

# Technical Leaflet



## Test-Kit

### Content

- 100 mL CaLoSiL® E25 (lime content 25g/l)
- 100 mL Ethanol
- 2 rings of Plexiglas
- 2 different droppers
- 1 Petri dish
- 10 mL Phenolphthalein in spray flask



### Use

The Test-Kit is composed for first tests to characterize the action of CaLoSiL® E25 on different materials. The results will give an overview about:

- Penetration depth
- Strengthening of the material
- White haze formation
- Rate of carbonation

The Plexiglas rings have to be filled with loose, original material. Then, saturation of the material with CaLoSiL® E25 can be realized by dropping it on the surface until saturation is achieved. Repeated applications are possible after evaporation of the ethanol. The carbonation process can be followed by using the phenolphthalein solution. For that, phenolphthalein has to be sprayed on the surface that shall be characterized. A red color will be visible when unreacted calcium hydroxide is present. The sample is then still strongly alkaline ( $\text{pH} > 10$ ) and further carbonation is possible. An option is also the after treatment with silicic acid esters. This can be realized after evaporation of the alcohol. If needed, CaLoSiL® E25 can be diluted with ethanol. Dilution with water, however, is possible in limited extent only. The addition of increasing amounts of water results in gel like solutions followed by the flocculation of calcium hydroxide particles. Ethanol or Ethanol-water mixtures can be used also for pre-wetting of the materials to be consolidated.

### Safety

CaLoSiL® is flammable/combustible. Keep away from oxidizers, heat, sparks and flames. Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapours. CaLoSiL® E25 is strongly alkaline. Use safety glasses and gloves. 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 field with CaLoSiL® in order to find out the most favourable application method and the required volumes of CaLoSiL® E25.

Please do not hesitate to contact us for further information or whenever you need any assistance.



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