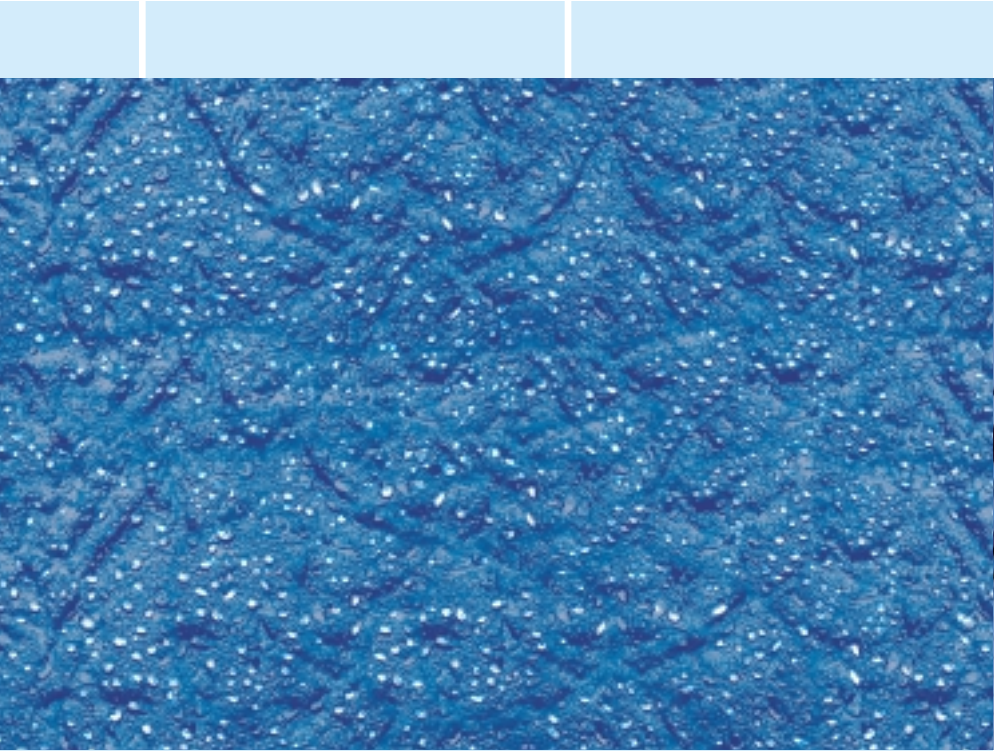


PETER GREVEN –
Competence in
building protection



PETER 
GREVEN

Partner of industry

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In today's construction industry many building materials are made hydrophobic. These mainly include fining, light, adhesive, insulating and redevelopment plaster. This technique is, however, also applied at other materials, e.g. for special concrete, grouting compound, gypsum plaster board and natural stone.

In this range of application metallic soaps have got an important position with an increasing share.

Metallic soaps owe this outstanding position in building protection to their high specific surface, as well as to their high water-repellent effect. At making them hydrophobic the surface is coated over the total cross section, which guarantees that the mass will be water-repellent for several years. The steam diffusion is not affected.

The effectiveness, however, depends on an intensive admixture of metal stearates in the building materials. Here the reactive hydrophobic substances are an improvement. They are used in the form of soluble soap - mostly sodium oleate. The water-repellency effect is delayed by the reaction with calcium from the building material.

During the last few years combination products have been used more and more, which guarantee a good incorporation and quick hydrophobic effect.

The **Peter Greven Fett-Chemie** has adapted the properties, with respect to application technology, of soaps and metallic soaps to the requirements of the construction industry. The result is a wide range of special products with a broad range of application, which in this information are represented in the form of a summary. On request we can provide you detailed information on the individual products. If not noted down otherwise, the indicated dosing quantities refer to the dry substance. They, however, represent approximate values, which may be different from the values in practice, e.g. owing to high proportions of binding agents or larger quantities of lightweight aggregates in the mixtures.



Successful reconstruction of a chapel in Gnigl, a municipal district of Salzburg (A): With damp wall plaster also damp brick-work can be reconstructed in such a way that this is protected durably against further negative influences of humidity. © maxit



Metallic Soaps

LIGA ZINKSTEARAT 101

A non-reactive hydrophobic agent produced by precipitation with a high specific surface and excellent long-term effectiveness, primarily for limestone cement plaster. The dosage is 0.1 % to 1 %. In order to ensure optimal effectiveness, sufficient time is necessary for mixing the dry mortar. Zinc stearates in plaster are light algicides.

LIGA ZINKSTEARAT 501

A type of zinc stearate with considerably improved flowing properties. In comparison to LIGA ZINKSTEARAT 101, the dry mortar can be mixed more easily. The dosage is slightly higher.

LIGAPHOB CSG

Another non-reactive stearate type produced by precipitation with a high specific surface for mineral plasters. At 0.2 to 1 % the dosage is higher than of LIGA ZINKSTEARAT 101. However, there are advantages in the preparation of dry mortar.

LIGA MAGNESIUMSTEARAT TECHN.

Standard grade with very good water repellent properties. Suitable for application in most cement bonded building materials. Very good free-flowing and dosing properties.

LIGAPHOB MSG

Finely powdered, precipitated grade of Magnesium stearate. Application as substitute for precipitated Zinc stearates. Very efficient hydrophobic agent with significantly less dosage compared to LIGA MAGNESIUMSTEARAT TECHN.

LIGA ALUMINIUMSTEARAT D2 LIGA ALUMINIUMSTEARAT DT

A slightly reactive hydrophobic agent primarily for insulating and repair plasters. Aluminium stearates can be mixed well in dry mortar. The dosage is between 0.1 and 1 %.

Alkaline Soaps

LIGA NATRIUMOLEAT 90 LIGAPHOB NT 90

A reactive hydrophobic agent with a wide range of applications. Besides plastering, there are also special applications such as sealing mud, concrete, etc. In comparison to the stearates, the mixing times when preparing the plaster with water is very short, due to the wetting effect. This is of particular advantage when plastering by machine. The hydrophobic effect of sodium oleate is based upon the time-delayed creation of calcium soaps with the alkaline components of the materials. The dosages lie between 0.05 and 0.6%.

Combination products

LIGAPHOB NF 25 LIGAPHOB NF 50 LIGAPHOB CN 50 LIGAPHOB MN 25

Mixed products combine ideally the advantages of metal soaps and oleates. The reactive component ensure the fast wetting of the building material, while the metal stearate component cause an immediate hydrophobization of the plaster surface. This provides faster protection against weathering. As a result of the favourable dispersive qualities the dosage concentration lie between 0.1 and 0.6%. The products are primarily used in construction materials with a limestone cement basis.

Special products

LIGAFLUID CA 50

An aqueous dispersion of calcium soaps for the hydrophobization of concrete, etc. An addition of 1.2 % respective to the bonding agent results, for example in the case of concrete paving blocks, in effective hydrophobization and thus prevents blooming. Besides the known surface characteristics, the product has a liquefying effect on the concrete.





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