

Microresina

Coloured water-based micro-resin with a matt finish for the re-design of all types of furnishing accessories, ceramic and wood coverings and floors.

Microresina technology is ideal for the protection of furnishing accessories and ceramic coverings. Perfect to cover and protect any surface with a protective and coloured ultra-thin film.

To be used as a coloured layer in the Microresina Floor, Microresina Parquet and Wallpaper systems.

Available in the 150 Color Collection colours and in the 1.500 Kerakoll Colors colours.



Rating 1

- × VOC Low Emission
- ✓ Water Based
- × Solvent ≤ 80 g/kg
- × Low Ecological Impact
- × Health Care

Rating based on average colour formulations

1. Highly washable
2. Resistant to detergents and disinfectants
3. Varnished matt finish
4. Good coverage
5. Resistance to rubbing, even in case of dark colours
6. Excellent resistance to wear
7. No splash
8. Free from heavy metals according to EN 71-3 standard
9. Low VOC, does not release harmful substances for human health and the environment
10. Compliant to HACCP protocol for the decoration of environments for food use

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Areas of application

→ Coloured water based, high performance Microresina

→ Intended use:

Suitable for:

- doors, windows and furnishing accessories in seasoned new wood, old wood to be repainted or veneered, melamine or laminate wood
- PVC and aluminium frames and plaques
- radiators and metal items duly treated with rust-preventive primer
- MDF, multilayer, or solid wood furniture
- floors (and coverings treated) with Microresina Zero
- previous ceramic coatings, glass mosaic, natural stone.
- fine-grain trowelled cementitious stable plaster
- gypsum based plasters and substrates
- suitably prepared dry panelling and plasterboard walls
- Legno Large, Legno Medium, Legno Small
- oak floors,
- wood floors made of any wood other than oak treated with Primer Antitannino.

→ For internal and external use (on windows and window frames), in domestic and commercial environments with foot traffic.

→ For floors, walls, furnishing accessories and vertical surfaces.

Suitable for heated substrates.

→ Specific for overcoating with Microresina Xtreme

Do not use on external floors and coverings, generally on wooden floors other than those expressly mentioned; on wooden floors that are subject to prolonged or constant contact with water. Directly on ceramic tile floors without Microresina Zero base layer and Microresina Xtreme protective coat.

On cold ceramic surfaces (< +10 °C), on damp surfaces, such as the coatings of tanks, containers for liquids, and in the presence of rising damp. On substrates that have been treated with silicones. Do not use more than 1.5 hours after mixing.

Instructions for use

→ Preparation of substrates

Before applying the Microresina microfilm, check that the substrates are stable and perfectly well anchored. Substrates must be perfectly dry.

- Metal surfaces to be repainted: mechanically remove any old varnish with metal brushes and emery cloth until the metal is shiny. In case of large surface areas, industrial paint, or serious corrosion, resort to dry sanding. Carefully clean the surface and apply a suitable rust-preventive anti-corrosion product. Before application, check that the temperature of the metal surface is warmer than +10 °C. Apply the first coat pure to act as an adhesion-promoter. Check that the temperature of the substrate (> +10 °C) and the ambient temperature (> +15 °C) are sufficient, and wait 6 – 12 hours before applying the subsequent coats over top (diluted with clean water to 5 – 10% by weight, until desired coverage is achieved).
- Unpainted wooden surfaces: sand and apply the first coat of Microresina diluted with clean water to 30% over the entire surface. Sand the first coat of primer after it has fully dried until an even and smooth surface is achieved. Wait 6-12 hours before applying the subsequent coats of Microresina over it (diluted with clean water to 5-10% by weight, until desired coverage is achieved).

- Wood surfaces to repaint: sand the entire surface and clean thoroughly. Window and door jambs and frames can be smoothed in advance with Wallpaper. Invisible and skirting board substrates, can be grouted in advance with Tetra Fix or Wallpaper.
- Aluminium or PVC frames and windows and furnishing accessories in veneered, melamine or laminate wood: Sand the surface with an abrasive pad (Scotch Brite) and clean with a cloth soaked in Keragrip Eco Pulep adhesion promoter.
- Floors (or coverings) treated with Microresina Zero: the Microresina Zero base layer can be sanded after 6 hours (+30 °C) – 16 hours (+10 °C) from its initial application. It must be prepared with care, making sure that any visible joins or build-up left during application of the Microresina Zero are removed: sand with a sander or mechanical buffer with Carboplus Sic 220 abrasive pad to even the surface; clean thoroughly with a vacuum cleaner to remove all sanding waste.
- Previous ceramic coatings, glass mosaic, natural stone: any dust and loose debris must be removed from joints by carefully cleaning them with vacuum cleaner. The surface of the covering to be decorated must be dry and free from dust or building dirt. Check the uniformity of the grouts; if these were inconsistent or discontinuous, remove the

Instructions for use

- damaged or flaky parts of the old grouts; clean the surface with a metal brush or remove the top-most parts with scraper such as Fuga-Remove. Vacuum cleaning residues and grout again with a grout from the Fugabella Color range (we recommend choosing the same finish as the existing joints) or an organic grout from the Fugalite range (fine finish). Before grouting again with a grout, make sure that the minimum thickness of product to be applied is adequate (Fugabella Color > 3-4 mm; Fugalite > 2 mm). Substrates must be prepared by cleaning with products suitable for the type of dirt present. If alkaline treatments are used, rinse well with water to remove any washing residue completely. Check that no silicone or acetic sealants have been used; if that is the case, remove them mechanically and with suitable products in order to eliminate any oily film. Check that there is no accumulation of greasy or oily pollutants in the joints. After washing and before applying the product, check that the humidity in the joints reaches suitable residual humidity levels (< 2% MC) before applying the Microresina cycle. After checking that no layers of wax or oily pollutants are present, prepare the surface by passing a cloth dipped in Keragrip Eco Pulep adhesion promoter over the whole surface, damping the ceramic covering. Before application, check that the temperature of the ceramic surface is warmer than +10 °C. On non-absorbent surfaces, apply the first coat of pure Microresina to act as an adhesion-promoter and wait 6-12 hours before applying the subsequent coats over it (diluted with clean water to 5-10% by weight, until desired coverage is achieved). On stone coverings or absorbent surfaces, apply a first coat over the entire surface, diluted to 30% using clean water.
- Fine-grain trowelled cementitious stable conventional plaster: cement based plasters must have a $\leq 2\%$ residual moisture measured with a calcium carbide hygrometer. Check that the base has been applied in a single layer, without fine finishing coats, as these may be imperfectly anchored and therefore unsuitable. Sand the surface with a 180-grain sandpaper to achieve a smooth surface. Before the application, prime with Universal Wall Primer. If the surface needs in-depth consolidation, apply a second coat of Universal Wall Primer. When the primed surface is completely dry, apply a first coat of Microresina over the whole surface, diluted to 30% (by weight). Wait 6 to 8 hours before applying subsequent coats (diluted with clean water to 5-10% by weight, until the desired coverage is achieved).
 - Gypsum based plasters and substrates: gypsum based plasters must have a $\leq 1\%$ residual moisture measured with a calcium carbide hygrometer (follow the manufacturer's instructions). Check that the base has been applied in a single layer, without fine finishing coats, as these may be imperfectly anchored and therefore unsuitable. Using a roller or spreader, apply a coat of Primer A Eco diluted 1 : 4 with water. Wait at least 16 hrs and apply a second coat of pure Universal Wall Primer. Wait at least 16 hours and apply a first coat of Microresina diluted with clean water to 5-10%. Wait 6 to 8 hours before applying subsequent coats (diluted with clean water to 5-10% by weight, until the desired coverage is achieved).
 - Dry panelling and plasterboard walls: joints of dry panelling and plasterboard walls must be carefully grouted with Q1/Q2 quality filling finishing products, and then with Q3/Q4 quality finishing products (we recommend Wallpaper Living or Wallpaper). To prevent the grout between the panels from being visible, we recommend to finish and smooth the surface after sanding in order to remove crests and flaws. When the finishing will be perfectly dry, apply with a roller or a flat brush one coat of Universal Wall Primer diluted 1:1 using water. Wait at least 16 hrs (for gypsum-based finishings), then apply a first coat of Microresina diluted 5-10% using clean water. Wait 6 to 8 hours before applying subsequent coats (diluted with clean water to 5-10% by weight, until the desired coverage is achieved).
 - Legno Large, Legno Medium, Legno Small: clean the floor carefully to ensure the surface is free of dust, oil, wax, silicones, residual adhesive and stains of any type. Sand with SoftPad, carefully vacuum up all the dust created during sanding and then apply Microresina.
 - Floors made of oak: smooth and/or sand the hardwood floor to obtain a smooth, clean surface that is free of dust, oil, wax, silicones, residual adhesive, previous treatments and stains of any type. In order to enhance the grain of the wood and obtain a more material effect, polish the surface using specific equipment, sand with SoftPad, vacuum to remove all the sanding dust with care and apply Microresina.
 - Floors made of any wood other than oak: smooth and/or sand the hardwood floor to obtain a smooth, clean surface that is free of dust, oil, wax, silicones, residual adhesive, previous treatments and stains of any type. On woods that allow it, in order to enhance the grain of the wood and obtain a more material effect, polish the surface using specific equipment. Apply Primer Antitannino respecting the coverage of 300 ml/m²

Instructions for use

according to the instructions of the technical data sheet. Sand with SoftPad, carefully vacuum up all the dust created during sanding and then apply Microresina.

- Wallpaper texturing agent: sand the surface with a 240-grain sandpaper to achieve a perfectly smooth surface. Apply a first coat of Microresina over the surface, diluted to 10% (by weight) using clean water. Wait 6 – 8 hours before applying subsequent coats on top. Before proceeding with subsequent coats, check the planarity of the surfaces, and if necessary replaster detected defects with the Wallpaper texturing agent. Wait for the finishing coat to dry completely, and then sand again with a 240-grain sandpaper. Clean, and then proceed with application of subsequent coats (diluted with clean water to 5-10% by weight, until achieving the desired coverage).

→ Preparation

Before use, stir part A, add the hardening compound whilst stirring in the ratio part A : part B = 5 : 1 and mix well until completely blended.

→ Application

- Application on coverings and furnishing accessories: for application on non-absorbent surfaces, prepare the first coat pure. For absorbent surfaces, dilute to 30% with clean water and mix again for application of the first coat to serve as primer or base coat. Wait 6 – 8 hours before applying subsequent coats on top. For subsequent coats, dilute the product to 5 – 10% using clean water and repeat the application over completely dry product until coverage is achieved. After mixing the product, leave to sit for a few minutes before proceeding with the application.
- Microresina must be applied carefully over the entire surface with a short-bristle roller, such as Roller Plus, or a sponge roller, brush, or spray in two, three, or more coats until desired coverage is achieved (depending on the colour used). Conditions required for decorating are ambient temperatures between +15 °C and +30 °C and relative humidity lower than 75%. Before application, check that the temperature of the covering is warmer than +10 °C. On large surfaces, do not cross the roller strokes, keeping the front wet and avoiding passing over areas that have already been covered to avoid depositing the pigment in the film, preventing the colour from changing. Shape the corner with the small roller or brush as you proceed, so that the product can always be laid wet-on-wet. The interval before re-application between first and second coats is 6 – 12 hours, and 2 – 12 hours for subsequent coats. Use coverage of $\approx 0.1 \text{ kg/m}^2$ per coat. If more than 12 hours elapses between one coat and the next, sand lightly with a Durasoft System Softpad abrasive before applying the subsequent coat.
- Do not apply when the substrate is directly exposed to sunlight. After application, the surfaces must be protected against dust, water and humidity until the film has dried completely. In cases where different lots of coloured product are used, or when completing a job, it is advisable to mix the various quantities together (part A) so as to avoid slight differences in tone.
- Application on wooden floors: dilute with clean water ($\approx 10\%$ for the first coat and $\approx 5\%$ for the second coat) and stir again. After mixing the product, leave to sit for a few minutes before proceeding with the application. Pour the mixed product into the tray provided and apply with a roller. Evenly apply the first coat of Microresina with Roller Plus so as to give a coverage of $\approx 110 \text{ g/m}^2$. On surfaces of over $\approx 20 \text{ m}^2$ avoid large overlaps, but create distinct gaps along the vein, using adhesive paper tape if necessary. When laying in several connected rooms, avoid any overlap, creating gaps and separations at the doors or thresholds connecting the rooms, using adhesive paper tape if necessary. After $\approx 3 - 4$ hours, sand with SoftPad, carefully vacuum up all the dust produced during sanding and apply the second coat of Microresina evenly with Roller Plus so as to give a coverage of $\approx 100 \text{ g/m}^2$, following the indications for application given above carefully. After $\approx 2 - 3$ hours, proceed to apply Microresina Xtreme, following the instructions provided in the technical sheet.
- Application on ceramic floors: dilute the product up to 10% by weight with clean water and stir again. After mixing the product, leave to sit for a few minutes before proceeding with the application. Pour the mixed product into the tray provided and apply with a roller. The product must be laid on the flooring previously treated with Microresina Zero and applied using a short-bristle roller, such as Roller Plus (4-6 mm), checking that a coverage of $\approx 80 \text{ g/m}^2$ is maintained. Shape the corner with the small roller or brush as you proceed, so that the product can always be laid wet-on-wet. Do not pour the product directly onto the flooring, but dip the roller in the tray and distribute evenly on the flooring. Lay the product in areas that are not too large, applying the coats in a criss-cross manner and even out the product, which must be applied continuously. In the joint areas, do not re-apply with the roller over areas that have already been coated previously, but blend together by lifting up

Instructions for use

the roller slightly at each overlap, so that no accumulations or excess amounts of material are applied by mistake. When laying in several connected rooms, avoid any overlap, creating gaps and separations at the doors or thresholds connecting the rooms, using adhesive paper tape if necessary by using the joints as breaks. Leave between 2 hours (+30 °C) and 3 hours (+10 °C) between coats

of Microresina Xtreme. Do not apply when the substrate is directly exposed to sunlight. After application, the surfaces must be protected against dust, water and humidity until the film has dried completely.

→ **Cleaning**

Product residues can be removed with running water before the product has hardened.

Certificates and marks



* Émission dans l'air intérieur Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentant un risque de toxicité par inhalation, sur une échelle de classe allant de A+ (très faibles émissions) à C (fortes émissions).

Special notes

- Before use acclimatize the product to reach room temperature.
- On horizontal surfaces with prolonged contact with water (such as washbasin counter), be careful to proceed with 4 coats of product application (with product pure or diluted to a maximum of 5%), following yield of $\approx 0.4 \text{ kg/m}^2$.
- Protect all treated surfaces from rain and strong humidity during the first 48 hours following application.
- Especially thick applications of product in a single coat will result in longer full-depth drying times.
- Always use clean containers and tools. Use within 1.5 hours from mixing. To give an even aesthetic effect, apply layers of uniform thickness and follow the recommended quantities.
- Once opened, the pack must be used as quickly as possible.
- Before starting application, check that the roller has been thoroughly cleaned so that it does not shed "hairs" during the initial phase of application.
- After the application, in environments with frequent contact with water, use Tetra Fix Crystal sealant to seal plaques, vents, shower cabinets and drains.
- Avoid direct contact with highly aggressive substances, such as highly acid or basic substances and highly oxidizing substances (e.g. hair dye) which may alter the colour of the treated surface.
- Cured plastic materials with a high content of plasticizers (e.g. tires and protective rubbers) may mark the floor if left in contact for a prolonged period of time on the flooring.
- Pay attention to contact with tanned leather carpets and/or leather treated with dyes: prolonged direct contact with materials of this type can release oxidizing substances and dyes that can permanently alter the colour of the floor.
- The photographic images in the catalogue and on the website, as well as the colours shown in the samples are to be considered purely indicative.
- Use material from a single production batch for each project.
- Materials from different batches may have slight colour and sheen variations.

Abstract

- For the re-design of furnishing accessories
Elastic ultra-thin film made of coloured water-based Microresina with varnished matt finish for the re-design of furnishing accessories through application by brush, roller, or spray, highly protective against aggressive substances and scratch-resistant, with excellent adhesion to iron, galvanized sheet metal, wood, and PVC, 100% according to DIN 53151/ISO 2409/ASTM D 3359, non-toxic according to EN 71-3, compliant with UNI 11021:2002 system (HACCP D.L. 193/2007) for food products hygiene, will be executed with finish compliant with Directive 2004/42/EC, GreenBuilding Rating 1, such as Microresina by Kerakoll Spa, applied by roller in 2-3 coats of $\approx 0.1 \text{ kg/m}^2$ per coat.

- For the re-design of vertical ceramic coatings
Elastic ultra-thin film made of coloured water-based Microresina with varnished matt finish for the re-design of existing ceramic coverings through application by brush, roller, or spray of Microresina highly protective against aggressive substances and scratch-resistant, with excellent adhesion on finishing products, existing ceramic, glass mosaic, natural stone, 100% according to DIN 53151/ISO 2409/ASTM D 3359, non-toxic according to EN 71-3, compliant with UNI 11021:2002 system (HACCP D.L. 193/2007) for food products hygiene, will be executed with finish compliant with Directive 2004/42/EC, GreenBuilding Rating 1, such as Microresina by Kerakoll Spa, applied by roller in three coats of $\approx 0.1 \text{ kg/m}^2$ per coat.

Technical Data compliant with Kerakoll Quality Standard	
Appearance:	
- Part A	white or coloured liquid
- Part B	transparent liquid
Volumetric mass A+B	$\approx 1.11 \text{ kg/l}$
Packs:	part A 2.5 kg bucket + part B 0.5 kg bottle
	part A 1.0 kg bucket + part B 0.2 kg bottle
Shelf life	≈ 12 months from production in the original sealed packaging, protect from humidity
Warning	protect from frost, avoid direct exposure to sunlight and sources of heat
Mixing ratio	Part A : Part B = 5 : 1
Working time of mixture	$\leq 1.5 \text{ hr}$
Temperature range for application	from $+15 \text{ }^\circ\text{C}$ to $+30 \text{ }^\circ\text{C}$
Humidity of the substrate	$\leq 2\%$
Temperature of the substrate	$\geq +10 \text{ }^\circ\text{C}$
Waiting time between 1 st and 2 nd coat	approx. 6 to 12 hrs (covering) / approx. 3 to 4 hrs (floor)
Waiting time between subsequent coats	approx. 2 to 12 hrs
Dilution with clean water:	
- on non-absorbent substrates	0-10% in volume (depending on the substrate)
- on absorbent substrates	0-30% in volume (depending on the substrate)
Touch-dry	$\approx 1 \text{ hr}$
Interval before normal use	washing and contact with water $\approx 48 \text{ h}$
Coverage per coat	$\approx 0.1 - 0.15 \text{ kg/m}^2$

Values taken at $+23 \text{ }^\circ\text{C}$, 50% R.H. and no ventilation. Data may vary depending on specific conditions at the building site, i.e.temperature, ventilation and absorbcency level of the substrate.

Performance		
HIGH-TECH		
Conformity	SR-B2,0	EN 13813
Non-toxic	Compliant	EN 71-3
Suitable for covering environments intended for food preparation	Compliant	HACCP UNI 11021-2002

Values taken at +20 °C, 65% R.H. and no ventilation. Data may vary depending on specific conditions at the building site.

Warning

- Product for professional use

→ abide by any standards and national regulations

→ protect from direct sunlight and air currents for the first 3 hours

→ do not use different product batches in the same room or in adjacent rooms
- if necessary, ask for the safety data sheet

→ for unstable wooden types, particular substrates and for any other issues, contact the Technical Customer Service Kerakoll: + 39 0536.811.516 www.kerakoll.com/contatti