

**INDUSTRY  
SOLUTIONS.**

**Mineral  
Building  
Solutions.**

**CHT**

**SMART CHEMISTRY  
WITH CHARACTER.**

# **VARIPHOB® AC 5002**

**HYDROPHOBIC AGENT IN POWDER FORM**



### Permanent protection for building materials

Wet areas with a very high humidity and water splashes requires the highest standard to grouts and other building materials. To preserve quality and aesthetics, the materials must be deeply, permanently and highly efficiently protected from penetrating moisture and water. Especially for this demand, CHT has developed high performance products such as VARIPHOB® AC 5002.

VARIPHOB® AC 5002 is a powder based hydrophobic component, which is recommended to use in mass. Especially with mass hydrophobation, the protective function cannot be affected by mechanical stress.

The application of VARIPHOB® AC 5002 is for cement-based systems which are mainly used in bathrooms, swimming pools, showers, saunas or wellness areas. VARIPHOB® AC 5002 increases the durability by reducing water absorption and has a positive influence on the surface hydrophobicity of the used materials. Additionally, it provides a full breathability so that water vapor easily can evaporate.

As producer and supplier of additives and specialty chemicals for the construction industry, CHT not only aims at supporting their partners with effective components and innovative solutions such as VARIPHOB® AC 5002 but also with a competent and personal customer service. Get in contact with CHT: [info@cht.com](mailto:info@cht.com)

### Recommended application fields

VARIPHOB® AC 5002 is especially suited for cement based construction materials as for example:

- ▶ Mineral mortars / Grouts
- ▶ Plasters
- ▶ Renders
- ▶ Concrete
- ▶ Joint fillers
- ▶ Sealing mortars
- ▶ Levelling compounds
- ▶ Skim Coats
- ▶ Stucco

# PRODUCT PERFORMANCE

<b>Topic</b>	Reduction of the capillary water uptake with a hydrophobic powder
<b>Material</b>	Cement based material (CEMENT HOLCIM 32.5 % / Norm Sand 67.5%)
<b>Water</b>	13.5%
<b>Dosage</b>	0.1 %, 0.2 %, 0.5% hydrophobic powder VARIPHOB® AC 5002
<b>Preparing</b>	VARIPHOB® AC 5002 is to be mixed with the components of the dry mortar homogeneously prior to adding water. Preparing the mortar prism in according to EN 196-1. 7 and 28 days drying and conditioning of the prism in a climate chamber (23 °C / 50 % air humidity).
<b>Test</b>	Capillary water absorption in [g] according to DIN EN 12808-5. Measurement of the water uptake after 30 min and 240 min in the water.

		CAPILLARY ABSORPTION [g]					
		VARIPHOB® AC 5002		COMPETITOR 1		COMPETITOR 2	
Dosage [%]	Time [min]	7 days	28 days	7 days	28 days	7 days	28 days
0.10	30	0.4	0.4	0.7	0.9	0.6	0.6
	240	0.7	0.8	1.0	1.7	1.1	1.1
0.20	30	0.4	0.3	0.4	0.5	0.4	0.4
	240	0.6	0.6	0.5	1.0	0.8	0.7
0.50	30	0.1	0.2	0.2	0.3	0.1	0.1
	240	0.1	0.3	0.2	0.5	0.2	0.2

## The strengths at a glance

- ▶ Reduces the capillary water absorption
- ▶ Reduce efflorescence (reduce ingress and transport of water-soluble salts)
- ▶ High resistance to alkalis
- ▶ Increases the surface hydrophobicity
- ▶ Good water vapour permeability
- ▶ Increases the durability of cementitious building materials
- ▶ Free flowing powder





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