



**FAKOLITH**<sup>®</sup>  
chemical systems

a Fakolith Group Company

dirección: polígono industrial Baix-Ebre  
parcela, 61 / D  
c.p.: E-43500, Tortosa / Spain  
teléfono / fax: (34) 977 454 000 / (34) 977 454 024  
e-mail: fcs-spain@fakolith.com

www.fakolith.com

## Hydrophobic protection on walls, ceilings, baseboards, pavements of mineral bases affected by humidity, mould, moss, biofilm and microorganisms in stones, mortars, concrete, bricks...

### Description of the problem

In the food industry and healthcare sector there are walls, ceilings, baseboards, pavements and other unpainted mineral bases affected by humidity and its consequences. The most visible problems are salts (saltpetre) and molds, although these conditions are usually accompanied by others that are not visible, such as bacteria, biofilm, spores, crystals, etc. Some well-known examples are the mineral brick walls, the natural or artificial stones of the wine cellars, among other sectors. This problem happens both indoor environments and facades, spreads quickly and contaminates other surfaces, utensils, machinery, environment, food..., with negative consequences on workers' health, and being a risk of contamination either organoleptically, or even at the level of food poisoning. Therefore, beyond aesthetic reasons, solution and prevention are needed. Sanitation, consolidation (sometimes with colored mineral glaze) and breathable waterproofing with BioFilmStop antimicrobial technology (BPR Art3) as main treatments, is the most appropriate system.



### Summary of the most common basic solution and procedure

#### 1. SURFACE CLEANING

· **FAKOLITH FK-12**: Application of the cleaner for moisture damage, such as damage from mould, saltpetre, biofilm... After subsequent rinsing with water and drying, the base is ready for the next treatment.

#### 2. CONSOLIDATING PRIMER WITH NATURAL COLOR CORRECTION

· **MULTILITE MONOCROM**: If the base is inconsistent and / or permanent stains remain, proceed to apply the consolidation-mineral silicate glaze either in colorless, or in the mineral color of the chart, or pigmented by the applicator in situ with our Mixol oxide pigments. The base will be consolidated and the aesthetics and visual damages solved. As an alternative to multilite monocrom is also suitable **multilite Color** with more heterogeneous finish.

#### 3. HYDROPHOBING FINAL PROTECTION

· **FAKOLITH FK-7**: Application of the polyvalent water repellent with BioFilmStop antimicrobial technology, to reduce and protect the mineral base against humidity and its consequences. The moisture absorption of the base will be drastically reduced and its long-term maintenance will be simplified. When the surface is a pavement, instead of FK-7, the recommended water-repellent is **FK-3 Plus N**, since it is also oil-repellent.

### Application process

Date 20-02-2024

Page 1

## 1.- FK-12

**PRODUCT SUMMARY:** Concentrated water-based detergent cleaner, free of chlorine and formaldehyde, biodegradable and compatible with moisture. Wide range of applications and sectors, for use both indoors and outdoors, on horizontal and vertical surfaces.

For cleaning moisture damage on surfaces of various materials; saltpetre blooms, lime blooms, surface damage caused by the action of microorganisms such as mould, moss, bacteria and biofilm matrix, as well as medium-grade pollution. Mainly used in industry in general, food industry, health sector, establishments in general, restoration of facades and heritage, civil works.

It presents a notorious descaling power of penetration, leaving the pore of the base, clean, open and receptive for later treatments; consolidators, protectors, waterproofing impregnations, primers, paints and coatings, anti-graffiti protections, etc. Its tensoactive components facilitate the neutralization of the base, after rinsing with water. With Declaration of Conformity.

**MODE OF APPLICATION:** Application from concentrated to dissolved 1:4 in water as a general rule. Adapt the dissolution according to the needs and conditions of each surface. The higher the concentration, the faster the action, and the higher the capacity to clean the damage. Especially to eliminate lime and microorganisms in wood will be applied without dilution.

Once the dissolution is done, apply preferably from the upper area, with brush, sponge, mop, spray, as appropriate in each case:

- Insist where the reaction is triggered and rub the affected area with brushes.
- Rinse with water before the product and the dissolved dirt dry.
- Allow to dry before proceeding with other treatments.

**CONSUMPTION - PERFORMANCE:** It is very variable, depending on the solution used, type and absorption of the surface, method of application, type and degree of dirt or affection, so its average performance can vary between 4 m<sup>2</sup> and 15 m<sup>2</sup> per litre of concentrate.

## 2.- MULTILITE Monocrom

**PROPERTIES:** Mineral glaze/veil based on a complex potassium silicate micro-emulsion, in a water-based dispersion, for use on interior and exterior mineral bases. With an organic material content of less than 5% of total formula weight, in compliance with the German DIN 18363 Standard. Specifically designed for exclusive use on mineral bases, as Multilite Monocrom ends up forming a part of the substrate, due to a process of silification, by chemical bonding, to form a single body that is insoluble in water but highly breathable (SD < 0.02). Can be pigmented using Mixol Óxidos and/or other oxide colours, subject to order. Multilite Monocrom, unlike Multilite itself, unifies the different oxide pigments used in pigmentation, mostly blending them into a unique colour in order to provide a homogeneous tone. Should you wish to make up a glaze colour of your choice, Multilite Monocrom is transparent and white and is available with a chart of colours and can also be pigmented, using at most 3%-5% of Mixol oxides. Because it does not form a surface film, due to its penetrating qualities, Multilite Monocrom will not alter the texture of the mineral base treated, making this an extremely natural, effective and lasting treatment.

**MAIN USE:** Multilite Monocrom is used as a penetrating, coloured mineral glaze for absorbent mineral bases, concretes, mortars, micro-mortars, paved floors, façades, heritage work, professional theming, etc.

**HOW TO APPLY:** Carefully protect all surfaces that are not to be treated from splashing, particular glass, metal or lacquered surfaces, wood, etc. Apply Multilite Monocrom using brushes, rollers or an airless spray gun. It must not be diluted with water or solvents. We recommend the application of 2 coats, leaving a drying interval of 12 hours between each coat. Clean utensils immediately after use with solvent. For optimum durability the system can be approved through the subsequent application of FK-7 or FK-3 Plus Nano water-repellent protector. For more information consult the specifications sheet and/or application guidelines, along with the safety sheet.

**AVERAGE YIELD:** Multilite Monocrom provides a yield of approx. 4-6 m<sup>2</sup>/litre and an average consumption of between 150 and 250 ml/m<sup>2</sup>, although this may vary considerably, depending on how it is applied and the texture and absorption of the base.

### 3.- FK-7 (CE Marking)

**DESCRIPTION:** FAKOLITH FK-7 is a concentrated, water-miscible, consolidating water-repellent, micro/nano dispersion, with CE Marking test data, effective against micro-organisms, with penetrating action, colourless and highly breathable. Provides effective protection against environmental influences and the causes and consequences of dampness in absorbent construction materials. The micro/nano dispersion of the FK-7 modified nano silane-siloxanes results in a "dew-drops" water-repellent effect. Once dissolved in potable water the mix is low voc and reacts with the construction element to which it has been applied, producing a water-resistant area, while at the same time allowing for the complete dispersion of water vapour (SD = 0.02), presenting excellent resistance to environmental influences and UV rays. Due to its high level of breathability FK-7 will not compromise the correct curing of the base material. Stable with regard to meteorological changes it rejects dirt and grime. Protects against harmful, hygroscopic salt bloom on construction elements and counteracts the appearance of damp patches originating inside walls. Another important function is that it highlights and maintains the natural colours of the surfaces it is applied to. Activates transpiration by drying damp patches and, due to its BioFilmStop technology, FK-7 is also highly resistant to mould and algae. Can be applied to damp surfaces, as it transmits through water. Particularly recommended for concrete structures where, due to its penetrability and protection against damp, it protects by inhibiting corrosion of the internal rebar-reinforcing, in this way prolonging useful life.

**BIOFILMSTOP SANITARY TECHNOLOGY:** FK-7 is an intelligent water-repellent, treated with BioFilmStop Inhibition Technology, and highly resistant to mould and microorganisms, DIN-UNE EN 15457:2008 ((Aspergillus, Cladosporium, Penicillium, Algae...), as well as bacteria ISO 22196:2011. The products in the BioFilmStop range positively contribute to compliance with (EC) 852/2004, and are manufactured subject to HACCP and GMP (EC) 2023/2006, also notably improving HACCP, food safety and asepsis for the user company. Declaration of Conformity – Health Register FAKOLITH RGSEAA ES-39.005259/T y ROESP E-0043-E.

**MAIN USE:** FAKOLITH FK-7 is ideal for the waterproofing, conservation, drying and strengthening of almost all porous or absorbent mineral materials, such as natural and artificial stone, concrete, mineral based paints and coatings, absorbent ceramics; and also for wood, interior or exterior and subject to a wide range of climactic conditions, principally on vertical wall surfaces and façades. FK-7 is the ideal water-repellent for restoration processes on surfaces suffering from damp pathologies. Apt for application in drilled rising damp treatments, request additional information. Mainly for use on façades and for rehabilitation, heritage projects, theming, civil engineering, industry in general, the food industry, etc. Limitations: Any type of polished base that lacks capacity for absorption (in these cases use FK-4 Extreme). Extremely alkaline, white or fresh cement bases (in these cases use FK-3 Plus N). Interior or exterior natural stone bases with water lixiviation with surface creep (limited function).

**WATER THINNING:** Generally speaking concentrated FK-7 should be diluted at a ratio of 1:14. For bases with rising damp, in order to enhance the natural colour of the mineral surface, and also in the case of woods, dilute using potable water, at a ratio of 1:9. Solely mix the quantity that you will be using during the day, given that the mix will only remain stable for around 8-12 hours and should not be used once that time has elapsed.

**HOW TO APPLY:** Carefully protect all surfaces that are not to be treated from splashing. Following suitable preparation of the surface, apply FK-7 2 or 3 times in a row using brushes, rollers or spray guns, each time on top of the previous coat while it is still wet, and always working from the bottom up. Make sure you clean all utensils immediately after use with water. Only apply the quantity that can be absorbed by the surface to be covered and avoid applications that will leave excess product on the surface. Will resist rain 24 hours after application, although the full water-repellent affect does not occur until several days have passed. Applicable at temperatures of 2-3°C or over. For more information consult the specifications sheet and/or application guidelines, along with the safety sheet.

**AVERAGE YIELD:** FK-7, when undiluted, provides a yield of approx. 20-60 litres/m<sup>2</sup>, although this may vary considerably depending on type of surface and method of application. Average consumption in solution is approx. 250 ml/m<sup>2</sup>, although this may also vary between 100 and 500 ml/m<sup>2</sup>.

**IMPORTANT NOTE:**

This application guide is a general recommendation. On particular cases there may be additional recommendations or variations. Consult your doubts and recommended plan of subsequent maintenance with our Technical Department through the contact form of this web. If you want a Personalized Technical Prescription, [contact us](#) and send us the completed Check List of the Food-Health Industry available in the section "Application Guides".

**APPLICATION GUIDES LEGAL ADVICE:**

FAKOLITH CHEMICAL SYSTEMS, S.L.U. (FCS) applies a quality management system, and manufactures under HACCP for the food industry and health sectors, among others. Fakolith is certified by TÜV Rheinland Cert GmbH for ISO 9001: 2015 standard. FCS is a company of the FAKOLITH group in Spain, dedicated to developing, manufacturing, importing and commercializing paints and special industrial treatments. As our corporate purpose reflects, the legal responsibility for the application of the products is always out of our reach. FCS has a policy of R.C. of products with international coverage, except USA and Canada, of up to three million euros for damages caused by possible manufacturing defects.