MC-RIM® PW101

Pure mineral high-performance coating for drinking water areas

Product Properties

- Based on DySC®-technology
- Cement-bound, only to be mixed with water
- Classified according to DVGW-leaflet W 300
- Tested and approved according to DVGW-leaflet W 347
- Application by hand and wet spraying technique
- Open to water vapour diffusion and impermeable to water
- Highly sulphate resistant and chloride-proof
- Low porosity, thus high resistance against hydrolysis
- Class R4 according to EN 1504 part 3

Areas of Application

- Surface protection for wall- and overhead areas in drinking water reservoirs, drinking water purification plants and concrete components in drinking water protection zones
- Suitable for concrete components in statically relevant and non-statically relevant areas
- Certified according to EN 1504 part 3 for principle 3 and 7, procedure 3.1, 3.3 and 7.1

Application

Substrate Preparation
See leaflet “General Application Advice Fine Fillers”.

Mixing
MC-RIM® PW 101 is added to the water under con-stant stirring and mixed until homogenous and lump-free. Forced mixers or slowly rotating double mixers must be used for mixing. Mixing by hand and preparation of partial quantities is not allowed. Mixing takes at least 5 minutes.

Mixing Ratio
Please refer to the “Technical Data” table. For a 25 kg pack of MC-RIM® PW 101 approx. 3.25 to 3.50 litres of water are required. As with other cementi-tious products the quantity of added water may vary.

Application
MC-RIM® PW 101 can be applied by hand and wet spraying technique. To achieve a dense and clo-sed coating matrix, MC-RIM® PW 101 is to be applied in 2 to 3 work steps. The first layer, as a kind of scratch coat, must be worked in thoroughly into the substrate. For spraying worm pumps with variably adjustable discharge flow should be used. Please request our assistance or the equipment planner leaflet.

Finishing
In case of 3-layer application we recommend to leave the second layer spray-rough. The last layer is to be pre-smoothed using a stainless steel tro-wel. Afterwards the smoothed surface is to be rub-bed off using a fine-pored sponge and, to increase the surface smoothness and impermeability, to be finished again using a trowel.

The overcoating times between the separate lay-ers must be observed.

Curing
Curing must be carried out immediately after sur-face finishing. The curing times indicated in DIN 1045-3 must be observed and tripled accor-ding to DVGW, work sheet W 300. The relative humidity must be between 85 and 95 % during the entire curing time, achieved by using suitable air humidifiers.

Cleaning
For regular cleaning intervals of MC-RIM® PW 101 coatings neutral cleaning agents are to be used.

MC-Bauchemie • Am Kruppwald 1-8 • 46238 Bottrop • Tel. +49 (0) 20 41-101 10 • Fax: +49 (0) 20 41-101 188
info@mc-bauchemie.de • www.mc-bauchemie.de

Technical Data for MC-RIM® PW 101

Characteristic	Unit	Value*	Comment
Largest grain size	mm	1.2	-
Fresh mortar density	kg/dm³	2.16	-
Flexural strength / Compressive strength	MPa	6.9 / 33.2 7.9 / 41.8 8.5 / 49.9 9.7 / 51.0	at + 10 °C after 7 days at + 21 °C after 7 days at + 10 °C after 28 days at + 21 °C after 28 days
Dynamic E-modulus	MPa	31,000	after 28 days
Water-cement ratio	w/c_{eq}	< 0.5	
Fresh mortar air void content	vol.-%	< 5.0	
Total air void content**	vol.-%	5.5 6.4	after 28 days at + 10 °C after 28 days at + 21 °C
Coverage (dry mortar)	kg/m²/mm	1.90	
Pot life	minutes	60 60 45	at + 5 °C at + 10 °C at + 20 °C
Layer thickness	mm	8 15	minimum layer thickness per work step maximum total layer thickness
Overcoating time	minutes hours	< 30 ≤ 4 or ≥ 16	1st layer (scratch coat) / 2nd layer 2nd layer / 3rd layer
Application conditions	°C	≥ 5 - ≤ 30	air, material and substrate temperature
Mixing ratio***	p. b. w.	100 : 13 - 14	MC-RIM® PW 101 : water

Product Characteristics for MC-RIM® PW 101

Delivery	25 kg bags
Storage	Can be stored in cool and dry conditions for at least one year in original unopened packs.
Disposal	Packs must be emptied completely.

* All technical values have been determined in the lab at + 10 °C and 80 % relative humidity.
** Lab values
*** Spray application should be carried out with the maximum water addition.

Edition 10/20. Some technical changes have been made to this print medium. Older editions are invalid and may not be used anymore. If a technically revised new edition is issued, this edition becomes invalid.

MC-Bauchemie • Am Kruppwald 1-8 • 46238 Bottrop • Tel. +49 (0) 2041-101 10 • Fax: +49 (0) 2041-101 188
info@mc-bauchemie.de • www.mc-bauchemie.de