

# LITHOSOL 1540

## Chemical binder



### Chemical basis:

Colloidal silicic acid dispersion

### Characteristics:

Appearance:	opaque liquid
Solubility:	water-miscible
Density (20 °C):	approx. 1.30 g/cm <sup>3</sup>
pH (original):	approx. 10
Average particle size	approx. 15 nm
Specific surface:	approx. 200 m <sup>2</sup> /g
SiO <sub>2</sub> content:	approx. 40 %
Na <sub>2</sub> O content:	0.40 %

### Shelf-life / Packaging:

6 months under proper storage; protect from frost  
drums of 25 and 250 kg, containers of 1000 kg, road tankers

### Application:

LITHOSOL 1540 is a colloidal silicic acid dispersion, low in alkali, which is used for binding ceramic fibres as well as for coating and impregnation of ceramic components.

The product can also be used for binding phosphate- and alkali-free refractory bodies and concretes. In these cases, the hardening effect of LITHOSOL 1540 results from gel formation of SiO<sub>2</sub>, during drying, or the addition of a gel forming aid, such as for example KERAFLOC A 4067.

The required addition quantity of LITHOSOL 1540 ranges between 3 and 10 % of the total mix, depending on each individuell application.

### Note:

LITHOSOL 1540 is sensitive to frost and freezes at temperatures below 0 °C. The colloidal silica floccs out irreversibly and renders the product unusable.

The above results have been obtained from trials in our laboratory and plant. In the light of changing conditions they can serve only as a guide and are therefore offered without obligation. We ask you to observe the possible rights of third parties.