

## Kimitech K40 AP Giallo

ST5-0221

*Yellow bicomponent epoxy resin, for protective painting of r.c. works, resin floors and coatings, suitable for contact with drinking water and food products*



### DESCRIPTION

**Kimitech K40 AP Giallo** is a two component epoxy resin, highly adhesive, resistant to hydraulic counterthrust with excellent resistance to chemical agents.

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

### ADVANTAGES

- Performing: solvents free; highly adhesive; resistant to chemical agents.
- Suitable for contact with drinking water and food products.

### USES





Protection from chemical attacks.

- Non-toxic coatings of tanks intended to contain drinking water (it is tested according to the M.D. 174/2004)
- Protective painting of concrete works subject to chemical or physical aggression (channels, pipes and manifolds for sewers, tunnels, purification plants).
- Coatings of tanks and basins intended for the containment of food products such as oil and wine (tested according to the D.M. 21/03/73).

The table below shows some related foods, in accordance with Annex III of the Ministerial Decree 21/03/73:

Food simulant	Main related foods
C – 10% ethanol	Wines, spirits, vegetables preserved in alcohol (> 5% vol), fruit preserved in alcohol (> 5% vol)
D – Rectified olive oil	Fats, animal and vegetable oils, natural or processed, products of dry bakery, biscuits and dry pastry with fatty substances on the surface

### 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 AP Giallo** it 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 applications where compliance with the regulations of the Ministerial Decree 174/2004 is required, the substrates that will be coated with **Kimitech K40 AP Giallo** must be previously skim coated with **Betonfix 300**, rounding the corners between wall-floor and wall-wall.

Once prepared, the product must be applied in min. two coats by brush, roller or sprayed with an airless pump. Wait at least seven days before filling the tank with water.

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 6 Kg (A: 5 Kg + B: 1 Kg)

Com 24 (A: 20 Kg + B: 4 Kg)

## STORAGE

In hermetically sealed containers, in sheltered and dry places, its stability is 24 months.

Store the packages on the ground and in rooms without sudden temperature changes.

In case of low storage temperatures or sudden changes in temperature, the "A" part of the material could be subject to crystallization (assuming a white-opalescent appearance with a lumpy consistency), in this case heat the pack at about 50° C for 1-1,5 hours until all the crystalline germs have completely dissolved. This procedure absolutely does not alter the characteristics of the material, which therefore, once restored to the correct fluidity, can be mixed and used.

As for transport, place the containers in the central area of the means of transport, covered with heat-insulating material.

Characteristics of the product	Average value (Part A)	Average value (Part B)
Consistency	Paste	Fluid
Color	Pale yellow	Yellow
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	Application data (A+B)
Mixing ratio	Part A : Part B = 5 : 1
Mixture consistency	Fluid paste
Density of the mixture	1,56 g/cm <sup>3</sup>
Viscosity type Brookfield (300 r.p.m. and 25°C) UNI 8490-3	100 - 120 mPa·s
Frost time	1h
Complete hardening	7 days
Min. temperature of application	+ 5 °C
Overall migration test in distilled water after 10 days at 40°C performed according to the test	10,8 mg/Kg < 60 mg/Kg (limit set by M.D. 21.03.73 and amendments to establish suitability for contact with

method mentioned in M.D. 26/04/93 ALL 3/B	foods for which the use of the simulant used in the test is envisaged)
Overall migration test in 10% ethyl alcohol at 40°C/10d according to the test method mentioned in the D.M. 21/03/1973 and further updates and Reg. 10/2011	2 mg/dm <sup>2</sup> < 10 mg / dm <sup>2</sup> (limit set by Ministerial Decree 21.03.73 and subsequent amendments to establish suitability for contact with foods for which the use of the simulant adopted in the test is foreseen)
Global migration test in rectified olive oil at 40°C/10d according to the test method mentioned in the D.M. 21/03/1973 S.O. GU n. 104 of 20704/73 and further updates	6.7 mg / dm <sup>2</sup> < 10 mg / dm <sup>2</sup> (limit set by Ministerial Decree 21.03.73 and subsequent amendments to establish suitability for contact with foods for which the use of the simulant adopted in the test is foreseen)

Characteristics	Limits EN 1504-2 Coating C, principles MC and IR	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
Capillary 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>
Fire reaction class	Declared value	F

## 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 in permanent contact with wine and alcohol.

Avoid laying the product at temperatures below + 5°C.

Do not apply on wet surfaces or with stagnant water.

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.

Handle with care: use gloves, protective creams and goggles to avoid contact with skin and eyes.

For further information and advice on safe handling, storage and disposal of chemical products, the user must refer to the most recent Safety Data Sheet, containing physical, ecological, toxicological and other data related to safety. The information and requirements indicated in this Technical Data Sheet are based on our current knowledge and experience and are to be considered, in any case, purely indicative. They cannot guarantee the final result of the applied product and they have to be confirmed by exhaustive practical applications; therefore the user must test the suitability of the product for the intended application and its purpose. Users must always refer to the latest version of the local technical data sheet related to the product.