Technical Leaflet



CaLoSiL® grey

Colloidal calcium hydroxide nano-particles for stone, plaster and fresco consolidation



Properties

CaLoSiL® grey is a stone strengthener as the other products of the CaLoSiL® family, but characterised by special properties concerning consistency, appearance and application possibilities. CaLoSiL® grey contains calcium hydroxide nano-particles in concentrations of between 5 and 50 g/L. The particles are stable dispersed in ethanol. They have sizes between 50 and 250 nm.

Specific properties of CaLoSiL® grey are:

- Colour
 - As the name it already indicates, in contrast to all other materials, the colour is grey. That results from a special production technology.
- Consistency
 - It has the same concentrations like the other CaLoSiL® products but has a lower viscosity and looks more transparent.
- Penetration behaviour
 Caused by the lower viscosity, CaLoSiL® grey penetrates better and faster, also in relative dense structures, than the other products.
- White haze formation
 There is no or just a slightly white haze formation despite using concentrations up to 25 g/L.

Applications

CaloSiL® grey is used as strengtheners for stone, mortar and plaster. Due to the low viscosity it is especially suitable for the treatment of relative dense structures. Also the consolidation of powdering surfaces, for example on wall paintings or frescoes, can be realised in a favourable manner.

Mixability

CaLoSiL® grey can be mixed with all products of the CaLoSiL® family. Blending with ethanol, n- or iso-propanol is also possible without any difficulties. Mixing with water results in gel like solutions. The addition of high amounts of water causes the flocculation of calcium hydroxide particles.

Packaging

CaLoSiL® grey is available in 500 mL, 1L, 5L and 10 L containers.

Storage

CaLoSiL® grey has to be stored between +5 °C and +30 °C. In unopened, original containers, storage for 12 months is possible. Settled particles can be re-dispersed by shaking the closed bottle or by ultrasonic treatment. The properties of CaLoSiL® "paste-like" remain unaffected.

Safety

CaLoSiL® grey is flammable/combustible. Keep away from oxidisers, heat, sparks and flames. Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapours. CaLoSiL® grey is strongly alkaline. Use safety gasses and gloves. Do not breathe vapour or mist. Do not smoke. Keep container closed. Wash thoroughly after handling. Keep away from sources of ignition. Please store in a cool, dry place and in a tightly closed container. Further information concerning safety during transport, storage and handling as well as for disposal can be found in our latest Material Safety Data Sheet.

Before using in large scale we recommend to treat a small test area with CaLoSiL® in order to find out the most favourable application method and the required volumes of CaLoSiL® grey.

The information mentioned above is state of the art and has been developed by intensive research and development. The application of our products and their use is beyond the range of our influence. Therefore IBZ-Salzchemie GmbH & Co. KG cannot take any liability from events that result from the information contained in this leaflet. Careful and considered use of CaLoSiL® grey is highly recommended.

