



A Subsidiary of PETRONAS Chemicals Group

PRODUCT DATA SHEET

BRB Siloen[®] MXP5

Constructions

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BRB Siloen® MXP5

Water repellent Powder



Description

BRB Siloen® MXP5 is a high performance water repellent additive in powder form, for cementitious mortars dry mix formulation.

Features

BRB Siloen® MXP5 protects from water penetration both bulk and surface of cementitious based material mixes for exterior as well as for interior applications: mortars, joint fillers, premixed plasters, grouts, renders and sealing mortar slurries.

BRB Siloen® MXP5 produces a hydrophobic treatment that inhibits liquid water absorption and improves durability against freeze-thaw de-icing salt stress.

BRB Siloen® MXP5 develops its best efficiency in alkaline medium typically with pH in between 10 to 12

Benefits

- Significant reduction in water uptake
- Long lasting performance better than stearate based powders
- Linear dosage efficiency
- Easy to use
- Non toxic
- Imparts free flowing anti-caking properties to dry mix
- Excellent compatibility with other chemical additives
- No change in rheological performance of the material mixes
- Storage stable

Typical Data

Parameter	Unit	Value
Appearance		Free flowing fine white powder
Active ingredient	% (m/m)	Alkyl Alkoxy Silane
Bulk density	g/L	≈ 400
pH (10% water solution)	gr/cm ³	≈ 7,5

How to Use

Mix *BRB Siloen® MXP5* with the other dry components in every type of standard mixer used to produce finished product in powder form.

Typical dosage of *BRB Siloen® MXP5* ranges from 0,2% to 0,5% w/w (dry) depending on the desired water repellent performance. Higher dosage exceeding 1,0% might result in little impact on compression strength. Be aware that presence of other additives based on water retaining chemicals (e.g. methyl-cellulose) might reduce the water repellent effect thus requiring a higher dosage.

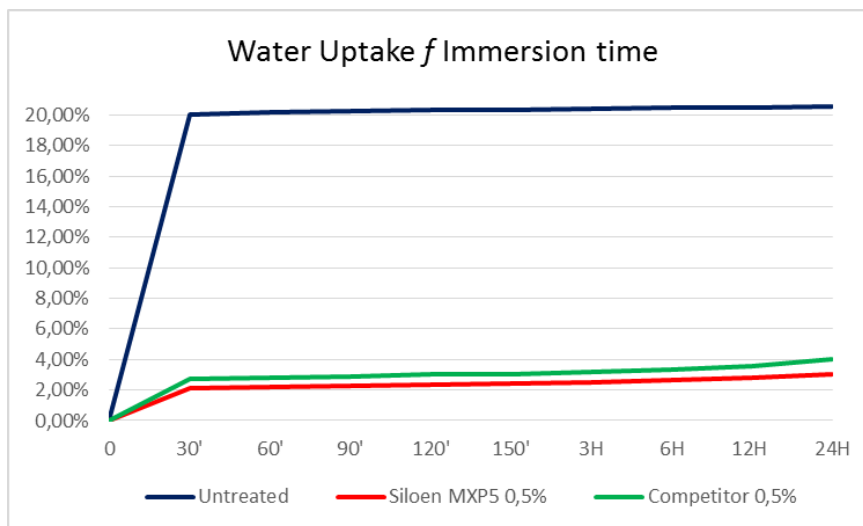
Add the dry mix containing *BRB Siloen® MXP5* to the required amount of water under stirring and keep the agitation going for almost 5 minutes to allow the most homogeneous dispersion. Too intensive machine stirring might lead to unwanted air entrapment whilst in case of hand mixing, where shear force is lower, it is recommended to stir then to leave the mix mature by standing for few minutes and stir again. Hydrophobic effect will appear when the mixes are totally dry.

Performance Test Result

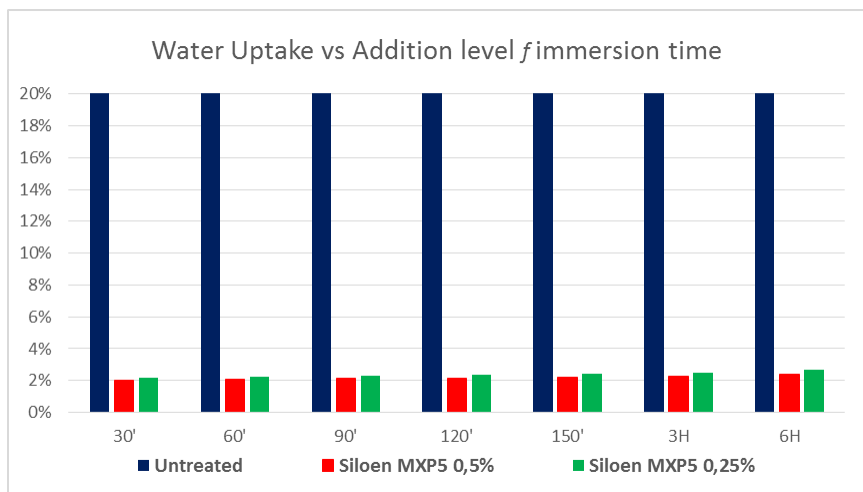
BRB Siloen® MXP5 was mixed at 0,5% in weight (dry/dry) to a M5 grade commercially available dry mortar.

Before performance evaluation, specimen were dried/matured for 28 days.

After immersion of the specimens in a tray with 5 cm water head, water absorption was evaluated by measuring the weight increase over time compared to a blank and competitor (same addition level - same active content). Results are shown in the graphs below.



BRB Siloen MXP5 is a highly effective additive and water uptake remains quite low even at lower addition level.



BRB Siloen MXP5 provides, in addition to low water absorption, a strong beading:

Droplet Test	Blank	0,5% Siloen MXP 5
Absorption Time (min)	0	180

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Blank



0,5% MXP5 addition

Standard Packaging

BRB Siloen® MXP5 is packed in plastic bags into 20 KG carton box.

Storage Recommendations

Store in dry place in between 0 to 28°C in sealed bags preventing from humidity.

A Product Safety Data Sheet should be obtained from your BRB office prior to use.

ATTENTION: Before handling, read product information, Product Safety Data Sheets and container labels for safe use, and any physical and/or health hazard information.

FOR MORE INFORMATION

Please contact

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IMPORTANT NOTICE

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