



Baerlocher Additives

# Hydrophobic Agents for Building Materials

**BÆRLOCHER**





The Baerlocher Group of Companies is one of the world's leading suppliers of additives for the building and the plastics industry. Baerlocher has extensive technology and market knowledge drawn from more than 190 years of company history.

Fourteen production sites and R&D facilities all over the world as well as a global sales network make the Baerlocher Group of Companies a strong partner. This global presence and more than 1200 employees worldwide make sure that we are close to the customer. Future oriented, we are continuously investing in research and development.

Additives play a crucial role in determining processing properties as well as product quality and character. Sustainable thinking in architecture and the building industry is a milestone towards acting in a responsible manner. By developing and supplying hydrophobic agents, we provide creative and sustainable solutions to "build the future".

With our BAEROPHOB products mainly derived from renewable resources, we ensure that your application performance needs are met by our technology.

**[www.baerlocher.com](http://www.baerlocher.com)**

# Hydrophobic agents protect your building material against moisture

*Mineral and pasty plasters*

*Plaster boards and fibre boards in kitchens and bathrooms*



*Wood plastic composites*

*Concrete road stones*

*Façade paints*

Hydrophobic agents are often used to improve the durability of building materials which are exposed to moisture.

- External: rain, fog, dew and snow
- Internal: high humidity in kitchens and bathrooms

## **Advantages of Baerlocher's hydrophobic agents**

- Prevent: water absorption, frost-damage, efflorescence of salts
- Protect: sub-layers (e.g. thermal insulation system)
- Maintain: functionality and appearance of the building material, water vapor permeability
- Extent: service life of the building, period between renovation
- Save: costs of expensive raw materials and short intervals of maintenance

**Baerlocher's hydrophobic agents are suitable for building materials made of:**




# Baerlocher's portfolio of hydrophobic agents

Baerlocher produces wide range of hydrophobic agents from non-reactive BAEROPHOBs based on standard metal soaps to higher performance formulated reactive BAEROPHOBs.

## Standard metal soaps

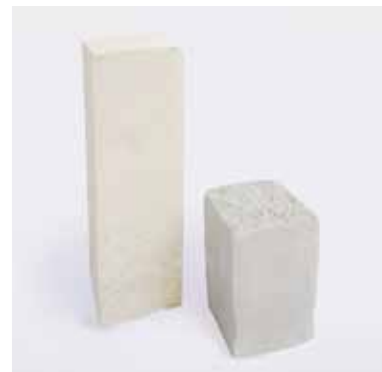
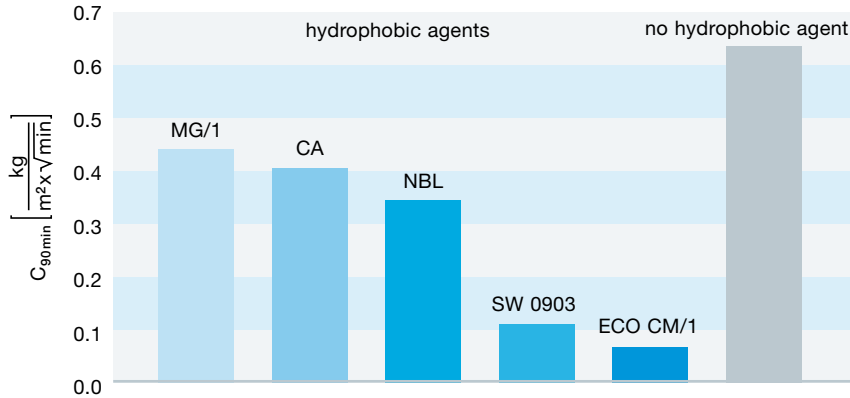
Robust all-rounder for most applications

Product Trade Name	Description	Application
BAEROPHOB CA	Calcium stearate	Mortars based on lime and cement 
BAEROPHOB NBL	Zinc stearate	
BAEROPHOB HF 2	Zinc laurate	
BAEROPHOB MG/1	Magnesium stearate	

- Small particles, high active surface area
- Good hydrophobicity of the building material
- Good distribution in the building material
- Easy to handle and apply

## Performance of hydrophobic agents in mortars

We use the capillary water absorption coefficient after 90 min ( $C_{90min}$ ) to evaluate the performance. Testing procedures are according to DIN EN 1015-18. The diagram gives results for a lime cement mortar with 0.25 wt.-% of hydrophobic agent.



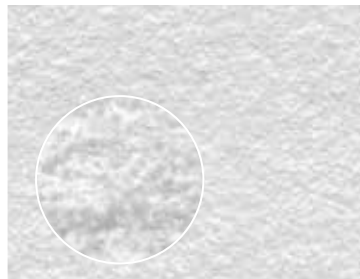
Mortar specimens for testing

## Product forms



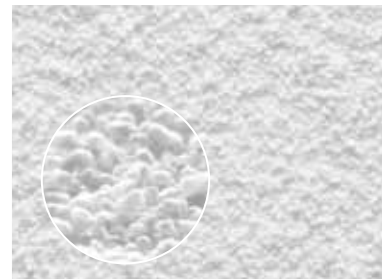
### Liquids

- Dosage accuracy
- Easy storage in tanks
- Easy homogenisation in mortars and with other ingredients
- Quick and safe flow through pumps



### SW Powder

- Small particles, high active surface area
- Good dispersability in final applications
- Good compatibility with powder blends
- Medium bulk density







### AV Granules

- Baerlocher's proprietary AV technology
- Free flowing
- Very low dust
- Good dispersability in polymers
- Easy to handle, accurate dosing
- High bulk density

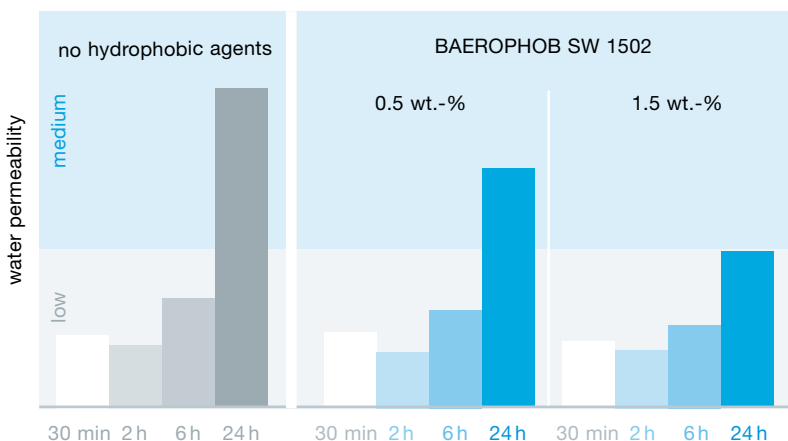
## Special metal soaps

Complex metal soaps with high efficiency

Product Trade Name	Application	Features	
BAEROPHOB ECO CM/1 BAEROPHOB SW 0903	Mortars based on lime and cement	<ul style="list-style-type: none"> <li>Easily dispersable in mixing water</li> <li>Excellent distribution in the building material</li> </ul>	
BAEROPHOB SW 0901	Plaster boards and mortars based on gypsum	<ul style="list-style-type: none"> <li>High efficiency at low dosages</li> </ul>	
BAEROPHOB L 1526	Concrete and mortars based on cement	<ul style="list-style-type: none"> <li>Liquid alternative available</li> </ul>	
BAEROPHOB SW 1502	Pasty plasters, façade paints	<ul style="list-style-type: none"> <li>Excellent distribution in the building material</li> <li>High efficiency at low dosages</li> </ul>	

## Performance of hydrophobic agents in paints and pasty plasters

We use the water permeability to evaluate the performance at a certain time. Testing procedures are according to DIN EN 1062-3. The diagram shows results for a façade paint using acrylic binder and 0.5 & 1.5 wt.% of hydrophobic agent.



Paint-coated specimen for testing

## Product developments

We benefit from our extensive know-how on hydrophobic agents. Together with our customers, we transfer knowledge beyond the given applications:

- Special additives for hydrophobizing and manufacturing wood powder composites
- Hydrophobic agents for natural fiber based materials



# Your reliable partner



## Technical Service

Baerlocher's Technical Service helps in finding the most suitable BAEROPHOB product for your application. We are equipped with our own application lab; accordingly, we offer to individually test the hydrophobic performance of BAEROPHOB products using your raw materials. Regional Technical Service teams benefit from our global experience and knowledge.



## Research and Development

If we may assist you in finding the proper hydrophobic agent among our products, please contact us. We individually develop tailor-made solutions with our customers. Baerlocher stands out as a research-orientated enterprise with strong creative potential because of our comprehensive knowledge about the production and use of hydrophobic agents as well as our activities in the development of new additive systems. We take care of our customers' needs and transfer our research results to the various markets. Continuous investment in research and development and a large number of skilled research scientists and technical experts are the source of our innovative power. Baerlocher has R&D sites focusing on hydrophobic agents in Germany (Unterschleissheim), Italy (Lodi) and the United States (Cincinnati).



## Responsible care and sustainability

We are committed to the principles of responsible care: Sustainable development, safe and environmentally friendly production processes as well as protection of people and the environment are therefore key corporate goals. Our quality management system with ISO 9001 certification, our environmental management system with ISO 14001 certification and our energy saving management system with ISO 50001 certification encourage all employees to act responsibly in order to achieve joint success with our customers. BAEROPHOB products are mainly derived from renewable resources. RSPO\*-certified fatty acids and metal stearates complete our product range. These efforts provide a sustainable future for our industry's business.

\*Roundtable on Sustainable Palm Oil (RSPO)



## Production

A network of fourteen production sites situated globally in key markets makes the Baerlocher Group of Companies a reliable partner with regard to worldwide availability of technology. State of the art production technology ensures consistent product quality independent from the respective production site. Regular investments are made for new capacities using the latest technologies, in support for the growing and changing demand for our products.





Build the Future: [www.baerlocher.com](http://www.baerlocher.com)

**Please contact us:**

- If you need help in finding the most suitable BAEROPHOB product for your application.
- If you have not found the proper hydrophobic agent among our products.

**We develop tailor-made solutions.**

**BÆRLOCHER**



Baerlocher GmbH  
 Freisinger Str. 1  
 85716 Unterschleissheim  
 Germany  
 phone: +49/89 14 37 30  
[www.baerlocher.com](http://www.baerlocher.com)

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