



# AQUABOND ALPHA 3

## INKJET GLUE

### Chemical basis

Mixture of polyglycols and resins

### Characteristics

Appearance	red liquid
Density (25°C)	approx. 1.20 g / cm <sup>3</sup>
Viscosity (35°C)	approx.15mPas

### Shelf-life / Packaging

6 months under proper storage conditions

Suggested storage temperature: from 5°C to 35°C

Containers of 5 and 1000 kg

### 应用

AQUABOND ALPHA-3 is a particular water-based inkjet glue with strong binding power specifically developed for tile decoration.

AQUABOND ALPHA-3 is a part of a bi-component (Alpha and Beta) glue concept.

Using two different bars of a digital printing machine AQUABOND ALPHA-3 is applied for using the first bar.

AQUABOND BETA-1 is applied for using the second bar creating a graphic design made of two layers of ALPHA-1 and BETA-1.

The reaction of AQUABOND ALPHA-3 and AQUABOND BETA-1 is fast and create a soft gel with the following advantages compared to standard digital glues:

- Higher definition
- Long drying time
- Grey scale very fine.

AQUABOND glues contain particular polymers with binding power to bind fine powders or fine grits on the tiles, allowing the decoration of all possible designs and effects desired.

Usually, AQUABOND glues are integrated in the production line as follows:

1. Engobe / glaze application
2. Inkjet color decoration and adding AQUABOND ALPHA-3 and AQUABOND BETA-1 in the last two bars
3. After the digital printing machine (2-3 m distance) application of fine grits of fine powder with traditional machine for grits application
4. Suction to eliminate the excess of materials





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AQUABOND ALPHA-3 can be used alone without AQUABOND BETA-1. In this case the drying time is faster and the definition decrease time by time because of the Newtonian rheology of the glue, the product works similar to a solvent based glue but with the following advantages:

- Reduction of organic content
- Absence of odours during the firing cycle
- Compatibility with all water-based application like glazes or engobes

If it is decided to use only the component AQUABOND ALPHA-3, we recommend as follows in order to increase the open time:

Use inkjet heads with high discharge of ink

- If possible, use two bars overlapping two applications
- Use possibly the 100% of covering (bitmap) always in binary way
- Use the primers of the DIGICER PRIMER collection in order to increase the open time
- Adjust the distance to the powder application unit to optimize the cohesive performance

After the application of grits or powder, it is possible to apply the glaze by spraying or with double disc.

### Cleaning of the machine

Before loading the glue it is strictly necessary to clean the unit circuit by using the proper cleaner TRUCLEAN WB 3.

The same product has also to be used for print heads' routine maintenance.

### Grits or powder parameters

- Compositions: all compositions are allowed
- Humidity: <1%
- Size: D90<0.3 mm without powder residue inside

