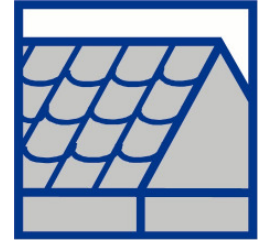


Temporary binders



LITHOPIX, MORMATE, OPTAPIX

Application

Temporary binders cause an increase in green and dry breaking strength. This is necessary for the **handling ability of the shaped articles** in subsequent technological processes, as well as for the transport within the factory.

If the composition does not contain sufficient plastic materials with binding properties, the temporary binders can be utilised to **increase the green and dry breaking strength of the body** as well as **improving the edge strength**.

Temporary binders can be used for plastic shaping via extrusion, dry pressing as well as for the production of spray dried or build-up granulates.

Mode of action

The raw material base of the temporary binders from Zschimmer & Schwarz are **polysaccharides** as well as **synthetic polymers**.

Through the addition of temporary binders, **adhesive forces** develop between the ceramic particles in combination with the batch humidity. Contact with the binder can be made by **covering the ceramic particles** as a result of film forming characteristics, or merely by **point contact**.

In addition to the desired mechanical properties, the **burn-off behaviour** of the temporary binder is a further selection criterion.

Good oxidization ability and thus **complete burn-off** in the sintering process, together with **low emission values** are the required properties that can be obtained with the temporary binders from Zschimmer & Schwarz when maintaining oxidizing kiln conditions.

If the addition of the binder is made in the preparation of the slip phase, the slip rheology can possibly be influenced and must be adjusted when required.