



## Technical Leaflet

# CaLoXiL®-repair mortar



### Properties

Repair mortars are used for the replacement of lost parts but also for the filling of open voids and cracks in mortars, plasters and frescoes. In many cases, the use of repair mortars is also necessary as a first step in order to stabilise historic mortars and plasters before real conservation can start.

The use of CaLoSiL®-paste like as a binder has allowed, in combination with special calcium carbonate fillers, the creation of a unique repair mortar fully compatible to the most historic mortars and plaster. Thus, in combination with the calcium hydroxide nano-sols (CaloSiL®) and the CaLoXiL®-injection grout a set of fully compatible restoration / conservation materials is available.

Characteristic data of the repair mortar are:

Density [g/ cm <sup>3</sup> ]:	1,89
Specific surface [m <sup>2</sup> /g]	2,9
Water absorption [wt.-% H <sub>2</sub> O]	16
Porosity [vol.-%]	24-29
Capillary suction up to 5 cm [min.]	20
Coefficient of water absorption in kg/(m <sup>2</sup> h <sup>1/2</sup> )	4,85
Compressive strength [N/mm <sup>2</sup> ] after 21 days	3
Shrinkage [%]	0,2
Hygric expansion [mm]	0,04
Freeze-thaw cyclic test, weight loss [%] after 25 cycles	20

The high capillarity and water suction capacity are typical properties. Water uptake and release takes place rapidly and the mortars can take the role of a protection layer. The mechanical properties of the repair mortar is sufficient to protect the historic materials. The amount of water in the mortar is, due to the use of ethanolic suspensions of nano-lime as binder, low and can be varied on demand.

The colour as well as the surface texture of the mortars can be adjusted by the addition of pigments based on the demands of the object and it is possible to imitate weathered and discoloured mortar surfaces.

### Packaging

CaLoXiL®-repair mortar is available in 250 mL, 500 mL, 1 Liter, 2,5 Liter and 5 Liter containers.



**IBZ-Salzchemie  
GmbH & Co.KG**

## **Storage**

The repair mortar has to be stored between + 5 °C and +30 °C in a tightly closed container. When CaLoXiL®-repair mortar remains in unopened, original containers, storage for at least six months is possible. When necessary stir the suspension until a homogenous mass is formed.

## **Safety**

CaLoXiL®-repair mortar reacts strongly alkaline, Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapours.

Wear safety glasses with side shields, or goggles, at all times while working with lime. Wear gauntlet-type gloves.

Further information concerning safety during transport, storage and handling as well as for disposal and ecology can be found in our latest Material Safety Data Sheet.

Before using in large scale we recommend to treat a small test field with CaLoXiL®-repair mortar in order to find out the most favourable application method and the required volumes.

The information mentioned above is state of the art. The application of our products and the work using is beyond the range of our influence. Therefore IBZ-Salzchemie GmbH & Co.KG can take no liability from events that result from the information contained in this leaflet.

**IBZ-Salzchemie GmbH & Co.KG**

Gewerbepark „Schwarze Kiefern“ • 09633 Halsbrücke, OT Tuttendorf • Tel.: 03731 200155 • Fax: 03731 200156 •  
www.ibz-freiberg.de • info@ibz-freiberg.de