



TECHNICAL DATA MICROCEM-FB

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Description:

Microcem-FB is a next-generation fiber-reinforced micro-cement, a premixed powder composed of quartz microspheres and marble powders, white Portland cement 525, selected glass fibers, and special additives that provide excellent adhesion to ceramic tiles, marble, screed, etc., with extraordinary flame retardancy and smoke resistance.

Applications:

- Ideal for covering floors, walls, and ceilings, both indoors and outdoors, intended for large-scale design and renovation of public and private spaces, shopping centers, shops, bars, bars, villas, residences, swimming pools, balconies, terraces, bathrooms, shower stalls, saunas, kitchens, furniture, and furnishings;
- The unique feature of the total absence of joints allows for seamless solutions between the floor and the wall, meeting the furnishing needs of modern and contemporary architecture.

Main features:

- Realistic and natural appearance of raw micro-cement;
- Seamless, jointless surface;
- Highly resistant and durable;
- Suitable for interior and exterior walls, furniture, and decorative panels.

Preparation, coloring, and mixing:

- The composition is 6 liters of drinking water to 20 kg of Microcem-FB.
1. Add the water to a clean bucket, pour in the desired amount of toner, and mix well.
 2. Add the Microcem-FB in small doses and mix thoroughly using a mechanical mixer until a smooth, lump-free paste is obtained.

Important note:

We recommend applying a coat of Primer NK on surfaces such as:

- Doors, furniture, tables, and furnishings;
- Plasterboard walls;
- Parquet flooring;
- Floors and walls with recesses for water pipes, heating pipes, and electrical systems.

Preparation and application:

- Substrates such as ceramic tiles, marble, or cement screeds must be dry, solid, and free of dust, paint, wax, oil, loose particles, and seasoned.
1. Lay out the 70/80 g/m² fiberglass mesh, taking care to position it so that it does not crease, overlapping the ends of the mesh by at least 10 cm;
 2. Apply a first coat of Microcem-FB using a stainless-steel trowel, evenly over the entire surface;
 3. Let dry for 24 hours (+20°C);
 4. Using a spray bottle with drinking water, slightly dampen the surface and proceed with the second coat of Microcem-FB;
 5. Let dry for 24 hours (+20°C);
 6. Apply a second coat of VetroLiquido PRP as done for the first;
 7. Let the product dry for 24 hours (+20°C);
 8. Apply a third layer of VetroLiquido PRP as done for the second;
 9. Let the product dry for 48 hours (+20°C).

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Microcem-FB Technical Data:

- Appearance: Powder;
- Color: White;
- Colors obtainable with toner: 32 shades;
- Dilution: ~300 ml of potable water per kg of product;
- Mixture pH: 12;
- Coverage: 16 m² with two coats;
- Solids content: 100%;
- Pot Life: Workable for 6 hours at +20°C and depending on ambient humidity;
- Grain size: Max. 0.5 mm;
- Aggregate mineralogical nature: Silicon/carbonate;
- Consistency: Thixotropic;
- Density of the mix: 1,500 kg/m³;
- Packaging: 20 kg;
- Bulk density: 1.20 kg/L;
- Apparent density of the mix: 1.50 kg/L;
- Optimal application temperature: (*) +5°C to +30°C;
- Operating temperature and thermal resistance: -30°C to +70°C;
- Surface drying: 3 hours at +20°C;
- Drying for the second coat: 24 hours at +20°C;
- Drying for walking: 48 hours at +20°C;
- Total hardening: ~7 days at +20°C;
- Stacking of tables, chairs, and furniture: ~10 days at +20°C;
- Total curing: 28 days at +20°C;
- Resistance to water and UV rays after application of VetroLiquido PRP: ~7 days;
- Shelf life: 24 months in unopened packaging, protected from UV rays and humidity, between +5°C and +30°C.
- Packaging: 20 kg;
- End-use classification (UNI EN 1062.1 – 4.1): Decoration and protection;
- UFI Code: NC00-Y08C-J00G-9N29.

Warnings and recommendations:

- Store in a dry, dry place, away from sunlight;
- Do not apply to dusty substrates;
- Do not apply to wet substrates;
- Do not apply to frozen substrates;
- Do not apply to substrates and repairs that are still damp;
- Do not apply where rising or seeping damp has been detected;
- Do not apply in strong sunlight (outdoor application);
- Do not apply in strong winds (outdoor application);
- Do not apply in rain (outdoor application);
- Check the local weather forecast (outdoor application);
- Ensure the temperature does not drop below +10°C;
- Measure the humidity level at a depth of 4 cm using a carbide hygrometer to ensure it is less than 3%;
- Cover window frames, doors, etc. well;
- Do not use on metal, rubber, vinyl, linoleum, or PVC surfaces.

Performance characteristics:

- Tensile strength (EN 13892-2): 38 N/mm² after 28 days;

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- Compressive strength (EN 13892-2): 38 N/mm² after 28 days;
- Flexural strength (EN 13892-2): 36 Nm after 28 days;
- Impact resistance (UNI EN ISO 6272-1): 0.500 Nm/501 m;
- Permeability resistance after Liquid Glass PRP (UNI EN 1062-3): 0.0001 kg/m²*h0.5 after 5 days;
- Fire reaction (EN 13501-1) CLASS 1 after 28 days;
- Adhesion strength to concrete (EN 13892-8): 6 N/mm² after 28 days;
- Determination of a chair with rubber castors (EN 425): absolutely free of defects;
- Slip resistance: DIN 51097 Class A method 19° ≤ α < 27° - Non-slip (DIN 51130): R11 - Food production environments, catering kitchens, work environments with a high presence of water and mud, clinics, laboratories, laundries, hangars;
- The minimum/maximum recommended thickness for the application cycle is 3 mm. Consumption may vary depending on the consistency, porosity, and condition of the surface, as well as the application method;
- Performance tests were conducted in our laboratories (laboratory temperature +21°C - humidity 65%).

NK Primer Technical Data:

- Color: Characteristic;
- Appearance: Liquid;
- pH: >9;
- Dilution: Ready to use;
- Specific gravity: 1.5 kg/l;
- Dry matter: 67%;
- Water solubility: soluble;
- Average consumption: ±6-8 m²/l;
- Average thickness: 300 μ;
- Dust dry at approx. 23°C: 3 hours depending on external humidity;
- Coating time: 24 hours at +20°C;
- Storage: between +5°C and +35°C, away from humidity;
- Temperature limits for use: +5°C and +35°C;
- Packaging: 7 L and 2.5 L;
- Cleaning tools after use: With drinking water.
- Primer NK complies with the UNI EN 15457 standard (resistance to fungal growth). Thanks to the presence of specific broad-spectrum additives, the product prevents the formation of mold, fungi, algae, and moss over time.

VetroLiquido PRP Technical Data:

- Color: Characteristic;
- Version: Satin 60 gloss and matte 20 gloss;
- Resistance: UV-resistant, non-yellowing;
- Wear resistance: High resistance to impact (AR0.5);
- Dilution: Ready to use;
- Coverage: ±7-8 m²/l for two coats, depending on absorption and application tool used;
- Drying: At +20°C and 65% RH: Dust-dry after 1 hour, touch-dry after at least 2 hours, and thoroughly dry in 24 hours;
- Slip resistance: DIN 51097 Class A method 12° ≤ α < 18° - Anti-slip (DIN 51130): R11;
- Specific weight: 0.800 kg/L ± 0.05 at 20°C;
- Spray application: With pressurized equipment; nozzles of 1.5–2 mm, pressure 3–4 bar, distance from the surface 15–30 cm;

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- Airless spray application: nozzles with an approx. 0.45 mm orifice, pressure 180 bar; spray angle 68°–80°, distance from the surface 15–30 cm;
- Cleaning of tools after use: with synthetic thinner;
- Packaging: 2.5 L and 1 L (15 kg on request);
- Storage: 12 months in the original, tightly closed containers in a cool, dry place;
- VOC classification (Legislative Decree 27 March 2006 n°161): Product for professional use only;
- ADR/RID land transport: the product travels under ADR;
- Customs Code 3208 9099: Paints based on synthetic polymers or modified natural polymers, dispersed or dissolved in a non-aqueous medium;
- UFI Code: HXJ0-Q0P5-300V-WGDG.

The times expressed are longer or shorter with the decrease or increase in temperature. In accordance with the general principles - Principles of evaluation of use of products and systems. Test conditions: temperature $23 \pm 2^{\circ}\text{C}$, $50 \pm 5\%$ R.H. and air speed in the test area < 0.2 m/s. The data expressed may vary depending on the specific conditions of the construction site: temperature, humidity, ventilation, absorbency of the substrate.

The values indicated for consumption are indicative. In practice, a higher consumption of approximately 10% should be considered. Consumption depends on the roughness and absorbent characteristics of the support, as well as the application technique.

The processing cycles indicated above do not constitute any assumption of responsibility by Nikkolor Italia s.r.l., which remains relieved of any problems originating from incorrect installations, or from interventions that do not comply with the regulations in force on the subject and the application instructions reported in the specific technical data sheets of each individual product.

The written and verbal technical-application instructions provided to buyers and applicators are based on our experiences and on the current state of the art at a theoretical and practical level; they are not binding and do not prefigure any contractual obligation or secondary commitment deriving from the purchase contract. They do not exempt the buyer from personally verifying and on his own responsibility the suitability of our products for the intended application purpose.

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