

POLEPOX-PR 824

TRANSPARENT, EPOXY-BASED RESIN, USED AS AN ADHESIVE COMPONENT BETWEEN CONCRETE SURFACES AND EPOXY COATINGS

GENERAL CHARACTERISTICS

POLEPOX-PR 824 is a clear, epoxy, two-component resin, which is used as an adhesive component between concrete surfaces and final epoxy coatings.

- Penetrates in depth.
- Eliminates dust from decay in old & new floorings, reinforcing their durability.
- Offers high mechanical resistance and chemical protection against acid solutions, alkalis, oil, grease etc.
- It can be easily repaired locally if necessary, but must precede grinding of the surface with a sandpaper or mosaic machine.

TECHNICAL DATA

Basis:	two-component epoxy resin
Appearance:	liquid
Colors:	transparent
Viscosity (A+B):	30-150 mPa•s at 25°C
Density (A+B):	0,88 ± 0,003 kg/l
Mixing proportion (A:B):	50:50 by weight
Application time:	approx. 1 h at 25°C
Final strength:	after 7 days at 25°C
Walkability:	after 2 days
Adhesive strength:	>3 N/mm ² (breaking of concrete)
Temperature for the application and drying of the material:	12 – 35°C

SUBSTRATE REQUIREMENTS

Concrete quality:	at least C20/25
Age:	at least 30 days
Moisture content:	below 4%

PREPARATION - APPLICATION

Applied only on dry surfaces. Protected from arising humidity and free of materials that might prevent bonding e.g. dust, loose particles, grease etc. The success in the application depends on the right preparation of the underlay and use of the material.

- Treatment of the surface with a mosaic machine, or with sandblast or rotor machine, depending on the thickness of the final coating.
- **Good, dry** cleaning of the surface from dust and residues with vacuum cleaner and use of squeegees.
- Caution must be taken so that temperature of the substrate as well as ambient air remains above 12°C during application and curing of the materials while relative environment humidity does not exceed 75%.
- Good mixing of components A (resin) & B (hardener) packed into separate containers in fixed weight proportions. Mixing should be performed using a low revolution mixer (300-600 rpm) for 1-2 min. Stirring of the mixture should be performed thoroughly near the sides and bottom of the container in order to achieve uniform dispersion of the hardener.
- In case of troweled surfaces when there is a need for a penetrating material, it is suggested the application of the **POLEPOX-PR 824** in two or more layers.
- Then, application of one or more layers, with **POLEPOX-PR 824**, until the surface is saturated and a film is created. If mat spots appear, then another layer is necessary. The next layer follows the other before the previous starts to dry. The number of layers vary from one surface to another depending on the absorbency.

CONSUMPTION

250-600 gr/m² in two layers depending on the type and the absorbency of the underlay.

APPLICATION TOOLS

Nappy rolls, brushes, squeegees for smooth industrial surfaces. Tools should be cleaned with solvent immediately after use.

PACKAGING

Supplied in packages of 30 Kg (two drums). Components A and B have the fixed weight proportion.

STORAGE

One year in unopened containers in dry places with minimum temperature 5°C and maximum temperature 35°C, protected from moisture and heat.

REMARKS

- Working time of **POLEPOX-PR 824** decreases when ambient temperature rises.
 - Prolonged storage of partially used containers must be avoided as contact with atmospheric moisture will result in skinning and clouding of the product.
 - **It cannot be applied in thickness for filling cracks or holes.** In this case it can only be used if mixed with fine dry sand.
 - Do not mix or apply unless surface, air and material temperatures are over 12°C during the next 24 hours.
 - Do not apply to floors if there is moisture in the subfloor drive or hydrostatic pressure. Prior precautions measurements of humidity with special device are suggested.
 - In case of cracks or holes we recommend the use of **EPOFIX-H 207**.
 - The usage of mosaic machine must precede the application of **POLEPOX-PR 824** for the creation of pores and the right penetration of the material.
 - In case old floors are going to be laid or a long period of time interferes between successive layers (twelve hours in summer or twenty four hours in winter), the surface must be thoroughly cleaned and ground prior to application of a new layer.
 - After hardening, **POLEPOX-PR 824** is completely safe for health and meets all requirements for food industries.
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CAUTION

The application must take place in well-aired places using protective gloves. Skin or eye contact must be avoided, otherwise wash carefully with soap and water.

For more information consult the material safety data sheet.

The information given here is true, represents our best knowledge and is based not only on laboratory work, but also on field experience. However, because of numerous factors affecting results we offer this information without any guarantee and no patent liability is assumed. For additional information or questions, contact the technical department of KDF LTD.

POLEPOX 833-CV

GENERAL CHARACTERISTICS

Epoxy two-component system. It offers strong bonding to the substrate and good conductivity that prevents the accumulation of static electricity on surfaces. It is used as an intermediate layer of the **POLEPOX FLOOR 830-CC** to assure uniform conductivity on the whole floor surface.

TECHNICAL DATA

Basis:	two-component epoxy resin
Colors:	black
Viscosity (A+B):	1060 mPa•s at 25°C
Density (A+B):	1,14 Kg/lit ± 0,001 Kg/lit
Mixing proportion (A:B):	68%:32% by weight
Application time:	approx. 1 hour at 25°C
Final strength:	after 7 days at 25°C
Temperature for the application and drying of the material:	12 – 35°C after 1 day at 25°C
Walkability:	>3 N/mm ² (breaking of concrete)
Adhesive strength:	

SUBSTRATE REQUIREMENTS

Concrete quality:	at least C20/25
Age:	at least 30 days
Moisture content:	below 4%

PREPARATION-APPLICATION

Applied only on dry surfaces. Protected from arising humidity and free of materials that might prevent bonding e.g. dust, loose particles, grease etc. The success in the application depends on the right preparation of the underlay and use of the material.

- Treatment of the surface with a mosaic machine.
- **Good, dry** cleaning of the surface from dust and residues with vacuum cleaner and use of squeegees.
- Caution must be taken so that temperature of the substrate as well as ambient air remains above 12°C during application and curing of the materials while relative environment humidity does not exceed 75%.
- Priming of the surface with **POLEPOX-PR 824**. Consumption: 200-300 gr/m² in two or more layers on industrial, troweled floorings. 300-600gr/m² depending on the type and the

absorbency of the underlay.

- After hardening of the primer (2-12 hours depending on the ambient temperature) follows the installation of the special copper-bands (conductors), in no less than $1,6\text{m}^2$, in a grid formation and connection to the ground through a perimetrical cable. That means that in an area of 100m^2 there are needed 16 lines of copper-bands of 10m each. The 8 copper-bands are installed vertically and another 8 horizontally in a grid formation.
- Afterwards the surface is coated with **POLEPOX 833-CV**. Good mixing of components A (resin) & B (hardener) packed into separate containers in fixed weight proportions. Mixing should be performed using a **very low revolution mixer (100 rpm)** for 1-2 minutes prior to application. Stirring of the mixture should be performed thoroughly near the sides and bottom of the container in order to achieve uniform dispersion of the hardener.
- Finally, after **POLEPOX 833-CV** has dried follows the application of the **POLEPOX COAT 830-CC** within the following 24 hours.
- The self-leveling layer should be rolled using a special spiky-roller in order to release any possibly entrapped air and avoid the formation of bubbles.

CONSUMPTION

200-250 gr/m^2 .

APPLICATION TOOLS

Special rollers and brushes. Tools should be cleaned with solvent immediately after use.

PACKAGING

Supplied in packages of 30Kg (two drums). Components A and B have the fixed weight proportion.

STORAGE

One year in unopened containers in dry places with minimum temperature 5°C and maximum temperature 35°C , protected from moisture and heat.

REMARKS

- Working time of **POLEPOX 833-CV** decreases when ambient temperature rises.
- In case old floors are going to be laid or a long period of time interferes between successive layers, the surface must be thoroughly cleaned and ground prior to application of a new layer.
- Do not mix or apply unless surface, air and material temperatures are over 12°C during the next 24 hours.
- Do not apply to floors if there is moisture in the subfloor drive or hydrostatic pressure. Prior precautions measurements of humidity with special device are suggested.
- Prolonged storage of partially used containers must be avoided as contact with atmospheric moisture will result in skinning and clouding of the product.

- **POLEPOX 833-CV** will yellow upon prolonged exposure to sunlight or high-intensity artificial lights. A urethane topcoat is highly recommended for color stability.
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CAUTION

The application must take place in well-aired places using protective gloves. Skin or eye contact must be avoided. Otherwise wash carefully with soap and water.

For more information consult the material safety data sheet.

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POLEPOX COAT 830-CC

GENERAL CHARACTERISTICS

Epoxy two-component colored system. It is used as a self-levelling coating on cement-based floors, in cases that static electricity causes problems.

Offers permanent conductivity that prevents the appearance of static electricity charges on surfaces.

It has a conductivity resistance between 10^4 and 10^6 Ohm.

It offers high mechanical resistance and chemical protection against acid solutions, alkalis, petroleum products, and a number of aggressive solvents.

It is suitable for hospitals, computer rooms, laboratories, printing rooms, textile mills, gas stations, electrical stations, ammunition store-rooms etc.

TECHNICAL DATA

Basis:	two-component epoxy resin
Colors:	Available in 10 basic colors and on request.
Viscosity:	4000 ± 500 mPa•s at 25°C
Density (A+B):	$1,46 \pm 0,04$ Kg/l
Mixing proportion (A:B):	76,5%:23,5% by weight
Final strength:	after 7 days at 25°C
Compressive strength (A+B): (ASTM D 695)	64 N/mm ² , 7 days at 25°C
Flexural strength (A+B): (Din 1164)	$35,8$ N/mm ² , 7 days at 25°C
Hardness according to SHORE D:	84
Walkability:	after 2 days at 25°C
Adhesive strength:	>3 N/mm ² (breaking of concrete)
Temperature for the application and drying of the material:	$12 - 35^\circ\text{C}$

SUBSTRATE REQUIREMENTS

Concrete quality:	at least C20/25
Age:	at least 30 days
Moisture content:	below 4%

PREPARATION- APPLICATION

Applied only on dry surfaces. Protected from arising humidity and free of materials that might prevent bonding e.g. dust, loose particles, grease etc. The success in the application depends on the right preparation of the underlay and use of the material.

- Treatment of the surface with a mosaic machine.
- **Good, dry** cleaning of the surface from dust and residues with vacuum cleaner and use of squeegees.
- Caution must be taken so that temperature of the substrate as well as ambient air remains above 12°C during application and curing of the materials while relative environment humidity does not exceed 75%.
- Priming of the surface with **POLEPOX-PR 824**. Consumption: 200-300 gr/m² in two or more layers on industrial, troweled floorings. 300-600gr/m² depending on the type and the absorbency of the underlay.
- After hardening of the primer (2-12 hours depending on the ambient temperature) follows the installation of the special copper-bands (conductors), in no less than 1,6m/m², in a grid formation and connection to the ground through a perimetrical cable. That means that in an area of 100m² there are needed 16 lines of copper-bands of 10m each. The 8 copper-bands are installed vertically and another 8 horizontally in a grid formation.
- Following the surface is coated with **POLEPOX 833-CV**. Consumption: 150-250 gr/m².
- After **POLEPOX 833-CV** has dried follows application of **POLEPOX COAT 830-CC** within 24 hours.
- Good mixing of components A (resin) & B (hardener) packed into separate containers in fixed weight proportions. Mixing should be performed using a **very low revolution mixer (100 rpm)** for 1-2 minutes prior to application. Stirring of the mixture should be performed thoroughly near the sides and bottom of the container in order to achieve uniform dispersion of the hardener.
- Following the application of the **POLEPOX COAT 830-CC**, the self-leveling layer should be rolled using a special spiky-roller in order to release any possibly entrapped air and avoid the formation of bubbles.

CONSUMPTION

1,7 Kgr/m² on smooth industrial floorings.

APPLICATION TOOLS

Special rollers and notched trowels. Tools should be cleaned with **EPOXY SOLVENT** immediately after use

STORAGE

One year in unopened containers in dry places with minimum temperature 5°C and maximum temperature 35°C, protected from moisture and heat.

REMARKS

- Working time of **POLEPOX COAT 830-CC** decreases when ambient temperature rises.
 - Prolonged storage of partially used containers must be avoided as contact with atmospheric moisture will result in skinning and clouding of the product.
 - In Do not mix or apply unless surface, air and material temperatures are over 12°C during the next 24 hours.
 - Do not apply to floors if there is moisture in the subfloor drive or hydrostatic pressure. Prior precautions measurements of humidity with special device are suggested.
 - **POLEPOX COAT 830-CC** will yellow upon prolonged exposure to sunlight or high-intensity artificial lights. A urethane topcoat is highly recommended for color stability.
 - case old floors are going to be laid or a long period of time interferes between successive layers, the surface must be thoroughly cleaned and ground prior to application of a new layer.
 - The conductible fibers contained in **POLEPOX COAT 830-CC** cause a slight differentiation in its color in relation to the RAL code and remain visible after the paint has dried. The intensity of the effect is stronger for light color shades.
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CAUTION

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For more information consult the material safety data sheet.

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