



AQUABOND ALPHA-1

INKJET GLUE



Chemical basis:

Mixture of polyglycols and resins

Characteristics:

Appearance: red liquid
Density (25°C): approx. 1.24g/cm³
Viscosity (25°C): approx. 26mPas

Shelf-life / Packaging:

6 months under proper storage conditions
Containers of 5 and 1000kg

Application:

AQUABOND ALPHA-1 is a particular water-based inkjet glue with strong binding power for the tile decoration. AQUABOND ALPHA-1 is a part of a bi-component (Alpha and Beta) glue concept: Using two different bars of a digital printing machine AQUABOND ALPHA-1 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-1 and AQUABOND BETA-1 is fast and create a soft gel with the following advantages compared to a standard digital glue:

- High 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-1 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

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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AQUABOND ALPHA-1 can be used alone without AQUABOND BETA-1. In this case the drying time is faster and the definition decrease time by time because the newtonian rheology of the glue, the product works similiar 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-1, we recommend as follows in order to increase the open time:

- Use inkjet heads with high discharge of ink
- If possible, use two bars of application (two applications overlapping)
- Use possibly the 100% of covering (bitmap) always in binary way
- Use the primers of the DIGICER PRIMER series (additives for surface treatment) 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.

Grits or powder parameters:

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

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