

# OPTAPIX PA 42

## Temporary binder



### Chemical basis:

Polyvinyl alcohol preparation

### Characteristics:

Appearance:	cream-coloured granulate
Solubility:	water-soluble
Bulk density:	approx. 500g/l
pH (4%):	approx. 6
Viscosity (4%, 20°C):	approx. 15mPas
Residue on ignition:	max. 0.5%

### Shelf-life / Packaging:

12 months when stored properly and dry  
bags of 20 kg

### Application:

OPTAPIX PA 42 brings about an increase in the green and dry breaking strength.

Owing to its good general slip compatibility, OPTAPIX PA 42 is particularly suitable for the preparation of ceramic bodies by spray granulation.

The mode of action of OPTAPIX PA 42, as a temporary binder, depends on the creation of adhesive forces between the raw material particles. A suitable binder-water ratio allows the formation of a film, which attaches itself to the raw material particles and, thus, brings about adhesion.

This OPTAPIX PA 42 already contains a pressing aid. This acts as a pressure equalising agent between individual granules, reducing friction and hence leading to homogeneous compaction during pressing. The constitution of the pressing aid makes the granules softer and easier to press, thus eliminating all structures in the pressed part that could adversely affect the structural integrity of the finished product.

The availability of a combined binder/pressing aid makes dosage simpler for the user during the process of manufacture.

The amount added is between 0.5 to 2.0 % of the solids content of the body.

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.

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The additive should be incorporated into the ceramic body or slip in the form of a 10 to 15 % stock solution. In order to produce clear stable solutions the granules should be scattered with stirring, into cold water, and then dissolved by heating to ca. 80 °C. However, ready dissolved preparations are available.

More information concerning the dissolution of polyvinyl alcohols, and the ready-for-use preparations, are available on request.

### Notes

Please note that when using OPTAPIX PA 42 in stock solutions, glazes and/or body slips, anti-bacterial biocide use is strongly recommended. Consequently, the dosage needs to be adapted to the process conditions. Adequate products and their specific application instructions can be found on our homepage [www.zschimmer-schwarz.com](http://www.zschimmer-schwarz.com) or will be sent to you upon request.

Should foaming occur when the additive is used it is recommended that our antifoams, CONTRASPUM CONC. or CONTRASPUM K 1012, be employed.

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