



The European Eco-label for Indoor and Outdoor Paints and Varnishes

"The official EU mark for Greener Products"

Choose the Flower for your Indoor and Outdoor Paints and Varnishes

if you want to show your commitment to a better environment. Once it's on your products, the Flower guarantees:

-  A limitation of air pollution by solvents
-  Reduced Sulphur emissions during production
-  Reduced hazardous waste of by-products during titanium dioxide production
-  The absence of heavy metals and substances harmful for the environment and health
-  Minimum hiding power, wet scrub resistance, water resistance and adhesion

It can be awarded to all kinds of indoor and outdoor paints and varnishes for do-it-yourself and professional use. Outdoor paints shall be used on buildings and outdoor furniture, floors and fencing.

Meet your customers' demand

Consumers are today more sensitive to the protection of the environment. Four out of five European consumers would like to buy more environmentally friendly products, provided they are properly certified by an independent organisation.

With the Flower on your products you offer them a reliable guide to easily identify the good environmental performers available on the market.

Give your paints and varnishes a credible sign of Environmental Excellence...

Apply for the Flower!

For a quick test use the check list on the back

They said it!

"Jotun is committed to developing quality products that care for both the environment and the indoor climate. The EU Ecolabel shows consumers that our commitment to the environment is real, as well as being an important step towards the company positioning itself on the market as a producer of environmentally friendly paint products. We have also noticed an increase in sales of paint products bearing the EU Flower."

Claus Fevang Vidum, Category Manager Interior, JOTUN

"Industrias Titan has always believed in a high quality, clean and sustainable industry. The EU Ecolabel is the frame that guarantees these positive features. The Flower logo shown on our products transmits confidence to consumers."

Antonio Vilaseca Martínez, Technical Director at Industrias Titan S.A.

For more information...

... on the scheme, its feature, the actors involved, the application process... 
<http://europa.eu.int/ecolabel>

... on the "Indoor and outdoor paints & varnishes" product group: detailed criteria, date of revision... 
<http://europa.eu.int/ecolabel>
Choose "product groups" on the menu on the left





Life Cycle Step	Criterion	Expectations
Manufacturing (formulation)	Limitation of substances harmful for the environment and for health	<ul style="list-style-type: none"> White pigment content $\leq 36\text{g/m}^2$ of dry film (98% opacity) for indoor paints and $\leq 38\text{g/m}^2$ of dry film (98% opacity) for outdoor paints. This requirement does not apply to varnishes and woodstains.
Manufacturing (formulation)	Reduction of air pollution	When white pigment is TiO_2 (for dry film with 98% opacity), sulphur emissions (expressed as SO_2) in the production of titanium dioxide: $\text{SOx} \leq 252\text{ mg/m}^2$ of dry film (98% opacity) for indoor paints and $\leq 266\text{ mg/m}^2$ of dry film (98% opacity) for outdoor paints
Manufacturing (formulation)	Reduction of by-products' hazardous wastes	When white pigment is TiO_2 (for dry film with 98% opacity): <ul style="list-style-type: none"> Sulphate wastes $\leq 18\text{ g/m}^2$ for indoor paints and $\leq 19\text{ g/m}^2$ for outdoor paints For natural rutile, chlorine wastes $\leq 3.7\text{ g/m}^2$ for indoor paints and $\leq 3.9\text{ g/m}^2$ for outdoor paints For synthetic rutile, chlorine wastes $\leq 6.4\text{ g/m}^2$ for indoor paints and $\leq 6.8\text{ g/m}^2$ for outdoor paints For slag ores, chlorine wastes $\leq 11.9\text{ g/m}^2$ for indoor paints and $\leq 12.5\text{ g/m}^2$ for outdoor paints
Use	Limitation of air pollution by solvents	<ul style="list-style-type: none"> VOCs (Volatile Organic Compounds) limits (in g/L including water): different depending on type of paint or coating VAHs (Volatile Aromatic Hydrocarbons) $\leq 0.1\%$ of end product (m/m). They shall not be directly added to the product before or during tinting.
Use	User information for environmental use	<p>The following information shall come with the product:</p> <ul style="list-style-type: none"> Use, substrate, conditions of use of the product, including advice on preparatory work Recommendations for cleaning tools and waste management in order to limit water pollution Recommendations on storage conditions after opening, including safety advice if appropriate Recommendations on preventive protection measures for the painter Text advising that unused paint requires specialist handling for safe environmental disposal Mention that thick-decorative coatings are especially designed to give a three-dimensional decorative effect Advice on the correct primer or base paint for darker coatings
Use	Performance criteria	<ul style="list-style-type: none"> Spreading rate (does not apply to varnishes, woodstains, floor coatings, floor paints, undercoats, other adhesion primers or any transparent coatings or transparent undercoats): <ul style="list-style-type: none"> White paints and light coloured-paints (incl. finishes, primers, undercoats and/or intermediates) $>$ or equal to $8\text{ m}^2/\text{L}$ at a hiding power of 98% for indoor paints and $>$ or equal to $6\text{ m}^2/\text{L}$ for outdoor paints Primers with specific blocking/sealing, penetrating/binding properties and primers with special adhesion properties for aluminium and galvanised surfaces $>$ or equal to $6\text{ m}^2/\text{L}$ at a hiding power of 98% <ul style="list-style-type: none"> Thick indoor decorative coatings: $1\text{ m}^2/\text{kg}$ Outdoor elastomeric paints $>$ or equal to $4\text{ m}^2/\text{L}$ at a hiding power of 98% Wet scrub resistance for washable, cleanable or brushable indoor wall paints: class 2 or better (≤ 20 microns after 200 cycles)(according to test EN 13300 and EN ISO 11998) Resistance to water for varnishes, floor coatings and floor paints: no change of gloss or of colour after 24 hours exposure and 16 hours recovery (according to EN ISO 2812-3) <ul style="list-style-type: none"> Adhesion: <ul style="list-style-type: none"> Floor coatings, floor paints, and concrete, metal and wood undercoats: score at least 2 according to test EN 2409 Indoor pigmented masonry primers and outdoor masonry paints (excl. transparent primers): score a pass according to EN 24624 (ISO 4624) pull-off test Abrasion resistance of floor coatings and floor paints $\leq 70\text{ mg}$ weight loss after 1000 test cycles with a 1000 g load and a CS10 wheel according to EN ISO 7784-2:2006. Outdoor masonry finish paints and wood and metal finishes incl. varnishes shall be exposed to artificial weathering in apparatus incl. fluorescent UV lamps and condensation or water spray according to EN 11507:2007. The following parameters shall then be evaluated: colour change, gloss, chalking, flaking, cracking, and blistering. <ul style="list-style-type: none"> Water vapour permeability: breathable exterior masonry and concrete paints classified as Class II or better according to test EN ISO 7783-2. Liquid vapour permeability (according to method DIN EN 1062-3:1999): <ul style="list-style-type: none"> Water repellent or elastomeric exterior masonry and concrete paints classified as Class III All other outdoor masonry paints classified as Class II. Fungal resistance: Outdoor masonry finish coatings with anti-fungal properties shall have a score of 2 or better as determined by method BS 3900:G6. Crack bridging: Outdoor masonry (or concrete) paint with elastomeric properties classified at least as A1 at 23°C according to DIN EN 1062-7:2004 Alkali resistance: Outdoor masonry paints and primers shall show no noticeable damage when the coating is spotted for 24 hours with 10% NaOH solution according to method ISO 2812-4:2007.
End of life	Limitation of the use of substances dangerous for the environment and health	<ul style="list-style-type: none"> The product shall not be classified as very toxic, toxic, dangerous to the environment, carcinogenic, toxic for reproduction, harmful, corrosive, irritant or mutagenic in accordance with Directive 1999/45/EC. Ingredients shall not contain: <ul style="list-style-type: none"> Heavy metals (or their compounds): Cd, Pb, Cr VI, Hg, As, Ba (excl. barium sulphates), Se, Sb, Co (excl. cobalt in pigments and for cobalt salts used as siccativ in alkyd paints where $\text{Co} \leq 0.05\%$ (m/m) of end product)) Alkylphenolethoxylates (APEOS) (before or during tinting) Limited content of dangerous substances: <ul style="list-style-type: none"> No ingredients incl. those used in tinting shall be used that at the time of application are assigned the following risk phrases (or combinations thereof) as laid down in Directives 67/548/EEC or 1999/45/EC: R23, R24, R25, R26, R27, R28, R33, R39, R40, R42, R45, R46, R48, R49, R60, R61, R62, R63, and R68. <ul style="list-style-type: none"> Active ingredients used as preservatives assigned the risk phrases R23, R24, R25, R26, R27, R28, R39, R40 or R48 (or their combination): $\leq 0.1\%$ (m/m) of the total paint formulation Ingredients (incl. those used in tinting) assigned at the time of application risk phrases N R50, N R50/53, N R51/53, N R52/53, R51, R52, or R53 as laid down in Directives 67/548/EEC or 1999/45/EC: $\leq 2\%$ (m/m) of the product. <ul style="list-style-type: none"> Isothiazolinone compounds $\leq 0.05\%$ of products (m/m) before or after tinting (for outdoor wood coatings $\leq 0.2\%$ of product (m/m)) Mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one $\leq 0.0015\%$ (m/m) of the product Free formaldehyde $\leq 0.001\%$ (m/m) (after tinting) Only halogenated compounds that at the time of application have been risk assessed and have not been classified with the risk phrases (or combinations thereof): R26/27, R45, R48/20/22, R50, R51, R52, R53, R50/53, R51/53, R52/53 and R59 in accordance with Directives 67/548/EEC and 1999/45/EC, may be used in the product before or during tinting. Only phthalates that at the time of application have been risk assessed and have not been classified with the risk phrases (or combinations thereof): R60, R61, R62, R50, R51, R52, R53, R50/53, R51/53, R52/53 in accordance with Directive 67/548/EEC and its amendments may be used in the product before or during tinting. Additionally DNOP (di-n-octyl nphthalate), DINP (di-isononyl phthalate), DIDP (di-isodecyl phthalate) are not permitted in the product. The product shall be free of PFAS, PFCA, PFOA and the related substances listed in the OECD "Preliminary lists of PFOS, PFAS, PFOA, PFCA, related compounds and chemicals that may degrade to PFCA (as revised in 2007)".