

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
V14	•	•	•	•

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
	1 2 3 4	1 2 3	1 2 3	1 2 3	1 2 3 4	1 2 3**	1 2 3
V14/10	•	••••	•••	•••	•••	•••	•
V14/40	•	••••	•••	•••	•••	•••	•
V14/80	•	••••	•••	•••	•••	•••	•

* Having sulfate attack up to 600 mg/l

** With protective measures according to DIN 1045-2

Classification acc. to the DAfStb VeBMR directive:

		Shrinkage class	Early strength class	Compressive strength class
V14/10	Categorisation	SKVM II	A	C55/67
V14/40	Categorisation	SKVM II	A	C55/67
V14/80	Categorisation	SKVB II	A	C60/75

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	max.	%	12	12	10
Consumption (dry mortar) approx.		kg/m ³	2,000	2,000	2,100
Fresh mortar raw density approx.		kg/m ³	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 ²	≥ 45	≥ 45	≥ 45
	7 d	N/mm ²	≥ 65	≥ 65	≥ 65
	28 d	N/mm ²	≥ 75	≥ 75	≥ 70
	90 d	N/mm ²	≥ 85	≥ 85	≥ 80
Bending tensile strength	1 d	N/mm ²	≥ 5	≥ 5	n. d.
	7 d	N/mm ²	≥ 8	≥ 8	n. d.
	28 d	N/mm ²	≥ 9	≥ 9	n. d.
	90 d	N/mm ²	≥ 11	≥ 11	n. d.
E-Modul	7 d	N/mm ²	≥ 25,000	≥ 25,000	≥ 25,000
	28 d	N/mm ²	≥ 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

The specified maximum amount of mixing water is valid for the predefined application temperature range and must not be exceeded.

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® 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

PROCESSING

SUBSTRATE PREPARATION:

Remove loose and unsound material such as cement slurry and dirt etc. using suitable methods, e.g. shotblasting 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.

Reinforced concrete:

The grade of surface preparation of reinforcement as well as other metallic parts is based on the requirements of the current applicable regulations and must be ensured before the application.

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.

Mixing water:

Drinking water quality

Temperature range:

+5 °C to + 35 °C

Low temperatures and cold mixing water reduce strength development, require intensive forced mixing and reduce flowability. Higher temperatures accelerate strength development and can also reduce the flowability.

APPLICATION:

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

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, thermofolios or moisture-retaining covering sheets, **01** Evaporation protection.

The technical data sheet must be observed when using **01** Evaporation protection.