



METAPOR®

TECHNICAL INFORMATION

METAPOR is a metakaolin with small amounts of fine expanded glass. It is used as reactive pozzolanic hardening additive for cement- and lime-based binder systems. METAPOR is also ideal as filler for plastic applications.

Because of its beneficial properties METAPOR can improve significantly the characteristics of mineral construction materials, ceramic products and plastics components.

METAPOR originates from the production process of PORAVER® expanded glass granulate without any extra energy entry for the manufacturing.

BENEFITS

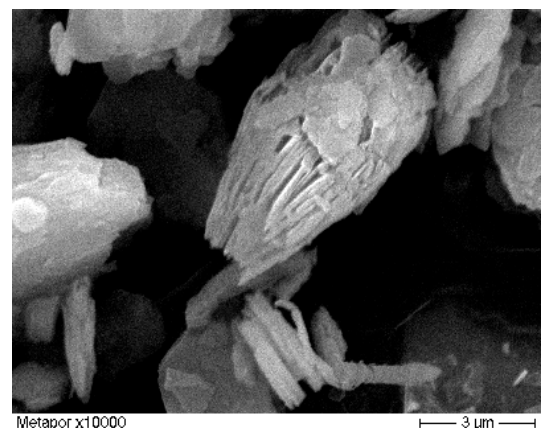
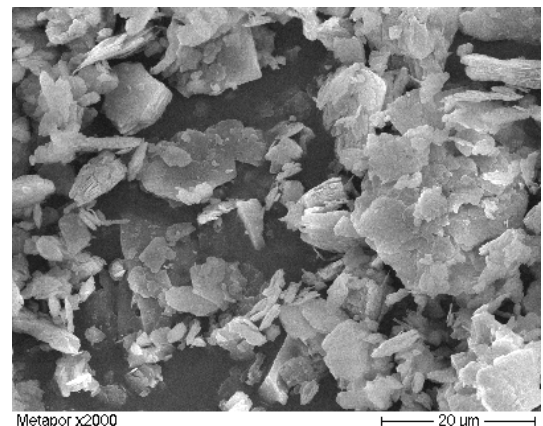
- Very high and fast activity in the lime-binding process
- Use as substitute for binder results in material savings
- Densification of the material structure
- Increased strength in mineral systems
- Improves the rheological properties of materials
- Low swelling-shrinking behaviour
- Improves the resistance against sulphate attack

APPLICATIONS

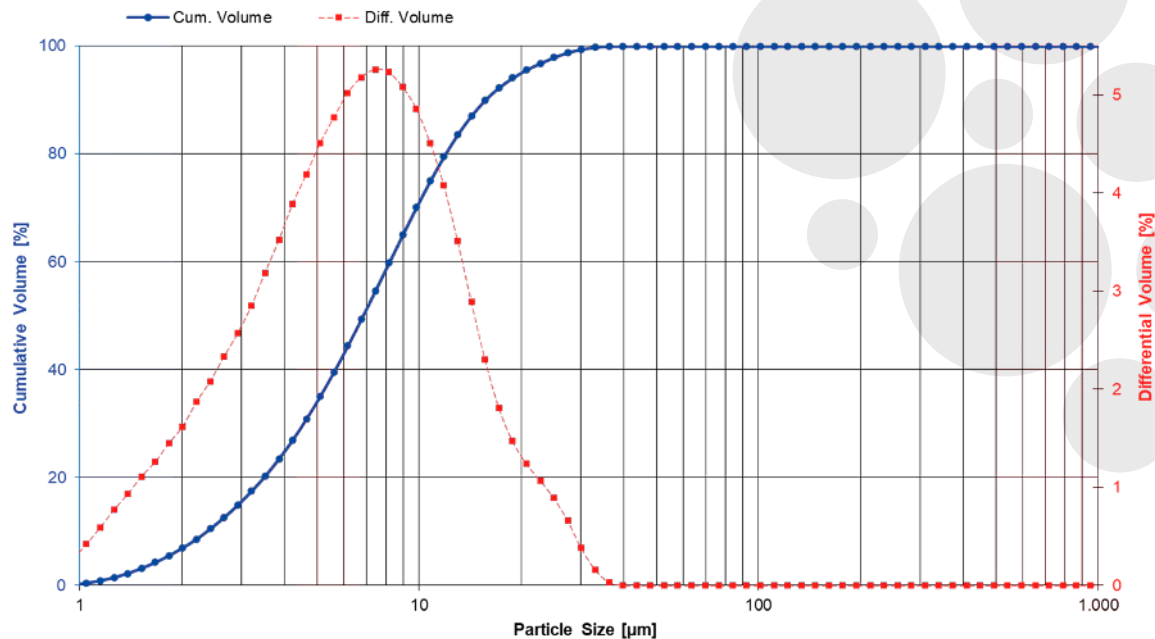
- Lime-bound systems
- Concrete, mortar, plaster, render
- Cementitious tile adhesives
- Substitute of fly ash and other fillers
- Fluxing agent and whitener for ceramic products
- Geopolymers

PACKAGING

- Paper bags with 15 kg; 30 bags per Euro pallet
- Big Bags with 450 kg (approx. 115x135x145 cm)
- Bulk by silo truck



EXEMPLARY GRAIN SIZE DISTRIBUTION



PHYSICAL PROPERTIES

Bulk Density ¹⁾	kg/m ³	350 ± 150
Moisture content	M.-%	< 0.1

¹⁾ The bulk density may vary due to air inclusions in the material.

INFORMATIVE VALUES

Specific surface (BET) according to DIN ISO 9277	m ² /g	6.7
Amount of PORAVER	M.-%	< 5
Amount of Kaolin	M.-%	> 95

CHEMICAL COMPOSITION

Constituent	Applied to the sample dried at 105°C	Analysis method
SiO ₂	50 - 63 %	DIN EN ISO 12677:2013-02, measured with RFA
Al ₂ O ₃	19 - 35 %	
Na ₂ O	8.0 - 10 %	
K ₂ O	1.0 - 2.0 %	
CaO	0.3 - 5.0 %	
MgO	0.1 - 2.0 %	
Fe ₂ O ₃	0.1 - 1.0 %	
TiO ₂	0.1 - 0.5 %	
P ₂ O ₅	0.1 - 0.5 %	DIN 51081:2002-12
SO ₃	< 0.1 %	
Loss on ignition	< 1.4 %	

More information on request

- Safety data sheet
- Guide formulations for lime-based lightweight render
- Study report from the University of Halle
- Press clipping of magazine ZKG „Glass-containing metakaolin as an active filler in lime-based binder systems“

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