

# PACKING MORTAR

V14/10 PACKING MORTAR

V14/40 PACKING MORTAR

V14/80 PACKING MORTAR

## TEST CERTIFICATES AND SUPPORTING DOCUMENTS

- › Tested in accordance with the DAfStb directive (VeBMR) "Herstellung und Verwendung von zementgebundenem Vergussbeton und Vergussmörtel" (Manufacture and use of cement-bonded concrete grout and grout) (QDB)
- › Product for the anchoring of reinforcing bars acc. to DIN EN 1504-6 "Verankerung von Bewehrungsstäben" (Anchoring of reinforcing bars)
- › Verification of the specific electrical resistance (**V14/10**)
- › Factory production control acc. to DIN EN 1504-6
- › Company certification acc. to DIN EN ISO 9001:2015

## PROPERTIES

- › Pumpable and easy to process
- › Soft elastic consistency
- › Controlled swelling with a frictional bond between concrete substrate and supporting construction
- › High early and final strength
- › Low w/c value
- › Largely resistant to mineral oils and fuels
- › Complies with the requirements of building material class A1 (non-combustible) as specified under decision 2000/605/EC of the European Commission dated September 26, 2000 (published in the official journal L258)

## AREAS OF APPLICATION

- › Packing steel and concrete constructions, fixators, prefabricated parts, noise barriers
- › Filling vertical and horizontal joints between precast parts
- › Sealing cone openings and formwork spacers

### MOISTURE CLASSES BASED ON CONCRETE CORROSION FROM ALKALI-SILICIC ACID REACTIONS

Moisture class	WO	WF	WA	WS
<b>V14</b>	•	•	•	•

The aggregates in PAGEL®'s products comply with the requirements of alkali sensitivity class E1 from non-hazardous sources specified under DIN EN 12620.

### EXPOSURE CLASS ALLOCATION ACC. TO: DIN EN 206-1 / DIN 1045-2

	XO	XC	XD	XS	XF	XA	XM
	1234	123	123	1234	1234	123*	123
<b>V14/10</b>	•	••••	•••	•••	•••	•••	•
<b>V14/40</b>	•	••••	•••	•••	•••	•••	•
<b>V14/80</b>	•	••••	•••	•••	•••	•••	•

\* Having sulfate attack up to 600 mg/l  
With protective measures according to DIN 1045-2

## TECHNICAL DATA

TYPE			V14/10	V14/40	V14/80
Grain size	mm		0-1	0-4	0-8
Packing height	mm		10-30	10-70	50-100
Amount of water	%		12	12	10
Consumption (dry mortar)	kg/m <sup>3</sup>		2,000	2,000	2,100
Fresh mortar raw density approx.	kg/m <sup>3</sup>		2,200	2,250	2,300
Processing time approx.	+20 °C	min	45	45	45
Swelling	24 h	Vol.-%	≥ 0,1	≥ 0,1	≥ 0,1
Compressive strength*	1 d	N/mm <sup>2</sup>	≥ 45	≥ 45	≥ 45
	7 d	N/mm <sup>2</sup>	≥ 65	≥ 65	≥ 65
	28 d	N/mm <sup>2</sup>	≥ 75	≥ 75	≥ 70
	90 d	N/mm <sup>2</sup>	≥ 85	≥ 85	≥ 80
Bending tensile strength	1 d	N/mm <sup>2</sup>	≥ 5	≥ 5	n. d.
	7 d	N/mm <sup>2</sup>	≥ 8	≥ 8	n. d.
	28 d	N/mm <sup>2</sup>	≥ 9	≥ 9	n. d.
	90 d	N/mm <sup>2</sup>	≥ 11	≥ 11	n. d.
E-Module	7 d	N/mm <sup>2</sup>	≥ 25,000	≥ 25,000	≥ 25,000
	28 d	N/mm <sup>2</sup>	≥ 30,000	≥ 30,000	≥ 30,000

\* DIN EN 196-1-compliant compressive strength testing;  
DIN EN 12390-3-compliant concrete compressive strength testing  
n. d. = not determined

**Note:** All stated test values correspond to the DAfStb VeBMR directive.

Testing of fresh and solid mortars at 20 °C ± 2 °C, storage of the test specimen after 24 hours until the strength test in water at 20 °C ± 2 °C. Higher or lower temperatures result in deviating properties of fresh respectively solid mortars and test results. Depending on the temperature, the consistency can be adapted with a slight reduction of the mixing water.

**Storage:** 12 months. Cool, dry, free from frost.  
Unopened in its original container.  
**Delivery form:** 25-kg bag, Euro pallet 1,000 kg  
**Hazard class:** Non-hazardous material, observe information on packaging.  
**Giscode:** ZP1

### PAGEL<sup>®</sup> PRODUCT COMPOSITION:

Cement: acc. to DIN EN 197-1  
Aggregate: acc. to DIN EN 12620  
Additions: acc. to DIN EN 450, general building inspection approval (abZ),  
DIN EN 13263 (fly ash, microsilica, etc.)  
Admixtures: acc. to DIN EN 934-4

## APPLICATION

### SUBSTRATE PREPARATION:

Remove loose and unsound material such as cement slurry and dirt etc. using suitable methods, e.g. shot-blasting or similar until the underlying solid grain structure has been exposed. A sufficient average tear strength ( $\geq 1.5 \text{ N/mm}^2$ , KEW  $\geq 1.0 \text{ N/mm}^2$ ) must be ensured.

#### Prewetting:

Prewet the concrete substrate to capillary saturation for approx. 6-24 hours.

#### Reinforcing steel:

Blast all rust off exposed reinforcement bars until the underlying metal has been exposed acc. to purity grade Sa 2 ½ in accordance with DIN EN ISO 12944-4.

#### Non-iron metals:

Cement and cement-bound building materials may cause non-iron-metals in the transitional area of the contact surface (e.g. aluminium, copper, zinc) to loosen.

Please contact us for technical advice.

### FORMWORK:

Attach in such a way that it is leak-proof and robust. Seal on the concrete substrate. Use non-absorbent formwork.

### MIXING:

The dry mortar is supplied ready to use and only needs to be mixed with water. Fill the specified amount of water apart from a residual amount into a clean and suitable mixing device (e.g. compulsory mixer).

Add the dry mortar and mix for at least 3 minutes.

Add the remaining water and mix for at least another 2 minutes until it forms a homogeneous mass.

**Temperature range:** +5 °C to + 35 °C

**Mixing water:** Drinking water quality

### APPLICATION:

Do not leave any gaps and pack and compress carefully. If using for repairs, brush on bonding agent **V14/10** and apply wet on wet.

### FOLLOW-UP TREATMENT:

Exposed grout areas must be protected from premature water evaporation (from wind, draughts, direct exposure to sun, etc.) immediately on completion of the work for a period of 3-5 days.

#### Suitable curing methods:

Water spray, foil covers with jute sheets, thermofolies or moisture-retaining covering sheets,

**01** EVAPORATION PROTECTION.

The technical data sheet must be observed when using **01** EVAPORATION PROTECTION.