

## Kimitech K40 NF

ST6-0319

*Two-component colored epoxy resin, solvent-free, for protective painting of reinforced concrete works, resin floors and coatings*



### DESCRIPTION

**Kimitech K40 NF** is a two-component, solvent-free, highly adhesive water-based epoxy resin, resistant to hydraulic thrust, with excellent resistance to chemical agents, available in both colored and neutral colors that can be colored with compatible universal pastes.

For concrete structures, it constitutes a protective system, able to improve the impermeability of reinforced concrete products, increasing their durability (also against aggressions due to sulphates and chlorides).

It is CE marked as a protective coating according to the 1504-2 (MC and IR intervention principles).

### ADVANTAGES

- **Performing:** solvent-free, highly adhesive, resistant to hydraulic thrust, with excellent resistance to chemical agents.
- **Versatile:** available in both colored and neutral colors that can be colored with compatible universal pastes

### USES

- Protective painting of concrete works subject to chemical or physical aggression (channels, pipes and collectors for sewers, tunnels, purification plants).
- Resin floors and coatings (**Kimitech K40 NF** must always be protected with suitable transparent polyurethane finishes to obtain more easily washable surfaces, with greater resistance to color changes, scratches and wear).
- Continuous wall coverings, especially in the case of industrial activities, including food (being odorless), without interrupting production cycles.
- Colored tricomponent painting self-leveling epoxy-resin (**Kimitech ECA**) or trowable (**Kimitech ECF**) resin systems. In this case the interventions must be completed with the final application in a double coat of **Kimifloor ECO-FINITURA** single-

component polyurethane resin.

- Painting of floors with a vapor barrier (after priming with **Kimicover FIX** and providing a final transparent polyurethane protection)

### APPLICATION

	Roller or brush application		Complete hardening time: 7 days
	Mechanical device application		
	Thickness per coat: < 1 mm for horizontal application < 1 mm for vertical application		

**Kimitech K40 NF** is supplied in two pre-dosed containers (A + B), of which the "B" part is oversized to allow an easy mixing. To prepare the material, pour component "A" into component "B", mix thoroughly with a low-speed drill (200-300 per minute) until you get a perfect mixture; the mixture must be diluted with about 15-20% of clean water. Mix a quantity of product not exceeding that which can be applied within the frost time. In case of fractionated mixing, respect the ratios by weight (not by volume) indicated in the packages.

In case of protective painting of concrete works, sand the surface in order to make it compact and free from oils, greases, old paints, release agents and any other material that could affect the good anchoring of the further resin coating; apply a coat of primer **Kimicover FIX**; **Kimitech K40 NF** must be applied in min. two coats by brush, roller or sprayed with an airless pump. .

In case of continuous non-toxic coatings of walls in industries, the substrate must be compact, free from oils, greases, old varnishes and any other material that may affect the good anchoring of the resin coating.

Any leveling must be carried out with **Betonfix RS** or **Betonfix R30**, rounding the corners between wall-floor and wall-wall.

If you intend to make a colored paint, it is feasible to get a non-slip surface by freshly dusting the surface of the first coat of the transparent polyurethane finish, applied with **Kimifill 01-03** and vacuuming the encapsulated quartz the next day before finishing the work with the last coat of protective polyurethane.

In case of applications in more than one coat, if there is a time exceeding 24 hours between one coat and the next, it is necessary to sand and carefully aspirate the substrate before reapplying the product.

## CONSUMPTION

- Protective painting : 0,2 Kg/m<sup>2</sup> per coat.

## PACKAGING

Com 5 Kg (A: 1 Kg + B: 4 Kg)

Com 25 (A: 5 Kg + B: 20 Kg)

## STORAGE

The product fears frost, store at a temperature higher than + 5 ° C. In these conditions and in tightly closed containers, it maintains its stability for 24 months.

If used partially, clean the edges of the container of A and B component with clean water before closing.

Characteristics	Average value (Part A)	Average value (Part B)
Consistency	Fluid	Fluid paste
Color	Pale yellow	Colorato
Density EN ISO 2811-1	1,12 ± 0,05 g/cm <sup>3</sup>	1,80 ± 0,05 g/cm <sup>3</sup>
Viscosity(20°C/gir4/100 r.p.m.)	1000 - 1200 mPa·s	3000 - 4000 mPa·s
Solids content EN ISO 3251	100 %	70 %

Characteristics	Average application data (A+B)
Density A+B	1,66 g/cm <sup>3</sup>
Pot Life 200g at 20°C	1h
Catalysis ratio by weight	Part A : Part B = 1 : 4
Complete hardening	7 days
Min. application temperature	+ 5 °C
Available shade	RAL: 7035, 9010 White base to be colored, Neutral

Characteristics	Limits EN 1504-2 Coating C, MC and IR principles	Typical value
Concrete adhesion EN 1542	Flexible systems without trafficking >0,8 Mpa; with trafficking >1,5 Mpa.  Rigid systems without trafficking>1 Mpa; with trafficking >2 MPa.	> 2 N/mm <sup>2</sup>
Permeability EN ISO 7783-2	Class I (permeable to vapour) Sd < 5 m  Class II 5 m ≤ Sd ≤ 50 m  Class III (not permeable to vapour) Sd > 50 m	Class I
Capillar absorption and water permeability EN 1062-3	< 0,1 Kg/m <sup>2</sup> ·h <sup>0,5</sup>	< 0,1 Kg/m <sup>2</sup> ·h <sup>0,5</sup>
Reaction class to fire	Declared value	F

## VARIANTS

The product is available in rapid version with a half pot life (**Kimitech K40 NF/R**).

## WARNING

Product intended for professional use. Different batches of the same raw materials have slightly discordant colors, between one batch of production and the other there could be small chromatic variations. If the product is used on large surfaces (pointing or plastering without a levelling coat), always use material from the same production batch (the use of natural colouring earths may mean that the colour varies slightly from one batch to another) and arrange so that it can be applied in a continuous manner or, if this is not possible, room by room or area by area defined by cuts such as string courses, corners, etc. Do not use **Kimitech K40 NF** in permanent contact with wine and alcohol. Avoid laying the product at temperatures below + 5°C. In case of application of the product in more than one coat, do not wait more than 48 hours between the application of the first and second coat of the product. If necessary, sand the surface before the next coat. The equipment used for the preparation and laying of **Kimitech K40 NF** must be cleaned with water before hardening. Handle with care: use gloves, protective creams and goggles to avoid contact with skin and eyes. The technical specifications and application methods recommended herein are based on our current knowledge and experience and do not represent any form of guarantee of the final results obtainable with the product. It is the customer's responsibility to verify the product suitability for its use by making previous tests before the application and check that this data sheet is still effective and it has not been replaced by more updated versions.