PCI Epoxigrund 390 PCI Epoxigrund Rapid

on absorbent and non absorbent substrates





Fields of application

- For indoor and outdoor use.
- For walls and floors.
- Primer for PCI sealings and PCI coatings on cementitious substrates, mastic asphalt screeds, ceramic tiles, synthetic resin coatings and wooden substrates.
- Primer for floors in the interior before applying floor levellers/fairing coats, also when subsequently gluing parquet flooring on
 - concrete floors, cement screeds,

- calcium sulphate screeds, magnesite screeds
- mastic asphalt screeds
- ceramic tiles and synthetic resin coatings
- wooden substrates
- substrates with residues of dispersion, reaction resin, water soluble (e.g. spent sulphite liquor adhesive) and bitumen adhesives.
- Suitable as leveller and/or fairing coat when mixed with silica sand.



PCI Epoxigrund 390 and/or PCI Epoxigrund Rapid is worked into the prepared substrate e.g. by means of a paint roller.

Features and benefits

- Low viscosity, intensive strengthening of the substrate and thus good bond of subsequent coatings and/or sealings.
- Impermeable sealing of pores, prevents air bubbles from ascending from the substrate into the top coat.
- Moisture barrier (two coats necessary) up to a residual moisture ≤ 7 CM% in the substrate of cement screeds, on underfloor heatings up to a residual moisture ≤ 5 CM%, when used as a primer before applying floor levellers with subsequent laying of textile and elastic floorings or parquet.
- Solvent free to TRGS 610, no damage to environment and operative due to solvent vapours, no danger of fire or explosion.
- Very low emission, GEV-EMICODE EC 1 R.
- EU 2004/42/IIA(j)(550/500): < 25 g/l.

PCI Epoxigrund Rapid

- Fast curing, subsequent work can be continued after approx. 3 ½ hours.
- Suitable as cast resin for the forcetransmitting sealing of cracks in screed surfaces.









PCI Epoxigrund 390 (DE0067/02 EN 1504-2:2004

Comply with 5.3 (EN 1504-



PCI Augsburg GmbH Piccardstraße 11 D-86159 Augsburg

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Comply with 5.3 (EN 150

Technical Data Sheet

PCI Epoxigrund 390 PCI Epoxigrund Rapid

Technical data

Material

	PCI Epoxigrund 390	PCI Epoxigrund Rapid
Material base	epoxy resin	epoxy resin
Components	two components	two components
Consistency		
- base component	fluid	fluid
- hardener component	fluid	fluid
Colour		
- base component	colourless - transparent	colourless - transparent
- hardener component	colourless - transparent	yellowish - transparent
Density		
- base component	approx. 1.1 g/cm ³	approx. 1.1 g/cm ³
- hardener component	approx. 1.0 g/cm ³	approx. 1.0 g/cm ³
Behaviour in fire to DIN 13501-1	E fl	E fl
Further information: see Information on the safe use.		
Shelf life	min. 18 months	min. 18 months
Storage	store in a dry, frost-free place, no permanent storage over +30°C	store in a dry, frost-free place, no permanent storage over +30°C
Packaging	tin unit	
Packaging size	25 kg unit, consisting of 17.5 kg hobbock base component stock no. 3226/8 and 7.5 kg pail hardener component stock no. 3227/5 10 kg combined unit (2 components) stock no. 1887/3 1 kg combined unit (2 components) stock no. 1886/6	5 kg combined unit (2 components) stock no. 6298/2 1 kg combined unit (2 components) stock no. 16299/9

Application

Application					
	PCI Epoxigrund 390			PCI Epoxigrund Rapid	
Consumption					
 primer depending on surface structure and absorbency of substrate 	approx. 300 to 500	g/m²	approx. 300 to 500 g/m ²		
- scrape filler at 1 mm peak-to- valley height	approx. 600 g/m ²			approx. 600 g/m ²	
Coverage	25 kg unit covers approx.	10 kg unit covers approx.	1 kg unit covers approx.	5 kg unit covers approx.	1 kg unit covers approx.
- primer	50 to 80 m ²	20 to 35 m ²	2 to 3 m ²	10 to 15 m ²	2 to 3 m ²
- scrape filler	42 m ²	17 m²	1.7 m ²	8 m²	1.7 m ²
Mixing ratio					
- base component	100 parts by weight			100 parts by weight	
- hardener component	43 parts by weight			39 parts by weight	
Working temperature	+10°C to +30°C			+10°C to +25°C	
Flashpoint of mixture	>100°C			>100°C	
Density of mixture	approx. 1.1 g/cm ³			approx. 1.1 g/cm ³	

Technical data

	PCI Epoxigrund 390	PCI Epoxigrund Rapid
Consistency (viscosity at +23°C)	fluid, approx. 420 mPa.s	fluid, approx. 420 mPa.s
Mixing time	approx. 3 minutes	approx. 3 minutes
Working time*	approx. 40 minutes	approx. 30 minutes
Curing times		
- walkable at +23°C	after approx. 8 hours	after approx. 3 1/2 hours
- walkable at +10°C	after approx. 24 hours	after approx. 8 hours
- can be levelled, sealed, coated, waterproofed*	when walkable, after 3 days at the latest in case of primer not s	sprinkled with silica sand
- final strength*	after approx. 7 days	after approx. 3 days

^{*} At +23°C and 50% relative humidity. Higher temperatures reduce, lower temperatures increase the times given.

Preparation of substrate

■ The substrate must be dry, structurally sound, clean, and free from oil, grease, and other residues which could impair adhesion.

Concrete and screed may only be rubbed down with a wooden board or felt pad, but not smoothed with a steel trowel. Roughen smoothed surfaces with cement enriched slurries by grinding, sandblasting or shot blasting (Blastrac). The

requirement as to the strength of the substrate depends on the sealings or coatings to be subsequently applied. Repair spalled areas with PCI Repament or PCI Novoment M1 plus in combination with PCI Repahaft before applying the primer. Fill existing cracks with PCI Epoxigrund Rapid or other suitable PCI cast resins.

The concrete moisture can be measured with a CM meter, if required, and must not exceed 4%.

PCI Epoxigrund 390 and/or Rapid can be used as a moisture barrier up to a residual moisture ≤ 7 CM% in the substrate of cement screeds, on underfloor heatings up to a residual moisture ≤ 5 CM%, only when used as a primer before applying floor levellers with subsequent laying of textile and elastic floorings or parquet. Two coats of primer are necessary.

Application procedure of PCI Epoxigrund 390 and PCI Epoxigrund Rapid

Wear protective gloves and safety goggles!

1 Mixing: Remove lid from both containers and add entire hardener component to the base component. Mix both components intensively for approx. 3 minutes using a suitable paddle (e.g. from Collomix) attached to a slow-speed, infinitely adjustable electric drill (approx. 300 rpm). Use a wooden tool or metal trowel to mix the 1 kg unit.

Mixed material must be transferred to another container. Scrape off remaining material from edge and bottom of the mixing container, add to the mixture and re-mix.

2 Primer for sealings(e.g. PCI Apokor W, PCI Supracolor)Pour PCI Epoxigrund 390 and/or PCI

Epoxigrund Rapid onto the prepared substrate section by section and spread over the entire surface using a surface scraper, brush or paint roller.

3 Primer for coatings

(e.g. PCI Apoten, PCI Apoflex)

Pour PCI Epoxigrund 390 and/or PCI Epoxigrund Rapid onto the prepared substrate section by section and spread over the entire surface using a surface scraper, brush or paint roller. Sprinkle dry silica sand (grade 0.3 to 0.8 mm/max. 500 g/m²) over the primer immediately after the application.

4 Primer for PCI Aposan

Pour PCI Epoxigrund 390 and/or PCI Epoxigrund Rapid onto the prepared substrate section by section and spread by brush or paint brush. Apply PCI

Aposan to the fresh and tacky primer within 1 hour at the latest.

5 Fairing coat/leveller

Rough and irregular substrates must be levelled. Mix PCI Epoxigrund 390 and/or PCI Epoxigrund Rapid with dry silica sand, grade 0.1 to 0.4 mm (e.g. silica sand F 32), mixing ratio 1:1, (add approx. 1% of PCI Stellmittel floating agent for vertical surfaces), apply by trowel to a thickness corresponding to the grain size and immediately scatter dry silica sand (grade 0.3 to 0.8 mm/max. 500 g/m²) over the scratch coat.

6 Primer before applying floor levellers/fairing coats when subsequently laying textile and elastic coverings or parquet as a top covering.

Application procedure of PCI Epoxigrund 390 and PCI Epoxigrund Rapid

Pour PCI Epoxigrund 390 and/or PCI Epoxigrund Rapid onto the prepared substrate section by section and spread over the entire surface using a surface scraper, brush or paint roller. Sprinkle dry silica sand (grade 0.3 to 0.8 mm/ max. 1 kg/m²) over the primer immediately after the application. Allow primer to dry and remove excess silica sand. Subsequent work can be continued after approx. 8 hours and/or 3 1/2 hours with PCI Epoxigrund Rapid. Apply two coats of PCI Epoxigrund 390 and/or PCI Epoxigrund Rapid if a moisture barrier is to be produced: Apply first coat without sprinkling it with silica sand, allow primer to dry (approx. 8 and/or 3 1/2 hours; apply second

coat after 3 days at the latest). Sprinkle dry silica sand (grade 0.3 to 0.8 mm/max. 1 kg/m²) over the second coat immediately after the application. Allow primer to dry and remove excess silica sand. Apply levellers after approx. 8 and/or 3 1/2 hours at the earliest after the second coat has been applied. PCI VG 2 can generally be applied to the cured, last required coat of PCI Epoxigrund 390 and/or Rapid as an alternative to sprinkling the surface with silica sand. Allow PCI VG 2 to cure for approx. 2 hours before applying a PCI floor leveller.

7 PCI Epoxigrund Rapid as cast resin for cracks

Pour mixed material into narrow cracks

(approx. 1 to 2 mm). The cracks must be filled down to a depth of min. 5 mm and/or 15 times the crack width. In case of wide cracks, blend PCI Epoxigrund Rapid with fire-dried silica sand (e.g. grade 0.3 to 0.8 mm), mixing ratio 1 part of mixed PCI Epoxigrund Rapid: 2 parts of silica sand, and pour into the cracks. In case of cracks cut in vertical direction to the course of the crack (needling), insert screed clamps in the cut transverse slits while filling the cracks. Remove excess material from the surface and scatter silica sand, grade 0.3 to 0.8 mm, over the entire surface while resin is still fresh. Allow material to cure and remove excess silica sand.

Please note

- For professional/industrial use only!
- Do not apply PCI Epoxigrund 390 and PCI Epoxigrund Rapid at substrate temperatures below +10°C and above +30°C.
- The moisture content of the substrate must not exceed 4% (CM meter).
- PCI Epoxigrund 390 and/or Rapid can be used as a moisture barrier up to a residual moisture ≤ 7 CM% in the substrate of cement screeds, on underfloor heatings up to a residual moisture ≤ 5 CM%, only when used as a primer before applying floor levellers with subsequent laying of textile and elastic floorings or parquet. Two coats of primer are necessary.
- The use of PCI Epoxigrund 390 and/or PCI Epoxigrund Rapid as a moisture barrier is no replacement for waterproofing measures to DIN 18 195.

- It is absolutely necessary to contact the PCI technical help-line prior to the application of PCI Epoxigrund 390 and/or PCI Epoxigrund Rapid to substrates with rising dampness.
- Please see the technical data sheet of the respective PCI parquet adhesive for suitability and use of PCI Epoxigrund 390 and/or PCI Epoxigrund Rapid as primer when directly gluing parquet flooring on suitable substrates.
- We recommend to open doors and windows during the application.
- Wear suitable gloves and eye/face protection during the application. Contact with unprotected skin may cause burns and sensitization. Approved gloves are e.g. Camatril 730/Nitrilhandschuh 0.4 mm from Kächele-Cama Latex GmbH. The maximum time to wear these gloves

- is eight hours when working with epoxy resins.
- Suitable tools are available from e.g.
 Collomix GmbH
 Horchstraße 2
 85080 Gaimersheim/Germany
 www.collomix.de
- Clean tools with PCI Univerdünner universal thinner immediately after use. Avoid risk from splashing and wear protective gloves. Danger of fire - avoid all sources of ignition. When the product has cured it can only be removed by mechanical scraping. It is not sufficient to just immerse the tools in PCI Univerdünner!
- Shelf life: min. 18 months; store in a dry, frost-free place, no permanent storage over +30°C.

Declaration of Performance

The Declaration of Performance can be downloaded on the Internet under

www.pci-augsburg.eu/produkte/leistungserklaerung.

Information on the safe use

For professional/industrial use only!

PCI Epoxigrund 390 and PCI Epoxigrund Rapid base component

Contains epoxy-containing compounds. BISPHENOL-A-EPICHLORHYDRIN RESINS M with an average molecular weight ≤ 700. May cause an allergic reaction. Causes serious eye irritation. Causes skin irritation. May cause an allergic skin reaction. Toxic to aquatic life with long lasting effects. Avoid release to the environment. Wear protective gloves and eye/face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER or doctor. IF ON SKIN (or hair): Wash with plenty of soap and water. IF SKIN IRRITATION OCCURS: Get medical advice/attention.

PCI Epoxigrund 390 hardener component

Contains Phenol, styrenated, 3-AMINOMETHYL-3,5,5-TRIMETHYL-CYCLOHEXYLAMINE, M-PHENYLENEBIS(METHYLAMINE). Harmful if swallowed. May cause an allergic skin reaction. Causes severe skin burns and eye damage. Toxic to aquatic life with long lasting effects. Wear protective gloves/protective clothing and eye/face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER or doctor immediately. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Dispose of contents/container to hazardous or special waste collection point.

PCI Epoxigrund Rapid hardener component

Contains trimethylhexane-1,6diamine, m-phenylenbis-(methylamine) and 4 tert-butylphenol. Causes severe skin burns and eye damage. Harmful if inhaled. May cause an allergic skin reaction. May cause respiratory irritation. Suspected of damaging fertility or the unborn child. Harmful to aquatic life with long lasting effects. Avoid breathing mist or vapours. Wear protective gloves/protective clothing/eye protection/face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER or doctor immediately. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Dispose of contents/container to hazardous or special waste collection point.

Giscode: RE 1

For further information: see PCI Material Safety Data Sheet



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German edition October 2015; the latest edition is always available on the Internet under www.pci-augsburg.de