Product Information 162

KERAPOX EP 224

Issue 19.10.2026

Base

Epoxy resin

Material Group

Levelling compounds

Fillers

System Description / Application

Compensation filling based on epoxy resin for steel and concrete surfaces. The system is thermally resistant and electrically conductive.

For levelling uneven substrates. As a conductive base coat for rubber linings and for coatings which are to be tested electrically for leaks.

System Design

Concrete

- Optional Alkadur HR Primer (on porous substrates)
- Kerapox EP 224 Filling coarse
- Earth Connection
- Kerapox EP 224 Filling fine

Steel

- Kerapox EP 224 Filling fine

Properties

- electrically conductive
- temperature-resistant up to 80 °C
- layer thickness approx. 1.0 - 3.0 mm

Physical Data

Physical Property	Value	Unit	Testing Standard
Density	1.3	g / cm³	DIN EN ISO 1183-1
Dissipation resistance (for a relative humidity of > 70 %)	≤ 10^6	Ohm	DIN EN 14879-3

The stated values are average values, determined on cured and heat-treated samples.

Chemical Resistance

Resistant to fuel, diluted acids and alkalis, solvents, oils, fats, salts and salt solutions.

Please contact our application engineering team to discuss the suitability of our products for your project.

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Packaging / Shelf Life

NOTE! **Observe the relevant safety data sheets for transport, storage and handling!**

- The shelf life is given in months.
- All components must be stored and transported dry.
- Protect components from sunlight.
- The minimum shelf life applies to a storage temperature of 20 °C. Higher temperatures reduce, lower temperatures increase the shelf life.

Component	Item Number	Package	Quantity	Shelf Life
Alkadur-HR-Solution	5035197020	Hobbock	16 kg	24
Alkadur-HR-Hardener	5035198085	Drum	8.8 kg	24
Kerapox-EP224-Component A	5035566003	Drum	5 kg	24
Kerapox-EP224-Component B	5035564193	Canister	2.3 kg	24
PE-Fibre 940T	5119125007	Drum	1 kg	24
SKC-Filler 3L	5011194017	Bag	12.5 kg	24
SKC-Filler 4L	5011195017	Bag	12.5 kg	24
Copper strip, 19 - 20 mm, self-adhesive	9703301015	Roll	33 m	unlimited
KCH-Cleaner 1	5040016068	Canister	8.5 kg	24
Steuler-Universal-Cleaner	5040023005	Canister	4 kg	24

GISCODE

Mixture	GISCODE
Alkadur HR Basic Mixture	RE90
Kerapox EP 224 Filler coarse	RE90
Kerapox EP 224 Filler fine	RE90

Working Equipment

NOTE! **The materials to be processed may have a corrosive effect on mixing and processing tools due to the substances they contain or their abrasive components. Therefore, only use tools that are suitable for mixing and processing.**

paint roller, brush

measuring cup, scales, mixing vessels, stirring tool, anchor stirrer

smoothing trowel

brick trowel

testing device for measuring conductivity

Cleaning of Equipment

NOTE! **Follow the safety instructions!**

Tools that are soiled with uncured materials can be cleaned with KCH-Cleaner 1 or Steuler-Universal-Cleaner.

Only clean in well-ventilated areas.

Close the package immediately after use!

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Requirements for the Application

Basic Requirements

- During application, the temperatures of the substrate, the ambient air and the materials to be applied must be between 15 °C and 30 °C.
- The optimum application temperature is 20 °C. Higher and lower temperatures affect the pot life and consistency of the materials being applied. Consumption and application performance may change as a result.
- The object temperature must have a dew point difference of at least 3 K, and at least 5 K for relative humidity above 70 %.
- During application, the substrate must be kept absolutely dry. No moisture (condensate, mist, etc.) may get onto the surfaces to be protected.
- Unevenness must already be levelled out in the substrate.
- The construction site must be protected from draught and direct sunlight.

Concrete / Screed

- Refer to DIN EN 14879-1 as well as to STEULER-KCH-Formsheet 010.
- The substrate must be free from cement slurry, cement skin, loose and crumbly parts, structural defects and separating substances.
- The substrate usually needs to be pre-treated with the right mechanical methods to get enough adhesion.
- The residual moisture of cement-based substrate must not exceed 4 %.
- The effect of water or water vapour pressure on the back of the coating / lining must be prevented.
- The condition of the substrate needs to be documented. For the documentation, use the STEULER-KCH-Test-Record 006 (Concrete Substrates) / 007 (Screed Substrates) or comparable documentation materials.

Steel

- Refer to DIN EN 14879-1 as well as to STEULER-KCH-Formsheet 020 and 030.
- The steel surface is blasted to near white blast cleaning. The following requirements must be met after blasting:
  - A preparation degree Sa 2 1/2 as specified to DIN EN ISO 12944-4
  - Roughness grade medium (G) as specified to DIN EN ISO 8503-1
  - Minimum surface roughness $R_z \approx 70$ µm
- After blasting, the reformation of rust must be prevented by suitable measures. For example, a primer can be applied immediately after sandblasting.
- The condition of the substrate needs to be documented. For the documentation, use the STEULER-KCH-Test-Record 003 (Inspection of Steel Construction Works) / 004 (Inspection of Grit Blasting Works) or comparable documentation materials.

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Mixing Ratios / Consumptions / Application

NOTE! **Follow the safety instructions!**

The application may only be carried out if the conditions set out under "Requirements for the application" are complied with. This applies for the entire duration of the application.

Bring the materials to be applied to the optimum application temperature of 20 °C by heating or cooling them prior to mixing and application.

Before application, the surface to be processed must be clean and undamaged.

Alkadur HR Primer

Alkadur HR Basic Mixture

Component	kg / mix	Litre / mix	Basic mixing ratio kg	kg pre-dosed
Alkadur-HR-Solution	1.800	1.6	1.000	16
Alkadur-HR-Hardener	1.000	1.0	0.550	8.8
Total	**2.800**		**1.550**	**24.8**
Yield	≈ 11.2 m²	≈ 11.2 m²	≈ 6.2 m²	≈ 99.2 m²
Number of application steps	1			
Consumption per m²	0.250 kg			

Consumption Quantities per m²

Component	kg / m²
Alkadur-HR-Solution	0.161
Alkadur-HR-Hardener	0.089
Total	**0.250**

Application-Relevant Times

Times	10 °C	20 °C	30 °C
Pot life	≈ 70 minutes	≈ 30 minutes	≈ 15 minutes
Minimum waiting time until walkability	≈ 24 hours	≈ 16 hours	≈ 10 hours
Maximum waiting time	≈ 72 hours	≈ 48 hours	≈ 16 hours
Curing time		7 days	

Mixing

- Weigh or measure the required quantity of the liquid components and place in a mixing vessel.
- For pre-dosed components, pour the contents of the smaller package into the larger one.
- Mix with stirring tool and anchor stirrer at 300 – 500 rpm until a homogeneous mixture is formed.
- Move the stirrer along the bottom and sides of the mixing vessel.
- Pour the mixture into a new mixing vessel and mix again carefully until a homogeneous, lump-free mixture is obtained.
- Do not use the ready mix after the processing time has expired.

Application

- The application is applied using paint roller or brush. No puddles may remain in concrete recesses or open expansion joints.

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Kerapox EP 224 Filling Coarse (1st Layer on Concrete Substrates)

Kerapox EP 224 Filler coarse

Component	kg pre-dosed	Litre / mix	Basic mixing ratio kg
Kerapox-EP224-Component A	5.0	4.6	1.000
Kerapox-EP224-Component B	2.3	2.3	0.460
SKC-Filler 3L	5.0	5.9	1.000
PE-Fibre 940T	0.1	2.2	20 g
Total	**12.4**		**2.480**
Yield 1 litre / 1 mm per m²	≈ 9.5 m²	≈ 9.5 m²	≈ 1.9 m²
Number of application steps	1		
Consumption per 1 litre = 1 mm / m²	1.300 kg		
Layer thickness	1 mm		

Consumption Quantities per Litre

Component	kg / 1 litre
Kerapox-EP224-Component A	0.524
Kerapox-EP224-Component B	0.242
SKC-Filler 3L	0.524
PE-Fibre 940T	0.010
Total	**1.300**

Application-Relevant Times

Times	15 °C	20 °C	30 °C
Pot life	≈ 55 minutes	≈ 45 minutes	≈ 20 minutes
Minimum waiting time until walkability	≈ 24 hours	≈ 16 hours	≈ 10 hours
Maximum waiting time between applying the coarse and fine filling	≈ 72 hours	≈ 48 hours	≈ 24 hours
Curing time		6 days	

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Mixing

- Weigh or measure the required quantity of the liquid components and place in a mixing vessel.
- For pre-dosed components, pour the contents of the smaller package into the larger one.
- Mix with stirring tool and anchor stirrer at 300 – 500 rpm until a homogeneous mixture is formed.
- Move the stirrer along the bottom and sides of the mixing vessel.
- Pour the mixture into a new mixing vessel and mix again carefully until a homogeneous, lump-free mixture is obtained.
- Weigh or measure out the required quantities of the solid components and add them to the liquid mixture in batches.
- Mix with a stirring tool and an anchor stirrer at 300 – 500 rpm until a homogeneous, lump-free mixture is achieved.
- Move the stirrer along the bottom and sides of the mixing vessel.
- Do not use the ready mix after the processing time has expired.

Application

- Apply the filler to the hardened surface using a smoothing trowel, to the required thickness.
- Avoid trowel marks and burrs.

Earth Connection

- One earth connection must be provided for every 50 m² of floor area.
- At least 2 earth connections must be provided for each area to be connected.
- Apply a self-adhesive copper strip amount to the clean, tack-free substrate around the edges of the surface.
- Bonding a strip approximately 10 cm long, to the surface and run it to the earth connection point, ensuring it is long enough.
- Connection to the on-site grounding system must be carried out separately by suitably qualified personnel.
- The functionality of conductive layers must be checked before applying additional layers.

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Kerapox EP 224 Filling Fine (1st Layer on Steel Substrates / 2nd Layer on Concrete Substrates)

Kerapox EP 224 Filler fine

Component	kg pre-dosed	Litres pre-dosed	Basic mixing ratio kg
Kerapox-EP224-Component A	5.00	4.6	1.000
Kerapox-EP224-Component B	2.30	2.3	0.460
SKC-Filler 4L	2.50	3.4	0.500
PE-Fibre 940T	0.05	1.1	10 g
Total	**9.85**		**1.970**
Yield 1 litre / 1 mm per m²	≈ 7.6 m²	≈ 7.6 m²	≈ 1.5 m²
Yield in order to achieve a smooth, sealed surface = 0.9 kg / m²	≈ 11 m²	≈ 11 m²	≈ 2.2 m²
Number of application steps	1		
Consumption in order to achieve a smooth, sealed surface	0.900 kg		
Layer thickness	≈ 0.7 mm		

Consumption Quantities per Litre

Component	kg / 1 litre
Kerapox-EP224-Component A	0.659
Kerapox-EP224-Component B	0.304
SKC-Filler 4L	0.330
PE-Fibre 940T	0.007
Total	**1.300**

Application-Relevant Times

Times	15 °C	20 °C	30 °C
Pot life	≈ 55 minutes	≈ 45 minutes	≈ 20 minutes
Minimum waiting time until walkability	≈ 24 hours	≈ 16 hours	≈ 10 hours
Maximum waiting time between applying the coarse and fine filling	≈ 72 hours	≈ 48 hours	≈ 24 hours
Curing time		6 days	

Depending on the temperature, a subsequent rubber lining may be started after ≈ 24 hours at the earliest (usually with the prescribed primer for the rubber lining). Immediately prior to this, the surface of the filling must be ground. Therefore the waiting time is not limited upwards.

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Mixing

- Weigh or measure the required quantity of the liquid components and place in a mixing vessel.
- For pre-dosed components, pour the contents of the smaller package into the larger one.
- Mix with stirring tool and anchor stirrer at 300 – 500 rpm until a homogeneous mixture is formed.
- Move the stirrer along the bottom and sides of the mixing vessel.
- Pour the mixture into a new mixing vessel and mix again carefully until a homogeneous, lump-free mixture is obtained.
- Weigh or measure out the required quantities of the solid components and add them to the liquid mixture in batches.
- Mix with a stirring tool and an anchor stirrer at 300 – 500 rpm until a homogeneous, lump-free mixture is achieved.
- Move the stirrer along the bottom and sides of the mixing vessel.
- Do not use the ready mix after the processing time has expired.

Application

- Spread the finished mixture evenly on the substrate in lanes with the smoothing trowel.
- The surface must be smooth and free of pores.
- Avoid bumps, dents and trowel marks.
- For a subsequent rubber lining, the filling must be ground to increase adhesive strength and remove burrs.

Testing

After completion, the ground dissipation resistance of the KERAPOX EP 224 must be determined!

Cleaning / Maintenance

Observe the "Cleaning instructions for Steuler-KCH industrial floor coatings"!

Safety / Disposal

- Ensure sufficient ventilation, especially when working in closed rooms, pits or containers.
- No smoking / no fire.
- Observe the safety data sheets, hazard warnings and safety advice on the containers.
- Wear the appropriate personal protective equipment. Avoid direct contact of the material with the skin.
- Clean and care for hands with skin protection soap and ointment. Do not use solvents.
- Wear a dust mask when grinding, e.g. during repairs.
- Follow the operating instructions in accordance with §14 Hazardous Substances Ordinance and Technical Rules for Hazardous Substances TRGS 507.
- Comply with the accident prevention regulations of the employers' liability insurance associations.
- Avoid direct contact of the materials with the flame, pay particular attention to welding beads during welding work.
- Preferably use residual quantities.
- Do not pour residues down the sink or into the dustbin.
- Collect residual quantities for disposal separately in durable, sealable and labelled containers.

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