



## PAGEL®-READY-FOR-USE-MORTAR DRINKING WATER SECTOR

### PROPERTIES

- **ready for use mortar** on cement basis
- in respect of water behaviour meets the demands on container materials specified in the "Plastic Drinking Water Recommendations" of the Bundesgesundheitsamt (Federal Health Service)
- corresponds to **Working Sheets W 270 and W347 from DVGW** and is also suitable for use in the drinking water sector in a microbiological respect as well
- promotes neither microbial growth nor does it have any bactericidal or fungicidal properties
- **economical**, problem-free and time-saving
- can be used on **vertical and horizontal surfaces** and can also be coated by the **wet and dry spraying processes**
- reduces the penetration of CO<sub>2</sub>, checks corrosion, is capable of vapor diffusion and is resistant to frost and dew-salt
- is mixed only with water – for coatings TW10 PAGEL-READY-FOR-USE-MORTAR is brushed in as **adhesion bridge**
- is subject to our own **constant controlling** in accordance with the recognized standards and guidelines. The production is certified in accordance with **ISO 9001**.
- The TW40-series consists of the following products:
  - TW05 0–0.02 inch (primer)
  - TW10 0–0.04 inch (adhesion layer + fine mortar)
  - TW20 0–0.08 inch (spray mortar)
  - TW40 0–0.16 inch (mortar)

|   |  |      |                     |      |
|---|--|------|---------------------|------|
| <b>CE</b>   |  |      |                     |      |
| 0921  |  |      |                     |      |
| PAGEL® SPEZIAL-BETON GmbH & Co. KG, D-45355 Essen         |  |      |                     |      |
| find the printed batch number                             |  |      |                     |      |
| 0921 – BPR – 2034   |  |      |                     |      |
| EN 1504-3:2005  |  |      |                     |      |
| TW PAGEL® - READY-FOR-USE-MORTAR                          |  |      |                     |      |
| Mortar for statically and not statically relevant repairs |  |      |                     |      |
| (on the basis of hydraulic cement)                        |  |      |                     |      |
| <b>Product name:</b>                                      | TW05                                   | TW10 | TW20                | TW40 |
| <b>Class:</b>   | R3                                     |      | R4                  |      |
| <b>Compressive strength:</b>                              | ≥ 25 MPa                               |      | ≥ 45 MPa            |      |
| <b>Chloridion content:</b>                                | ≤ 0,05 %                               |      | ≤ 0,05 %            |      |
| <b>Adhesion:</b>  | ≥ 1,5 MPa                              |      | ≥ 2,0 MPa           |      |
| <b>Prevented shrinkage/swelling:</b>                      | ≥ 1,5 MPa                              |      | ≥ 2,0 MPa           |      |
| <b>Resistance to carbonation:</b>                         | NPD                                    |      | requirements passed |      |
| <b>Modulus of elasticity:</b>                             | ≥ 15 GPa                               |      | ≥ 20 GPa            |      |
| <b>Temperature variation tolerance:</b>                   | NPD                                    |      |                     |      |
| <b>Grip:</b>  | NPD                                    |      |                     |      |
| <b>Thermal expansion coefficient:</b>                     | NPD                                    |      |                     |      |
| <b>Capillary water absorption:</b>                        | NPD                                    |      |                     |      |
| <b>Reaction to fire:</b>                                  | Class A 1                              |      |                     |      |
| <b>Hazardous Substance:</b>                               | In accordance with EN 1504-3:2005, 5.4 |      |                     |      |
| NPD: „No Performance Determined“                          |  |      |                     |      |

### FIELDS OF APPLICATION

- **coating** of wall and floor areas in the drinking water sector
- **repair** of concrete, plaster and composites
- **drinking water containers**, pipes, purification plant

TW05<sub>US</sub>

TW10<sub>US</sub>

TW20<sub>US</sub>

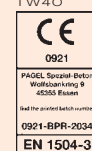
TW40<sub>US</sub>

Assigning to expositioncategory according to:  
DIN 1045-2 / EN 206-1 / ZTV-W219  
PAGEL – READY-FOR-USE-MORTAR

|      | XO<br>1 | XC<br>1 2 3 | XD<br>1 2 3 | XS<br>1 2 3 | XF<br>1 2 3 4 | XA<br>1 2 3 | XM<br>1 2 3 |
|------|---------|-------------|-------------|-------------|---------------|-------------|-------------|
| TW05 | •       | • • •       | •           | •           | •             | •           | •           |
| TW10 | •       | • • •       | • • •       | • • •       | • • •         | • • •       | • • •       |
| TW20 | •       | • • •       | • • •       | • • •       | • • •         | • • •       | • • •       |
| TW40 | •       | • • •       | • • •       | • • •       | • • •         | • • •       | • • •       |



TW05-TW40



TW40



# PAGEL®-READY-FOR-USE-MORTAR

TWO5 US

TW10 US

TW20 US

TW40 US

## TECHNICAL DATA

| TYPE                                   |                     | TWO5              | TW10           | TW20         | TW40      |
|--|---------------------|-------------------|----------------|--------------|-----------|
| <b>fields of application</b>           |                     | screeing compound | adhesion-layer | spray-mortar | mortar    |
| <b>coating thickness</b>               | inch                | 0.08–0.24         | 0.2–0.39       | 0.39–1.18    | 0.79–1.57 |
| <b>grain size</b>                      | inch                | 0–0.02            | 0–0.04         | 0–0.08       | 0–0.16    |
| <b>amount of water</b>                 | %                   | 14–16             | 11–13          | 10–12        | 10–12     |
| <b>density of freshly mixed mortar</b> | lbs/ft <sup>3</sup> | 136.1             | 136.1          | 134.22       | 134.22    |
| <b>compressive strength*</b>           | 24 h                | PSI               | ≥ 2,175        | ≥ 3,625      | ≥ 3,625   |
|  | 7 d                 | PSI               | ≥ 5,075        | ≥ 6,525      | ≥ 6,525   |
|  | 28 d                | PSI               | ≥ 6,525        | ≥ 7,975      | ≥ 7,975   |
| <b>abrasion strength</b>               | 7 d                 | PSI               | ≥ 217.5        | ≥ 290        | ≥ 290     |
| <b>E-Modul (static)</b>                | 56 d                | PSI               | –              | –            | –         |
| <b>consumption</b>                     | lbs/ft <sup>3</sup> | 106.13            | 112.37         | 115.5        | 115.5     |

All test data are values derived under normal climate conditions. 23/50-2

\* DIN EN 196-1-compliant compressive strength testing

**supplied in:** 25-kg-bags  
**storage:** dry  
**shelf-life:** 9 months in sealed bags  
**hazard class:** no dangerous substance  
 follow safety data sheet

**types of Cement:** Other types of cement can also be supplied although the technical properties are changed as a result. If you have any queries, please get in touch with our Customer Services.

## PROCESSING

**SUBSTRATE:** Thoroughly clean, remove loose and adhesion-checking parts as well as cement slurry by high-pressure-water blasting or such like down to the loadbearing grain structure, sufficient abrasion resistance must be guaranteed (mean > 217.5 PSI). Pre-wet to saturation. Remove rust from exposed concrete steel and coat without gaps with TWO5 PAGEL-SCREEING COMPOUND as corrosion protection.

**MIXING:** Apart from a residual quantity, pour water into the forced-circulation mixer. Add dry mortar and mix for approx. 3 minutes. Add the rest of the water and mix for a further 2 minutes.

**ADHESION BRIDGE:** Mix TW10 PAGEL-READY-TO-USE-MORTAR as adhesion bridge in small quantities with a maximum 13 % water as slurry and brush into the substrate pore-deep. When using the spray process, no adhesion bridge of all TW mortars is required.

**PROCESSING:** Apply TW40 in plastic consistency in the not yet set adhesion primer, disperse and smooth. If using the spray process, seek special technical advice if required.

**CAUTION:** Protect surfaces against wind, draughts and premature water evaporation e.g. with film.

The information provided in this leaflet, is supplied by our consulting service and is the end result of exhaustive research work and extensive experience. They are, however, without liability on our part, in particular with regard to third parties proprietary rights, and do not relieve the user of the responsibility for verifying that the products and processes are suitable for the intended application. The data presented was derived from tests under normal climate conditions according to DIN 50014 and mean average values and analysis. Deviations are possible when delivery takes place. Given that recommendations may differ from those shown in this leaflet written confirmation should be sought. It is the responsibility of the purchaser to ensure they have the latest leaflet issue and that its contents are current. Our customer service staff will be glad to provide assistance at any time. We appreciate the interest you have shown in our products. This technical data sheet supercedes previously issued information. Please find the latest leaflet issues at [www.pagel.com](http://www.pagel.com).



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