



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

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## Painting and renew walls, ceilings and baseboards of the food industry and health sectors, with FoodGrade paint for direct and indirect contact with food and beverages.

### Description of the problem

Painting walls, skirting boards and ceilings, new or already painted in the food industry and also in other sanitary sectors, with certified food paint is increasingly demanded by the industry, quality audits and sanitary inspection. This guarantees the absence of toxic migrations from painted surfaces, both in direct contact and in occasional or indirect contact with food, which could be generated for example by condensation drops on ceilings, or by eventual contact with walls and other surfaces. Fakolith as a specialist manufacturer of certified food contact and hygienic coatings with declaration of conformity offers a wide range of possibilities. All Fakolith FoodGrade coatings are treated with BioFilmStop Green antimicrobial food technology, which helps to inhibit the nesting of bacteria, biofilm and viruses that cause food poisoning, thus increasing food and health safety. In the following, we will only deal with the most common cases on walls, ceilings and skirting boards, generally mineral surfaces that are free of paint, or are already painted with other unsuitable products.



**IMPORTANT NOTE:** *If the surfaces to be painted have a significant risk of mould growth on indirect contact surfaces, then we recommend that you assess whether it is more appropriate to use our other range of [Hygienic Coatings](#) that are highly resistant to mould, bacteria, biofilm and other pathogenic microorganisms. If in doubt, please consult our technical team.*

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

#### 1. SURFACE CLEANING:

· **FAKOLITH FK-12:** Application of moisture damage cleaner, such as mold, saltpeter, biofilm, and subsequent rinsing with water to eliminate damage and, after drying, the base is ready for the next treatment. Alternatively, or if necessary, can be used the BIOFILMSTOP Cleaner with HA Health Record for the elimination of biofilm, bacteria, fungi, virus or also the multifunctional industrial cleaner **FK-111** for greasy dirt.

#### 2. SURFACE PRIMER:

· **DISPERLITH PRIMER:** For the dispersion paint, application of the fixing nano primer with high resistance to humidity, to consolidate the base and prevent the infection regeneration from the inside. The base will be ready for the adequate adhesion of the most suitable FoodGrade coating for each case.

#### 3. SURFACE PAINTING:

Final painting with 2-3 coats of the most suitable FoodGrade paint or FoodGrade enamel:

· **Option A - DISPAINT FOODGRADE:** Innovative water-based enamel, fast drying, thin film and matt-satin finish,

suitable for direct and indirect contact with foodstuffs, which is presented as the most versatile option for multiple surfaces. For surfaces requiring good hardness, medium physical-chemical stress, with easy renovation and maintenance. It has double certification EU 10/2011 and FDA 21 CFR 175.300, and CE marking tests, which broadens its field of use. Alternatively, provided there is no risk of mould growth, you can also evaluate the use of the paint [DISPERLITH FoodGrade Elastic](#).

· **Option B - FAKOLITH FK-45 FOODGRADE:** Especially for such situations or on skirting boards and high performance surfaces, this high solids, high gloss food grade epoxy paint, with EU 10/2011 certification and CE marking tests, is often the most widely used choice for high performance surfaces, and also because it is an epoxy paint available in white. It takes more than 10°C to dry. Alternatively, you can also paint with [FK-100 FoodGrade](#) (available in [FoodGrade colorcard](#), except white), which is also FDA 21 CFR 175.300 certified, or if you prefer a water-based food grade epoxy paint, [FK-450 FoodGrade](#) is also available.

## Application process

### 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.- DISPERLITH Primer

**PRODUCT SUMMARY:** DISPERLITH PRIMER is a water-based consolidating primer, with hybrid resins and quartz nano-spheres, ideal as a primer prior to painting with paints from the Disperlith range and dispersion paints in general.

Low Voc, fast drying, breathable and with high penetration in the base. Ideal for fixing, consolidating and bridging

surfaces before painting. Can be applied on mineral bases, pladur®, bases painted with dispersion paints, mineral paints, sol-silicate, silicone resin and other paints and coatings that are deteriorated but well adhered to the base.

Highly moisture resistant primer, treated with BioFilmStop antimicrobial technology (BPR Art.3) effective against internal regeneration of bacteria, biofilm, moulds and yeasts.

**MODE OF APPLICATION:** Those bases that were affected by moisture and microorganisms should be pre-cleaned with the moisture damage cleaner FK-12.

After the cleaning has dried, the primer will be applied, without dilution, and according to the needs of each surface, 1 or 2 coats will be applied by brush, roller, spray or airless.

**CONSUMPTION - PERFORMANCE:** DISPERLITH PRIMER has a coverage of approximately 4-10 m<sup>2</sup>/l. Depending on the way of application, texture and absorption of the base coat it can vary considerably.

### 3.- OPTION A - DISPAIN'T FoodGrade

**PROPERTIES:** it is a 1-component aqueous dispersion satin-matt acrylic enamel, thin film and fast air drying, widely certified and suitable for direct and indirect contact with food, according to the European Regulation EU 10/2011 and American FDA 21 CFR 175.300, and its subsequent modifications. Formulated with modified acrylic copolymers, free of Bisphenol A (BPA free), APEO, formaldehyde, phthalates, heavy metals, etc. Dispaint FoodGrade has excellent finish and adhesion on multiple surfaces, with an adequate balance between physicochemical resistance and impermeability in its category. It has no tacking or blocking after curing, class 1 wet scrub resistance, low Voc, and low odor. It is not dangerous goods neither for its use nor for road, sea or air transport. It is a multipurpose aqueous food enamel, easy to apply, renew and maintain. **With Declaration of Conformity, Performance and CE Marking.**

**BIOFILMSTOP SANITARY TECHNOLOGY (Article treated BPR Art.3):** DISPAIN'T FoodGrade is a treated paint (BPR Art 3 and 58) with BioFilmStop Foodgrade antimicrobial Technology. With effectiveness ≥99,9% and tested in several official R&D&I projects and external reference laboratories, under various regulations ASTM D2574-06, ISO 846, ISO 22196, ISO 15457:201, ISO 21702, etc., against bacteria and biofilm (Staphylococcus aureus MRSA, Listeria monocytogenes, Salmonella enteritidis, Salmonella enterica, Pseudomonas aureuginosa, Legionella pneumophila...) and viruses (Human Coronavirus, Feline Coronavirus). The paints and coatings of Fakolith's sanitary range contribute to comply positively with CE 852/2004, are manufactured under HACCP and Good Manufacturing Practices (GMP) according to CE 2023/2006, improving hygiene and food and sanitary safety of surfaces and environments. FAKOLITH Sanitary Registration: RGSEAA ES-39.005259/T and ROESP E-0043-E.

**MAIN USE:** particularly suitable for the protection and finishing of surfaces of repeated use, and up to medium physicochemical stress, in direct, indirect or occasional contact with food, such as open surfaces of walls, ceilings, skirting boards, installations and various objects. Excellent general adhesion in its category on multiple surfaces, such as surfaces with previous coatings in good condition, 3D printing parts, various plastics, primed metal alloys, wood surfaces and derivatives, mineral surfaces and dry construction gypsum panels, sandwich panels, etc. Mainly used in food and auxiliary industry, health sectors, hospitals, clinics, in industry, civil works and public and private buildings in general.

**PROPERTIES:** Dispaint FoodGrade is an enamel with exceptional hardness and adhesion on multiple surfaces. Resistant to weathering, carbonation and alkalinity of the base. Good average resistance to most of the disinfectants and cleaners in use solution, according to DIN EN ISO 4628-2: 2004-01 (Higher resistance to acid solutions than to basic ones). **Tests CE marked** (Tecnalia) UNE-DIN EN ISO 1504-2:2005 after 7 days of curing applying 2 coats of 162.5 gr:

- Abrasion resistance. Weight loss= 40 mg.
- Permeability to CO<sub>2</sub> Class III Sd >50 m (223)
- Permeability to water vapor Class I Sd <5 m (2.07)
- Liquid water permeability w<0.1 Kg/m<sup>2</sup>-h 0.5 (0.01) Class III
- Tensile strength for rigid systems with traffic loads =3.55 N/mm<sup>2</sup>.

**APPLICATION:** Applicable by brush, roller, Airless or Air-Mix, anilox rollers, industrial spraying.

**SERIAL COLORS:** White. Consult availability, price and minimum quantity for other colors of the FoodGrade chart or other RAL colors).

**AVERAGE YIELD:** DISPAINT FOODGRADE has an approximate average yield of 4-8 m<sup>2</sup>/l. in 2-3 coats. Depending on the desired finish, the texture and absorption of the base can vary considerably.

For a correct application follow the indications of the technical data sheets, application guides and safety data sheets. In case of doubt consult our technical service.

### 3.- OPTION B - FK-45 FoodGrade

**PRODUCT SUMMARY:** FK-45 FoodGrade is a 2-component heavy-duty epoxy food contact coating, paint or varnish, with very high solids content, certified for direct and indirect contact with food, according to the European regulation EU 10/2011. High performance paint, low Voc, low odor, gloss finish, with CE marking tests and excellent physicochemical resistance in its category. Especially indicated for the protection and painting of surfaces in direct and indirect contact with food, beverages, water for food processing and drinking water.

**Product treated (BPR Art 3 and 58) with BioFilmStop FG antimicrobial technology**, specific FoodGrade version, highly effectiveness tested against bacteria and other pathogenic microorganisms such as coronavirus, and always according to EU 10/2011 and FDA 21 CFR 175.300 regulations. ISO 22196 and ISO 21702 effectiveness test (Escherichia coli, Listeria monocytogenes, Bacillus subtilis, Pseudomonas aureginosa, Staphylococcus aureus, Salmonella enteritidis, Legionella pneumophila, Coronavirus Feline). The paints and coatings of the Fakolith FoodGrade range contribute to the positive compliance with CE 852/2004, are manufactured under HACCP and Good Manufacturing Practices (GMP) according to CE 2023/2006 and/or FDA 21 CFR 174.5, improving the hygiene, food and health safety of surfaces and environments.

**FIELDS OF USE:** Following the technical indications for each system, FK-45 FoodGrade is recommended for direct, indirect and occasional contact with food on open surfaces of walls, ceilings, skirting boards, floors, metal structures, machinery and equipment, cold and freezing rooms, food warehouses, panels, food transport, objects, etc., always indoors. In the food industry, health sectors, hospitals and clinics, industry, civil works, and public and private buildings in general. **Compatible with most consistent surfaces:** Tensile strength EN ISO 4624:2016 Rigid Systems: ≥1,0 (0,7) b N/mm<sup>2</sup>. (Without traffic loads) and: ≥2,0 (1,5) b N/mm<sup>2</sup> (With traffic loads). Surfaces with the adequate roughness Rz>50, both in mineral bases, as well as in duly sandblasted (SA 2,5) or primed metals. Lacquered panels and previous compatible paints and/or primers, well bonded and resistant to the ISO 2409:2007- Class 0-1 cut-cross test.

**For the painting and interior renovation of food, beverage and drinking water tanks and pipes, use from now on the most modern, resistant and certified version "FK-100 FoodGrade", the only one that simultaneously complies with EU and FDA regulations.**

**STANDARD COLORS:** Transparent varnish, White RAL 9003, Light Ivory RAL 1015, Oxide Red RAL 3009 and Grey RAL 7004, Green RAL 6002, Blue RAL 5012, Yellow RAL 1003 and Black RAL 9017 Consult availability, price and minimum quantity of colors [FoodGrade chart](#) or other RAL colors.

**APPLICABLE:** with brush, roller, Airless or AirMix preferably heated.

**With Declaration of Compliance, Performance and CE marking.**

**AVERAGE YIELD PAINT:** according to recommended coat thickness, depending on use of FK-45 FoodGrade

- Dry thickness 200 µm = wet 302 gr/m<sup>2</sup> (222 ml/m<sup>2</sup>) - yield 3,31 m<sup>2</sup>/kg (4,5 m<sup>2</sup>/L).
- Dry thickness 300 µm = wet 453 gr/m<sup>2</sup> (333 ml/m<sup>2</sup>)- yield of 2,21 m<sup>2</sup>/kg (3,00 m<sup>2</sup>/L).
- Dry thickness 350µm = wet 528 gr/m<sup>2</sup> (389 ml/m<sup>2</sup>)- yield of 1,90 m<sup>2</sup>/kg (2,57 m<sup>2</sup>/L).
- Dry thickness 400 µm = wet 604 gr/m<sup>2</sup> (444 ml/m<sup>2</sup>)- yield of 1,66 m<sup>2</sup>/kg (2,25 m<sup>2</sup>/L).

#### **AVERAGE YIELD TRANSPARENT VARNISH:**

- Dry thickness 50 µm = wet 58 gr/m<sup>2</sup> (53 ml/m<sup>2</sup>)- yield of 17,27 m<sup>2</sup>/kg (18,87 m<sup>2</sup>/L).
- Dry thickness 75 µm = wet 87 gr/m<sup>2</sup> (79 ml/m<sup>2</sup>)- yield of 11,49 m<sup>2</sup>/kg (12,66 m<sup>2</sup>/L).
- Dry thickness 100 µm = wet 116 gr/m<sup>2</sup> (105 ml/m<sup>2</sup>)- yield of 8,63 m<sup>2</sup>/kg (9,52 m<sup>2</sup>/L).

**For a correct application follow the indications in the technical sheets, application guides and safety data sheets. In case of doubt consult our technical service.**

#### **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.