

Kimicover BLINDO

ST9-0221

Single-component elastic acrylic resin for protective treatment of reinforced concrete buildings, asbestos encapsulations, non-slip and non-reflecting finishings of pedestrian traffic surfaces.



DESCRIPTION

Kimicover BLINDO is a single-component acrylic resin specifically used for non-slip and non-reflecting elastic protective coverings with excellent adhesion, resistance to atmospheric agents, frost-thaw cycle, acid rains and de-icing salts. It is impermeable and resists to atmospheric aggressive agents (sulphates, carbon dioxide and ozone), maintaining a proper vapour permeability.

The product is CE marked according to the EN 1504-2, is used accordingly to the following principles: PI 1.3 (protection against entry by coating) and MC 2.3 (protection against moisture by coating).

Kimicover BLINDO passed the tests required by the Ministerial Decree 20.08.1999 for use in asbestos encapsulation cycles.

Product certified in compliance with the Regulation of March 27 1992 n.257, DMS of September 6 1994, DMS August 20 1999, CEE regulations.

ADVANTAGES

- Excellent adhesion, wear resistance and weathering properties.
- It can be used as a protective coating of structures in r.c. and for the encapsulation of asbestos cement structures; Available in several colors.
- Easy to apply: Can be rolled, painted or sprayed with airless pump.

USES

- Anti-carbonation protection of cement structures
- Protective painting of facades with deteriorated plasters
- Encapsulation of asbestos cement structures,
- Synthetic flooring of external sport facilities
- Finishing cycle of waterproofing systems using cementitious membranes or resins






WORKS

- Cortical restoration and protection of degraded

reinforced concrete structures with exposed metal reinforcement ([SA65](#)).

- Anti-slip and anti-reflective paint on floors, including exteriors, subject to pedestrian traffic ([SA76](#)).
- Encapsulation and protection of "a-type" externally exposed concrete-asbestos roofing ([SA25](#)).
- Encapsulation and protection of "b-type" internally exposed concrete-asbestos structures ([SA26](#)).
- Encapsulation of "c-type" of cement-asbestos structures and installation of coupled panels in direct contact with the asbestos-cement structure ([SA27](#)).
- Encapsulation of "c-type" cement-asbestos structures and installation of false ceilings or over-roofs raised or detached from asbestos-cement ([SA28](#)).

APPLICATION

	Roll, brush or push broom application		Complete curing time: 7 days
	Mechanical device application		Mixing water: 2,5 - 3,75 lt/ 25Kg
	Thickness per coat: <1 mm depending on the kind of work		

The substrates (plasters, concretes and binders) must be free of uneven parts and perfectly cleaned through sanded down and rinsed with abundant water to remove paint, grease, moss or lichen and flaking materials in general that would hinder the perfect adhesion of the product.

Kimicover BLINDO can be applied by push broom, brush, roller or airless pump on clean surfaces, free of detaching materials in general.

It must be diluted with drinkable water, in t quantity shown in the table.

To avoid polymerizing problems, it is necessary to apply

less than 1,5 kg/square metre, per each coat.
On concrete flooring, apply a previous coat of **Kimicover FIX**

CONSUMPTION

Depends on the kind of work (please see technical specifications).

PACKAGING

Plastic pail da Kg 25.
Plastic tanks 1.100 Kg.

STORAGE

Product fears frost.
Store at a temperature not lower than +5°C. In these conditions and in whole containers, the product's stability is 24 months

Characteristics	Value
Appearance	Single component
Smell	Typical
Nature	Acrylic with titanium dioxide and dispersed pigments
Limit of operative temperature	-20 / +90 °C
Non-volatile residue EN 3251	73 ± 5%
Apparent dry bulk EN ISO 2811 -1	1,50 ± 0,05 g/cm ³
Viscosity (a 20°C e 20r.p.m.) UNI 8490-3	200 - 800 mPa·s
Dry touch at +25°C	> 5 mins
Complete hardening	7 days
Minimum application temperature	+5 °C
Thermal expansion coefficient EN 1770	N.A.
Adherence secondo norma EN 24624	5,1 MPa
Accelerated ageing UNI 9922 (1000 h.)	No defects
Resistance to cleaning UNI 10560	> 5000 cycles
Consumption per square metre: Minimum-Maximum Crowning type A, externally exposed	500 -800 g/m ²
Consumption per square metre: Minimum-Maximum Crowning type B, internally exposed	400 -800 g/m ²
Consumption per square metre: Minimum-Maximum Crowning type C, bordering	350 -800 g/m ²

*Adherence tests (EN 24624), accelerated ageing (UNI 9922), resistance to washing (UNI 10560) were carried out on the resin Kimicover BLINDO applied with a coat of Kimicover FIX.

Characteristics	EN 1504-2 limits	Value
Adhesion to concrete (EN 1542) [MPa]	Flexible systems with trafficking >0,8 MPa without trafficking >1,5 Mpa. Rigid systems with trafficking >1 Mpa without trafficking >2 MPa.	2,2
Adhesion to concrete after frost-thaw cycles EN 13687-1 and Thunderstorms EN 13687-2 [MPa]		1,8

Characteristics	EN 1504-2 limits	Value
Permeability EN ISO 7783-2	Class I Sd < 5 m	Class I Sd 1,5 m
Water impermeability (UNI EN 1062-3) [Kg/m ² ·h ^{1/2}]	< 0,1	0,09
Carbon dioxide permeability EN 1062-6	Sd > 50 m	64 m
Artificial ageing EN 1062-11	No defects	Ok
Reaction to fire class	-	F

Tested data on our APPLUS Laboratory *Check certificate Nr. 10/2074-3298-S*

AVAILABLE VERSIONS

The product is available in different colours: White 9003 - Grey 7032 - Grey 7035 - Neutral- Green 6011 – Red and in RAL colours.

Kimicover BLINDO in white (RAL 9003) is specific for the painting of tunnels and road underpasses, with high reflection.

Characteristics	Value
Light reflection Y (SPIN)	85%
Light reflection Y (SPEX)	85%

WARNING

Product intended for professional use.
There may be small differences in color between batches, therefore, if the product is used on large surfaces, organize the installation of the same material lot, or if not possible, apply for rooms or panels defined by lines dividing net.
The equipment used for the application and preparation of **Kimicover BLINDO** must be cleaned with water before curing.
Avoid applying the product at temperatures lower than + 5°C, if it is foggy, if there is dew, if rain is forecast or on wet surfaces; The hardening of the product is slowed down at low temperatures (lower than +10°C). Do not apply **Kimicover BLINDO** in areas with puddles of water. Do not dilute the products with other solvents.
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. All technical data shown in this Technical Data Sheet are based on laboratory tests. Actual measurement data may vary due to circumstances beyond our control. 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.

TECHNICAL SPECIFICATIONS

SK65 - Cortical restoration and protection of degraded reinforced concrete structures with exposed metal reinforcement

SK76 - Anti-slip and anti-reflective paint on floors, including exteriors, subject to pedestrian traffic

(SK65) Accurate removal of degraded and inconsistent concrete by hammering until you see a compact substrate. Remove concrete from the exposed metal reinforcements in contact with them using a needle gun.

Laying of the new collaborative metal reinforcement in case of noticeable oxidation of existing irons with a strong reduction of the section and grouting with special epoxy resins.

Sandblasting or hydro-sandblasting of concrete and metal reinforcement. SSD and remove stagnant water at the time of casting. For the treatment of the reinforcement, use Betonfix KIMIFER mortar by Kimia S.p.A. or similar product. The product will be applied by brush in a double coat with a total consumption of about 0.5 Kg/m². The first coat will be spread on the metal reinforcement to be protected, the second coat will be applied, as an adhesive bridge, even on the concrete to be restored.

For the cortical restoration, Betonfix FB mortar by Kimia S.p.A. or similar product. Apply with a trowel or spray with suitable plastering machines. Kimicover BLINDO by Kimia S.p.A. or a similar product will be used for the anti-carbonation protective coat. diluted with 10-15% of drinking water applied in a double coat by brush, roller or spray respecting a total consumption not lower than 0.5 kg/m².

(SK76) Carry out a proper cleaning of the concrete substrate or bituminous carpet in order to remove dust, detached parts and everything that could affect. In case of concrete substrates, preliminary sealing of any expansion joints. Non-slip and non-reflective coating of floors, even outdoors, subject to pedestrian traffic after priming with Kimicover FIX primer (consumption of about 0.2 kg/m²) and application of single-component acrylic resin Kimicover BLINDO by Kimia S.p.A. or similar product with a consumption between 1.5 and 2 kg/m² depending on the degree of finishing of the substrate.

The single-component acrylic elastomeric resin, anti-glare and anti-slip, with excellent resistance to atmospheric agents, freeze-thaw cycles, acid rain and de-icing salts will be prepared and applied scrupulously following the instructions on the technical data sheets provided by the manufacturer and must have the following features:

- Non-volatile residue EN 3251: 73 ± 1%;
- Viscosity (at 20°C and 20r.p.m.) UNI 8490-3: 200 - 800 mPa · s;
- Dry touch at + 25 ° C: > 5 minutes;
- Adherence according to UNI EN 24624: 5.1 MPa;
- Accelerated ageing UNI 9922 (1000 hours): Absence of defects;
- Resistance to washing UNI 10560: > 5000 cycles;
- Compliance with the CLS (UNI EN 1542) [MPa] > 2 MPa;
- Adhesion to CLS after frost / thaw cycles EN 13687-1 and thunderstorms EN 13687-2 [MPa] > 1.8;
- EN ISO 7783-2 permeability: Class I, Sd < 5 m;
- Resistance to accelerated carbonation, EN 13295 < to control;
- Water impermeability (EN 1062-3) [Kg / m² · h^{1/2}] < 0.1;
- Permeability to carbon dioxide EN 1062-6: Sd > 50 m;
- Artificial aging EN 1062-11: Absence of defects.

The product will be in possession of durability tests in concrete restoration (in addition to the certifications on the single material, the producer will be able to demonstrate the solidity of his know-how in the

field of restoration of reinforced concrete structures through experiments on the durability of the package of "standard" products); Certificate of membership; Certificate of resistance to washing; Certificate of resistance to light and water.

The product will be CE marked as a concrete protection system according to EN 1504-2, principles of intervention PI and MC.

SK25 - Encapsulation and protection of "a-type" externally exposed concrete-asbestos roofing;

SK26 - Encapsulation and protection of "b-type" internally exposed concrete-asbestos structures;

SK27 - Encapsulation of "c-type" of cement-asbestos structures and installation of coupled panels in direct contact with the asbestos-cement structure ;

SK28 - Encapsulation of "c-type" cement-asbestos structures and installation of false ceilings or over-roofs raised or detached from asbestos-cement

(SK25) TYPE A: Encapsulation and protection of "type a" externally exposed asbestos-cement roofing, after priming with Kimicover FIX primer (average minimum consumption of 0.1 Kg/m²) and encapsulation with Kimicover BLINDO resin by Kimia SpA or similar, applied without dilution in two coats of contrasting color, consumption of 0.35 Kg/sqm; second coat consumption 0.3 Kg/sqm.

(SK26) TYPE B: insulation and protection of "type b" internally exposed asbestos-cement structures, after priming with Kimicover FIX primer (average minimum consumption of 0.1 Kg/m²) and encapsulation with single-component acrylic elastomeric resin Kimicover BLINDO by Kimia SpA or similar, applied by spraying between 6 and 36 hours after priming, in double coat: the first respecting an average consumption of about 0.30 Kg/sqm; the second for an average consumption of about 0.25 Kg/sqm.

(SK27) TYPE C: Encapsulation of "type c" asbestos-cement structures and laying of coupled panels in direct contact with the asbestos-cement structure with Kimicover BLINDO single-component elastomeric resin by Kimia S.p.A. or similar product, diluted with 10-15% of drinking water and applied in a single coat respecting an average consumption of about 0.35 Kg/m²

(SK28) TYPE C: Encapsulation of "type c" asbestos-cement structures and installation of false ceiling or over-roof raised or detached from the asbestos-cement structure after priming with Kimicover FIX primer (minimum consumption of 0.1 Kg/sqm) and encapsulation with Kimicover BLINDO resin by Kimia SpA or similar applied as it is in a single coat between 6 and 36 hours after laying Kimicover FIX, respecting a minimum consumption of about 0.4 Kg/sqm.

The single-component non-slip and non-reflecting acrylic elastomeric resin, with excellent resistance to atmospheric agents, frost-thaw cycles, acid rain and de-icing salts will be prepared and applied scrupulously following the instructions on the technical data sheets provided by the manufacturer and must have the following features:

- Non-volatile residue EN 3251: 73 ± 5 %;
- Viscosity (at 20°C e 20r.p.m.) UNI 8490-3 : 200 - 800 mPa · s;
- Dry touch at +25°C: > 5 mins;
- Adherence according to EN 24624: 5,1 MPa;
- Accelerated ageing UNI 9922 (1000 h): No defects;
- Wash resistance UNI 10560: > 5000 cycles;
- Concrete adhesion (EN 1542) [MPa] > 2 MPa;
- Concrete adhesion after frost-thaw cycles EN 13687-1 and thunderstorms EN 13687-2 [MPa] > 1,8;
- Permeability EN ISO 7783-2: Class I, Sd < 5 m;
- Resistance to accelerated carbonation, EN 13295 < to the control one;
- Water permeability (EN 1062-3) [Kg/m² · h^{1/2}] < 0,1; Carbon

dioxide permeability EN 1062-6: $S_d > 50$ m;

- Artificial ageing EN 1062-11: No defects.

The product will be in possession of durability tests on concrete repair (in addition to the certifications on the single material, the producer will be able to show the solidity of his know-how in the field of restoration of reinforced concrete structures through experiments on the durability of the package of "standard" products); Certificate of conformity for type A asbestos removal operations; Attestation of conformity for asbestos removal type B; Certification of compliance with asbestos-type removal operations C; Certificate of membership; Certificate of resistance to washing; Certificate of resistance to light and water.

The product will be CE marked as a concrete protection system according to EN 1504-2, principles of intervention PI and MC.