prolonged or repeated exposure	H373: May cause damage to organs through prolonged or repeated exposure
Respiratory and skin sensitization	
Category 1A and 1B	
H317: May cause an allergic skin reaction	
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled	
Hazardous to the aquatic environment	
Categories 1 and 2	**Categories 3 and 4**
H400: Very toxic to aquatic life	H412: Harmful to aquatic life with long-lasting effects
H410: Very toxic to aquatic life with long-lasting effects	H413: May cause long-lasting effects to aquatic life
H411: Toxic to aquatic life with long-lasting effects	
Hazardous to the ozone layer	
H420: Harms public health and the environment by destroying ozone in the upper atmosphere	
Endocrine disruptors for human health and the environment	
Category 1	**Category 2**
EUH380: May cause endocrine disruption in humans	EUH381: Suspected of causing endocrine disruption in humans
EUH430: May cause endocrine disruption in the environment	EUH431: Suspected of causing endocrine disruption in the environment.
Persistent, Bioaccumulative and Toxic	
PBT	**vPvB**
EUH440: Accumulates in the environment and living organisms including in humans	EUH441: Strongly accumulates in the environment and living organisms including in humans
Persistent, Mobile and Toxic	

PMT	vPvM
EUH450: Can cause long-lasting and diffuse contamination of water resources	EUH451: Can cause very long-lasting and diffuse contamination of water resources

Table Y. Derogations to restrictions on ingoing substances and mixtures that are classified with one or more of the restricted hazards listed in Table X and are present in concentrations greater than 0,010% (weight by weight) of the final product formulation.

Substance type, substance name and CAS number	Derogated hazard code(s)	Derogation conditions
Preservatives and preservative stabilisers		
***Note for combined preservative limits**: the maximum quantity of any combination of in-can preservatives that are approved or that have an initial application for approval in progress under Regulation (EC) No 528/2012 for Product Type 6 applications shall be 0,080 % weight by weight of the final product.* *Any permitted use of dry-film preservatives shall be considered as being independent of the allowance for in-can preservatives.*		
In-can preservative: N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine (CAS No 2372-82-9)	H301, H373, H400, H410	*See horizontal derogation condition at foot of table Cannot be present in the final product formulation in quantities exceeding 0,050 % (weight by weight).
In-can preservative: Sodium pyrithione (CAS No 3811-73-2)	H311, H317, H331, H372, H400, H411, EUH070	*See horizontal derogation condition at foot of table Can only be used up to 0,050 % weight by weight in the final product.
In-can preservative: Bronopol (CAS No 52-51-7);	H301, H317, H331, H400, H411	*See horizontal derogation condition at foot of table The use of any formaldehyde releasing preservatives must be declared by the applicant. Bronopol cannot be added in concentrations >0,030 % weight by weight in the final product. Limits of free formaldehyde, as measured in the final product, shall not exceed the

		relevant limits defined in criterion 4.3(i).
In can preservative: Isothiazoline or izothiazoline-releasing substances:	H317, H330, H400, H410	*See horizontal derogation condition at foot of table The total quantity of all isothiazoline substances added to the final product shall not exceed 0,040 % weight by weight in the final product. In cases where isothiazoline preservatives are actively added by the paint or varnish manufacturer, the final product shall be tested for isothiazoline content to verify compliance with the combined limit.
Dry-film preservatives:	H330, H400, H410, H411, H412 and H317 (Additionally, and only for IPBC: H331 and H372)	Only applies to outdoor products and indoor products for use in high humidity areas. *See horizontal derogation condition at foot of table The sum total of dry-film preservatives with any of these derogated hazards shall: Not exceed 0,10 % weight by weight in indoor products for use in high humidity areas Be less than 0,25% weight by weight in outdoor products. Higher concentrations may be permitted in the case of slow release, encapsulated forms of dry film preservatives, but only in cases where the formulation can be tested to demonstrate that the specific formulation of the final product, or read-across formulations, would not be classified with any of the hazards listed in Table X. Any dry-film preservatives classified as H400 or H410 must be non-bioaccumulative, demonstrated by having an octanol-water coefficient (Log K_{ow}) of ≤ 3.2 or a bioconcentration factor (BCF) of ≤ 100.

Preservative stabiliser: Zinc oxide (CAS No 1314-13-2)	H400, H410	*See horizontal derogation condition at foot of table Permitted to be used as a preservative stabiliser, in concentrations up to 0,040 % weight by weight of the final product, when used to stabilise tinting paste, in-can or dry film preservations combinations that require 1,2-Benzisothiazol-3(2H)-one (BIT).
Drying and anti-skimming agents		
Anti-skimming agents	H317, H412, H413	*See horizontal derogation condition at foot of table The sum total anti-skimming agent content shall not exceed 0,40 % weight by weight in the final product.
Driers (siccatives)	H301, H317, H373, H400†, H410†, H412, H413	*See horizontal derogation condition at foot of table The sum total drier content shall not exceed 0,10 % weight by weight in the final product. † The derogation for H400 and H410 only applies to cobalt-based drier compounds and such compounds can only be used up to 0,050 % weight by weight in the final product.
Corrosion inhibitors		
Anti-corrosion pigments	H410, H411, H412, H413.	*See horizontal derogation condition at foot of table Only allowed in quantities up to 2,0 %.
Other, miscellaneous		
Adipic acid dihydrazide (CAS No 1071-93-8)	H317, H411	*See horizontal derogation condition at foot of table Only allowed up to 1,0 % weight by weight and when used as an adhesion promoter or as a crosslinking agent.

Methanol (CAS No 67-56-1)	H301, H311, H331, H370	*See horizontal derogation condition at foot of table Only permitted as a residual reaction product of other substances in the product formulation. Allowable residual concentration increases as a function of binder content in the following manner: - Binder content of 10-20%: allowable residual methanol is 0,020 % weight by weight in the final product. - Binder content of 20-40%: allowable residual methanol is 0,030 % weight by weight in the final product. - Binder content of >40%: allowable residual methanol is 0,050 % weight by weight in the final product.
Mineral raw materials, including fillers	H373	*See horizontal derogation condition at foot of table Only applies to mineral raw materials and leucophyllite minerals that naturally contain crystalline silica.
Neodecanoic acid, zinc salt, basic (CAS No 84418-68-8)	H400, H411	*See horizontal derogation condition at foot of table Only allowed up to 0,050 % weight by weight in the final product.
Neutralising agents	H301, H311, H331, H400, H410, H411, H412, H413	*See horizontal derogation condition at foot of table Only allowed up to 0,50 % weight by weight in the final product.
N,N-diethylhydroxylamine (CAS No 3710-84-7)	H411	*See horizontal derogation condition at foot of table Only allowed up to 0,020 % weight by weight in the final product.
Optical brighteners	H413	*See horizontal derogation condition at foot

		of table Only allowed up to 0,10 % weight by weight of the final product.
Silicon resin	H412, H413	*See horizontal derogation condition at foot of table Only allowed up to concentrations of 2,0 % weight by weight in the final product.
Solvents	H304 and additionally for alcohols: H400, H410, H411 and H412	*See horizontal derogation condition at foot of table Solvents only allowed up to concentrations of 1,0 % weight by weight in the final product. Specifically alcohols are only allowed up to 0,40% weight by weight.
Surfactants	H411, H412, H413	*See horizontal derogation condition at foot of table Only allowed up to 1,0 % weight by weight in white or light-coloured products or up to 3,0 % weight by weight in all other colours of products.
Titanium dioxide (in a powder form containing 1% or more of particles with aerodynamic diameter ≤ 10µm)	H351 (inhalation)	*See horizontal derogation condition at foot of table The applicant shall demonstrate that they have systems in place to minimise worker exposure to dry TiO2 powder in the workplace (e.g. closed dosing systems, ventilated dosing and mixing areas and personal protective equipment).
Trimethylolpropane (CAS No 77-99-6)	H361fd	*See horizontal derogation condition at foot of table Only when used as an additive in supplied pigments and only up to a maximum concentration of 0,50 % weight by weight of the supplied pigment or 0,015 % in the final product.
Tri-zinc bis(orthophosphate)	H400, H410	*See horizontal derogation condition at foot

(CAS No 7779-90-0)		of table Only allowed up to sum total concentrations of 0,060 % weight by weight in the final product.
Unreacted monomers (in binders)	H400 +???	*See horizontal derogation condition at foot of table Only allowed up to sum total concentrations of 0,050 % weight by weight in the final product.
UV stabilisers	H317, H411, H412, H413	*See horizontal derogation condition at foot of table Only applicable to outdoor products and only up to a maximum concentration of 0,60 % weight by weight to the final product formulation.

***Horizontal derogation condition**: none of the derogations above, either individually or in combination, shall be permitted if they result in the final product being classified with any of the hazards defined in Table X..

The hazard statement codes generally refer to substances. However, if information on substances cannot be obtained, the classification rules for mixtures shall apply.

The use of substances or mixtures that are chemically modified during the production process, so that any relevant hazard for which the substance or mixture has been classified under Regulation (EC) No 1272/2008 no longer applies, shall be exempted from the above requirement.

This criterion shall not apply to:

— substances not included in the scope of Regulation (EC) No 1907/2006 as defined in Article 2(2) of that Regulation;

— substances covered by Article 2(7)(b) of Regulation (EC) No 1907/2006, which sets out the criteria for exempting substances included in Annex V to that Regulation from the registration, downstream user and evaluation requirements.

Assessment and verification:

The applicant shall provide a signed declaration of compliance with sub-criterion 4.2, a list of all chemicals used, their concentrations in the format supplied, safety data sheets for the chemicals supplied, the quantities added to the final product formulation and any other relevant declarations from suppliers or chemical producers that are necessary in order to demonstrate compliance with the relevant requirements.

Substances known to be released or to degrade from ingoing substances are considered ingoing substances and not impurities.

Any ingoing substances shall be assumed by default to be 100% retained in the final product. Justifications for any deviation from a retention factor of 100% (e.g. solvent evaporation) or for chemical modification of a restricted impurity shall be provided.

For substances exempted from sub-criterion 4.2 (see Annexes IV and V to Regulation (EC) No 1907/2006), a declaration to this effect by the applicant shall suffice to demonstrate compliance.

Since multiple products or potential products using the same process chemicals may be covered by one EU Ecolabel license, the calculation only needs to be presented for each impurity for the worst-case product within a common family of products covered by the same license.

Regarding information requested from suppliers that may be commercially sensitive, evidence from suppliers can also be provided directly to competent bodies without necessarily providing certain details to the applicant.

4.3. Specific hazardous substance restrictions for ingoing substances

The substances indicated below shall not be included as ingoing substances in the product formulation or as ingoing substances to the ingredients used to make the final product:

(a) Akylphenolethoxylates (APEOs) and their derivatives.

(b) Perfluorinated and polyfluorinated compounds (PFAS).

(c) Phthalates.

(d) Organotin compounds.

(e) Fragrances.

(f) Bisphenols that have been identified by ECHA for further EU regulatory risk management that are known or potential endocrine disruptors for the environment or for human health, or that can be identified as toxic for reproduction.

(g) Microplastics.

(h) The following metals shall not be present in the final product formulation in quantities exceeding 0,010 % weight by weight (per metal): Cadmium, Lead, Chromium (VI), Mercury, Arsenic, Barium, Selenium, Antimony and Cobalt. The only exceptions shall be when the limits are exceeded due to the use of:

- Cobalt compounds used in driers that comply with the derogation conditions in criterion 4.2,
- the Barium-containing mineral nepheline syenite, and
- the use of the following pigments: Barium sulphate; Antimony Nickel within an insoluble TiO2 lattice; Cobalt aluminate blue spinel and Cobalt chromite blue-green spinel.

(i) Free formaldehyde shall not be intentionally added to the final product. The final product shall be tested in order to determine its free formaldehyde content. Worst-case samples for testing shall selected for the white base or transparent tinting base and colour tint predicted to have the highest theoretical amount of formaldehyde content. The following sum total limits of free formaldehyde shall be permitted:

- Up to 0,0010 % weight by weight permitted when bronopol or preservatives that are formaldehyde donors are required as an in-can preservative to protect a specific type

of paint or varnish and where the formaldehyde donor is used in the place of isothiazolinone preservatives.

- Up to 0,010 % weight by weight permitted when polymer dispersions (binders) provide, through residual levels of formaldehyde, the function of formaldehyde donors instead of in-can preservatives.

Assessment and verification:

(a to g) The applicant shall declare the non-use of APEOs, PFAS, phthalates, organotin compounds, relevant bisphenols and fragrances as ingoing substances in their formulation, supported by declarations from their suppliers about the non-use of APEOs/PFAS and listed phthalates as ingoing substances in the ingredients supplied and that are used in formulations subject to the EU Ecolabel license application procedure.

(h) In the case of the metal restrictions, the product formulation(s) should be tested for metal content via a standard laboratory procedure for digesting powder, liquid or paste samples prior to analysis for metal content via methods such as atomic absorption spectroscopy or inductively coupled plasma spectroscopy.

For demonstrating compliance with exemptions from certain metal content restrictions, the applicant shall declare the content of any metal containing ingredients added to the formulation, supported by a declaration from their supplier(s). In the case of demonstrating that a restricted metal is bonded within a crystal lattice in an insoluble form, compliant results from testing according to DIN 53770-1 or an equivalent standard shall be accepted.

(i) The applicant shall declare which of their products should have the highest theoretical free formaldehyde content. This declaration shall be based on the choice of the paint formulator to use formaldehyde donors as in-can preservatives and declarations from suppliers regarding the amounts of formaldehyde donors used to preserve supplied ingredients (especially bonders). The addition of these substances (and any other ingredients that release formaldehyde) to the worst-case formulations shall not result in the content of free formaldehyde in the final product exceeding 0,010%, as measured by the Merckoquant method, the VdL RL 03 method or HPLC analysis in accordance with UNI 11775 or an equivalent standard.

Criterion 5: Consumer information

5(a) The following texts shall appear on or be attached to the packaging:

— ‘Minimise paint wastage by estimating how much paint you will need before buying’

— ‘Recover unused paint for re-use’.

— ‘Reuse of paint can effectively minimise the products' life cycle environmental impact’

5(b) The following general information and advice shall be provided on or be attached to the packaging or be available via a web-link or QR code:

— How to estimate the amount of paint needed prior to purchase in order to minimise paint wastage and a recommended amount as a guideline (e.g. for 1 m^2 of wall, X litres of paint is needed).

— How to deal with the ‘leftover paint’.

5(c) The following advice and recommendations on how to handle the paint shall be provided on or be attached to the packaging or be available via a web-link or QR code:

— Safety measures for the user. This shall include basic recommendation on personal protective equipment that should be worn. It shall also include additional measures that should be taken when using spray equipment.

— The use of cleaning equipment and appropriate waste management (in order to limit water and soil pollution). For example, text advising that unused paint requires specialist handling for safe environmental disposal and therefore it should not be thrown away with household or commercial waste (e.g. ‘Do not put residual paint down the kitchen sink or toilet, or into a waste bin’).

— Storage of the paint in appropriate conditions (before and after opening), including, where appropriate, safety advice.

Assessment and verification: the applicant shall declare that the product complies with the requirement and provide the competent body with the artwork or samples of the user information and/or a link or QR code to a manufacturer's website containing this information as part of the application. The recommended amount of paint given as a guideline shall be provided.

Criterion 6: Information appearing on the EU Ecolabel

The optional label with text box shall contain, where relevant, the following texts:

— Minimised content of hazardous substances

— Reduced content of volatile organic compounds (VOCs): x g/l

— Good performance for indoor use (where indoor criteria have been met) or

— Good performance for outdoor use (where outdoor criteria have been met) or

— Good performance for both indoor and outdoor use (where both indoor and outdoor criteria have been met)

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

http://ec.europa.eu/environment/ecolabel/documents/logo_guidelines.pdf

Assessment and verification: the applicant shall provide a sample of the product label or an artwork of the packaging where the EU Ecolabel is placed, together with a declaration of compliance with this criterion.