

# sikkens

## Two-component satin-finish hydro-enamel based on epoxy resin.



Two-component satin-finish hydro-enamel based on epoxy resin for application on indoor floors and walls.

### CHARACTERISTICS PRODUCT

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Composition:	Based on two-component epoxy resin, dilutable with water
Main properties	<ul style="list-style-type: none"> <li>- Suitable for use as a low thickness colored decorative resin</li> <li>- Suitable for walls and floors</li> <li>- Good resistance to detergents and sanitizers not containing alcohol, solvents or acids</li> <li>- Excellent resistance to oils and fats</li> <li>- Good mechanical resistance</li> <li>- Excellent adhesion on different surfaces (plasters, concrete screeds, tiles, ...) adequately prepared with suitable base products</li> <li>- Available in a wide range of shades (over 2000 colors)</li> <li>- Good hiding power</li> <li>- Product suitable for application in environments with the presence of food (UNI 11021)</li> <li>- It has good surface decontamination properties according to DIN 25415, Part 1</li> </ul>

### PHYSICAL CHARACTERISTICS

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Density (density):	Comp. A: $1.35 \pm 0.1 \text{ kg / dm}^3$ according to the colors Comp. B: $1.11 \pm 0.1 \text{ kg / dm}^3$ according to the colors
Solid content:	$50 \pm 2\%$ by volume; $63 \pm 2\%$ by weight

Drying at 23 ° C / 65% RH: Dust free:

Overlay:

Coloring:

Packaging:

EU limit value for VOC content:

After 3 hours

After min 16 hours and max 72 hours

Only with Akzo Nobel's Acomix tinting system using the bases W05, M15 and N00

1, 5 l

Cat. A / j: 140 g / l (2010). This product (A + B) contains a maximum of 10 g / l of VOC

Abrasion resistance:

Taber test (CS17 wheel - 1000 revs - 1000 g) = 0.07 g of weight loss after 7 days

Brilliance:

G.2Satin

<60 GU 60 °; ca. 50 GU 60 ° ≤ 50

Dry film thickness:

AND<sub>1</sub>

µm per coat; ca. 50 µm

Heat resistance

max 90 ° C

Slip resistance DIN 51130:

action class  
non-slip R9

#### CHEMICAL RESISTANCE OF THE COATING [UNI EN ISO 2812 - 1 (Method 2)]

TYPE OF CHEMICAL AGENT	WAPEX 660
Hydrochloric acid 30% in H <sub>2</sub> O	1 - 2
Nitric acid 10% in H <sub>2</sub> O	1 - 2
Sulfuric acid 30% in H <sub>2</sub> O	2
Acetic acid 30% in H <sub>2</sub> O	0
Acetone	0
94% denatured ethyl alcohol	2
Ammonia 15% in H <sub>2</sub> O	2
Soda (NaOH) 50% in H <sub>2</sub> O	4
Bleach (<5% Chlorine) diluted 1:50 with H <sub>2</sub> O	4
OR	
Mineral oil	4
Green petrol	4
Diesel fuel	4
Sodium chloride (NaCl) 20% in H <sub>2</sub> O	4
Waterfall	4
Vegetable oil	4
UHT milk	4
Tomato puree	3
Lemon juice	2 - 3
Coca Cola	4
Red wine	3
Hydrogen peroxide 3%	2
Hair dye	4

#### Results interpretation scale:

- "0"=Complete disintegration of the coating
- "1"=Cracking / blistering / swelling of medium size, softening and partial detachment
- "2"=Softening, pitting, flaking, slight swelling
- "3"=Opacification, chromatic variation, less resistant to mechanical action
- "4"=No alteration of the coating

#### Note

- All aggressive agents are diluted in double distilled water
- The results obtained refer to the uninterrupted contact for 7 days with the aggressive agent
- Timely removal of the aggressive agent reduces the risk of degradation of the flooring and prolongs its shelf life

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## METHOD OF USE

Catalysis ratio:	Comp. A: 83 parts by weight (equal to 80 parts by volume) Comp. B: 17 parts by weight (equal to 20 parts by volume)
Methods of application:	By short-haired roller, by brush (only for profiling) and by spray. Airless application: 0.38 mm (0.015 inch) nozzle Pressure: 140 - 160 bar. Spray application with air: nozzle 1.50 - 2.00 mm Pressure: 3 - 4 bar.
Dilution:	max 10% by volume with water. The product can only be diluted after having optimally mixed components A and B.
Surrender:	10 - 11 m <sup>2</sup> / l per coat. The yield may vary according to the roughness, porosity and absorption characteristics of the substrates.
Environmental conditions for application:	Temperature: 10-30 ° C; Relative humidity: max 85%. The ideal application temperature ranges from 15 to 25 ° C. The application of the product with high temperatures accelerates the catalysis and consequently reduces the application time; this can partially compromise the final aesthetic effect
Usage time (Pot-life):	ca. 90 minutes at 20 ° C (with 65% RH); ca. 45 minutes at 25 ° C (with 65% RH); ca. 20 minutes at 30 ° C (with 65% RH)
Cleaning of tools:	Immediately after use, first with warm water and detergent and then with Diluente X.
Mixing:	With no other product.
Storage:	In tightly closed packages, in a cool and dry place with a minimum temperature of +10 ° C and a maximum of +30 ° C, protected from frost and heat sources. In these conditions, if stored in original packaging, it is stable for at least 12 months.
Warnings:	All products based on two-component epoxy resins, such as WAPEX 660, tend to show yellowing over time; this phenomenon is very evident when white and very light colors are applied, especially when part of the surface remains in the dark, and can occur according to unpredictable times (even within a few days). In the event that Wapex 660 is applied on floors on

where vehicles with new tires are parked, stains due to the compound of the tires themselves could appear in the contact area, more or less evident depending on the color applied. Light colors highlight this phenomenon more. It is therefore recommended to carry out a preliminary sampling.

In the case of applications on dark colored floors with brightness values lower than 50 (ex. E8.10.40) the application of two coats of WAPEX DECOR BL SATIN or WAPEX DECOR BL GLOSS must be envisaged as a final protective layer.

Operations such as sanding, sandblasting or flame removal, etc., of old paint layers, can generate dangerous dust and / or fumes. Work in well-ventilated areas and necessarily wear suitable personal protective equipment. For more information on the correct disposal, storage and handling of the product, please consult the relevant Safety Data Sheet.

## APPLICATION SYSTEMS

Recommendations for correct installation:

WAPEX 660 must be applied on substrates in general free from humidity, dirt, oils, greases and inconsistencies.

Components A and B must first be mixed separately and then together, until a homogeneous mixture is obtained; only afterwards is it possible to dilute with water. Failure to comply with this procedure compromises the aesthetic and performance qualities of the product. Do not alter the mixing ratio.

The product can be walked on after at least 48 hours from the last finishing coat in optimal conditions at 23 ° C and 65% RH; this means that it is possible to pass on foot, with due attention, but avoiding the passage of manual or mechanical trolleys or vehicles or the storage of heavy objects. The total mechanical and chemical resistances are reached after 7 days in optimal conditions at 23 ° C and 65% RH.

The mechanical resistance of the finish cannot be compared to coatings of any kind (ceramic, stoneware, terracotta or other), but rather comparable to a parquet; it will tend to scratch and show surface wear compatible with the stresses to which it will be subjected.

To clean the surfaces, use the Polyfilla Pro S600 product. Do not use cleaners containing alcohol, solvents or acids. WAPEX 660 cannot be applied outdoors and on unstable substrates, on plastic, iron, linoleum, rubber, parquet, wood.

The presence, following the application of WAPEX 660, of workers in the rooms can favor the deposit of dust and other elements that can alter the aesthetics of the finish.

Preparation

- New cement screed floors  
Degreasing and cleaning of the support; roughen the surfaces with a single disc machine; apply as a base coat of WAPEX PRIMER EP (adopting what is reported in the respective Technical Data Sheet) undiluted
- Deteriorated and uneven cementitious screed floors  
Degreasing and cleaning of the support; removal of inconsistencies, of the parts in the detachment phase of the support and abrasion of the surfaces with a floor machine; remove any oil and grease by shot peening o

removal of the affected support part; restore any removed parts with special anti-shrinkage fiber-reinforced cementitious mortars from the AN BETON range (premixed products for professional construction); wait for the restorations to dry and cure perfectly; restore the flatness of the screed with suitable cement mortars, with adequate mechanical resistance (compressive strength  $\geq 25 \text{ N / mm}^2$ ); wait for the mortars to dry and cure; sand and remove inconsistencies; then apply a coat of WAPEX PRIMER EP (adopting what is reported in the respective Technical Data Sheet) undiluted.

- Completely planar cementitious screed floors, even with old epoxy finishes, well anchored

Degreasing and cleaning of the support; removal of inconsistencies and parts in the detachment phase of the old finishing cycle with a single disc machine; remove any presence of oil and grease by shot-peening or removing the relevant support part; restore any removed parts with special anti-shrinkage fiber-reinforced cementitious mortars from the AN BETON range (premixed products for professional construction); wait for the restorations to dry and cure perfectly; apply as a base coat of WAPEX PRIMER EP (adopting what is reported in the respective Technical Data Sheet) undiluted.

- Tiled floors (system to cover the joints) Degreasing and cleaning of the support; removal of inconsistencies with a single disc machine; remove any presence of oil and grease by shot-peening or removing the relevant support part; restore any removed parts with tiles similar to the existing ones or with special anti-shrinkage fiber-reinforced cementitious mortars from the AN BETON range (premixed for professional construction); wait for the restorations to dry and cure perfectly; smooth the tiles with suitable cementitious mortars, with adequate mechanical resistance (compressive strength  $\geq 25 \text{ N / mm}^2$ ), to cover the joint; wait for the mortars to dry and cure; sand and remove inconsistencies; then apply a coat of WAPEX PRIMER EP (adopting what is reported in the respective Technical Data Sheet) undiluted.

- Tiled walls (system to cover the joints) Careful evaluation of the anchoring of the tiles, restoring any parts removed with tiles similar to the existing ones; degreasing and cleaning of the support with POLYFILLA S600 to remove dirt and inconsistencies; abrade surfaces to roughen them; smooth the tiles with special smooth-looking epoxy-cement mortars with adequate mechanical resistance; wait for the mortars to dry and cure; sand and remove inconsistencies; then apply a coat of WAPEX 660 in the chosen color, diluted at maximum 10% by volume with water.

- Tiled walls and floors (system to keep the joints visible)

Thorough evaluation of the anchor of the floor tiles, restoring any parts removed with tiles similar to the existing ones; degreasing and cleaning of the support with POLYFILLA S600 to remove dirt and inconsistencies; abrade surfaces to roughen them and remove inconsistencies; apply an undiluted coat of WAPEX PRIMER EP (adopting what is reported in the respective Technical Data Sheet).

- Walls smoothed or plastered in civil or concrete  
Careful brushing or sanding and removal of inconsistencies.

Apply a coat of ALPHA GROND in the color corresponding to the finish, diluted 30% by volume with DILUENTE PER ALPHA GROND.

PLEASE NOTE: Given the multiplicity of smoothing products on the market, it is recommended to check the adhesion of the indicated painting cycle on smoothed surfaces, by means of a preliminary sampling of the same on a test area and subsequent tear test.

- Uneven walls  
Careful brushing or sanding and removal of inconsistencies.

Smooth with ALPHA STUCCO until the surface is smooth; wait for it to dry completely and sand to eliminate smudges and excess grout and remove any inconsistencies. Apply a coat of ALPHA BL GROND in the color corresponding to the finish, diluted up to 30% by volume with water.

Finish

Apply two coats of WAPEX 660 with an interval of at least 16 hours between coats.

Please Note

All the information contained in this document is purely indicative and contains only some examples of support that do not represent the totality of the situations that in practice could be affected, therefore if it is necessary to intervene on supports not indicated or if further clarifications are necessary, we invite you to contact our Technical Assistance Service. Furthermore, for the correct preparation of the substrates and the application of the products, the rules for state-of-the-art installation apply, as reported in the Sikkens notebook "Preparation of masonry substrates", which we invite you to consult.

## WORDING TO BE INCLUDED IN THE TENDER SPECIFICATIONS AND ESTIMATES

Two-component, satin-finish, epoxy-based water-based enamel for application on indoor floors and walls (Type WAPEX 660)

## PHYSICAL CHARACTERISTICS

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Dust dry:	After 3 hours
Overlay:	After min 16 hours and max 72 hours
Coloring:	Only with Akzo Nobel's Acomix tinting system using the bases W05, M15 and N00
Packaging:	1, 5 l
EU limit value for VOC content:	Cat. A / j: 140 g / l (2010). This product (A + B)

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Dry film thickness:

AND<sub>1</sub>

µm per coat; ca. 50 µm

Heat resistance

max 90 ° C

Slip resistance DIN 51130:

action class  
non-slip R9

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The effectiveness of our products and systems is based on years of practical experience and research conducted in our laboratories. We guarantee that the quality of the work carried out with our products meets the eligibility requirements set by Akzo Nobel Coatings SpA, provided that all the instructions given by us are correctly followed and the work has been carried out according to skill and professionalism. In the event that the final result has been negatively influenced by circumstances beyond our control, any and all liability is expressly excluded and declined. The buyer is obliged to check whether the delivered products are suitable for the intended use.

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Akzo Nobel Coatings SpA Decorative Paints Via  
Pietro Nenni, 14  
28053 Castelletto Sopra Ticino (NO) T  
+39 0331 916611  
F +39 0331 916635

[www.sikkens.it](http://www.sikkens.it)  
[www.sikkenscolore.it](http://www.sikkenscolore.it)  
[www.sikkensdecor.it](http://www.sikkensdecor.it)  
[service.clienti@akzonobel.com](mailto:service.clienti@akzonobel.com)



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