

3-component repair mortar down to -25 °C

PCI Repafast® APS 40

for traffic areas and industrial floors

PCI®

Für Bau-Profis



Previous name Emaco APS T2040

Fields of application

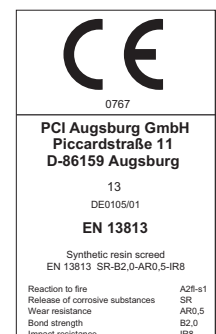
- For indoor and outdoor use.
- For the repair of concrete surfaces and cement screeds.
- Fast repair of surfaces exposed to traffic with high mechanical loads.
- Repair of runways at airports.
- Repair of bridge decks and roads.
- Repair work in cold storage houses.
- Floors in the food industry.
- Repair of floors in petrol stations.
- Repair of crane runways.
- For layer thickness from 8 to 30 mm.
- Components B for different temperature ranges:
 - Component BF from -25 °C to 0 °C
 - Component B from 0 °C to +20 °C



Surfaces subject to mechanical loads can be repaired - without priming - with PCI Repafast APS 40 down to -25 °C.

Features and benefits

- 3 components.
- Easy to apply.
- No primer required.
- High early and final strength.
- Can be applied even at very low temperatures (down to -25 °C).
- High chemical resistance.
- Good adhesion to concrete.
- Resistant to frost and frost/de-icing salt.
- Impact resistant, tough and hard.
- Resistant to moisture.
- Resistant to abrasion.
- Low odour development.
- Tested in accordance with EN 13813 SR-B2, 0-ARO, 5-IR8.
- Approved for application in the food industry.



Technical data

Material

Material base	acrylate polymer
Components	three components
Colour of mixture	grey
Density of mixture	2.3 g/cm ³
Shelf life component A + B + C	A 6 months, B + C 12 months
Storage component A + B + C	dry at +5 °C to +25 °C
Packaging size	25.3 kg combined unit
- component A	2.4 kg polymer (plastic container)
- component B	0.4 kg activator (cartridge)
- component BF	0.4 kg activator (cartridge)
- component C	22.5 kg filler (bag)

Application

Working temperature	down to -25 °C		
Consumption	approx. 2.3 kg/m ² and mm layer thickness		
Layer thickness	8 - 30 mm		
Field of application	component A + component C with 3 rd component		
- component BF (fast)	-25 °C to 0 °C		
- component B (normal)	0 °C to +20 °C		
Working time			
- component BF (fast)			
- at -20 °C	approx. 15 minutes		
- at -10 °C	approx. 10 minutes		
- component B (normal)			
- at +10 °C	approx. 30 minutes		
- at +20 °C	approx. 20 minutes		
Curing time	4 - 6 hours for the entire temperature range		
Tack-free surface at +20 °C	after 2 hours (sanded) after 5 hours (not sanded)		
If required, can be sanded with	silica sand 0.1 - 0.3 mm or 0.3 - 0.8 mm (excessive amount)		
If required, can be blended with	5 kg silica sand DM 1 - 4 mm per 25.3 kg mixture		
Strength development	bending tensile strength (N/mm)	compressive strength (N/mm)	modulus of elasticity (N/mm)
after 3 hours at +23 °C	approx. 17	approx. 35	
after 1 day at +23 °C	approx. 20	approx. 70	
after 7 days at +23 °C	approx. 22	approx. 80	approx. 30000
after 7 days at -20 °C	approx. 25	approx. 80	approx. 35000
Impact resistance after 1 day	approx. 20 Nm		
Abrasion resistance (BCA) after 3 days	approx. 0.2 mm		
Adhesive tensile strength on blasted concrete after 1 day	> 3.5 N/mm ²		
Adhesive tensile strength on sandblasted steel after 1 day	> 3.5 N/mm ²		
Non-slip resistance (scattered with silica sand 0.3 - 0.8 mm until saturated)	R12 V8		
Water permeability to DIN 1048	no penetration		
Cl penetration, UNI 7928	no penetration		

* Curing times are measured at +20°C and 65% R.H. Higher temperatures and/or higher R.H. can shorten these times, and vice versa. The given technical data are the outcome of the standards indicated. The physical properties can change under jobsite conditions.

Chemical resistance at 20 °C

Chemical	Result
Hydrochloric acid 10 %	++
Sulphuric acid 20 %	++
Lactic acid 10 %	++
Caustic soda 20 %	-
Premium petrol 98 octane lead-free	++
Diesel	++
Kerosine	++
Glycol 50 %	++
Glycol 100 %	++
Brake fluid	++
Motor oil Turbo 400A 10 W-40	++
Xylene	++

-: non-resistant, +: resistant for 3 days
++: resistant for 21 days

Preparation of substrate

■ Substrate

The substrate must be dry, rough, clean, and able to take loads.

Remove oil, grease, loose particles, old coats and other residues. The adhesive tensile strength is not allowed to fall below 1.5 N/mm². The area to be repaired must be cut out to a square and the cut surfaces must be roughened. Green concrete must

not be coated until it has reached the age of 28 days.

■ Ambient conditions

The surface and ambient temperature must range between - 25 °C and + 30 °C. Ice and other substances which could reduce strength must be removed. The choice of component B depends on the working temperature.

■ During the mixing phase, the temperature of the components should be adapted to the temperature range on site which is between 5 °C and 25 °C.

■ **The material must be stored at temperatures from + 5 °C to max. - 5 °C the day before when applying the material below - 15 °C and - 25 °C.**

Application procedure

Application

Make sure that enough material and tools are available in direct vicinity.

Mix only full units.

Using a trowel, PCI Repafast APS 40 is applied to the prepared

substrate without primer. The newly applied mortar can be sprinkled with plenty of silica sand (0.1 - 0.3 mm or 0.3 - 0.8 mm) to achieve a tack-free surface faster. Finish the surface in one work step without interruption when

working under direct sunlight. Avoid working on surfaces already finished.



Pour content of component A in a blade-type mixer and add component C.



Mix for approx. 1 minute until compound is homogeneous and free of lumps.



Add component B to the compound and remix for at least 2 minutes.



Transfer mixed material to another container to avoid mixing errors at the edges of the pail. Remix if necessary.

Cleaning

Uncured material can be washed off with PCI Univerdünnern universal thinner.

Once cured material can only be removed by mechanical scraping.

Please note

- The working time can be extended by storing the individual components at a cool place.
- The maximum installation depth of 30 mm is not allowed to be exceeded

even if blending PCI Repafast APS 40 with silica sand.

- Apply a second layer with PCI Repafast APS 40 within 2 hours to achieve a higher layer thickness.

- Adhesion to galvanized sheet is not possible.

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 Repafast APS 40, component A

Contains methacrylic acid, monoester with propane-1,2-diol.

Causes serious eye damage.

May cause an allergic skin reaction.

Wear protective gloves and eye/face protection. Avoid breathing dust.

Avoid release to the environment.

Contaminated work clothing should not be allowed out of the workplace.

Wash with plenty of water and soap thoroughly after handling.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. If skin irritation or rash occurs: Call a poison center or doctor/physician. If on skin (or hair):

Wash with plenty of water and soap.

Take off contaminated clothing and wash it before reuse. If eye irritation

persists: Call a poison center or doctor/physician. Dispose of

contents/container to special waste collection point.

■ PCI Repafast APS 40, component B + BF

Contains cobaltbis (2-ethylhexonate).

May cause an allergic skin reaction.

Harmful to aquatic life with long lasting effects. Wear protective

gloves. Avoid breathing vapours.

Avoid release to the environment.

Contaminated work clothing should not be allowed out of the workplace.

If on skin (or hair): Wash with plenty of water and soap. Take off

contaminated clothing and wash it

before reuse. If skin irritation occurs:

Get medical advice/attention. Dispose of contents/container to special waste collection point.

■ PCI Repafast APS 40, component C

The product contains: benzoyl peroxide.

May cause allergic reaction.

Giscode RMA10

For further information: see PCI Material Safety Data Sheet.



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