

## AQUENCE FU 400

Known as DORUS FU 400  
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### PRODUCT DESCRIPTION

AQUENCE FU 400 provides the following product characteristics:

<b>Technology</b>	Urea Formaldehyde Condensation Resin
<b>Product Type</b>	Surface Lamination Veneering
<b>Application</b>	Assembly
<b>Appearance</b>	opaque after drying

### Application Areas

- Veneering and crossbanding in the hot press
- Veneering as per E 1 (low formaldehyde content)
- Veneering in membrane press
- B1 particle boards with HPL

### Product Properties

- Long shelf life of the powder
- Long pot life of ~16 hours
- High bonding agent content
- High water resistance in compliance with C3 as per DIN EN 12765
- Exceedingly low formaldehyde emission, far below the threshold value of the E1 requirement

### DIRECTIONS OF USE

#### Preliminary Statement

Prior to application it is necessary to read the **Material Safety Data Sheet** for information about precautionary measures and safety recommendations. Also, for chemical products exempt from compulsory labeling, the relevant precautions should always be observed. Please also refer to the local safety instructions and contact Henkel for analytical support.

#### Instructions for Use

##### Open Time

Open time at 20 °C:	
Quantity applied 100 g/m <sup>2</sup> , minutes	~6
Quantity applied 200 g/m <sup>2</sup> , minutes	~15

##### Pressing temperature and basic pressing time

at 80 - 90 °C, minutes	≥5
at 90 - 95 °C, minutes	≥4
at 95 - 100 °C, minutes	≥3
at 100 - 105 °C, minutes	≥2.5
at 105 - 110 °C, minutes	≥2
at 110 - 115 °C, minutes	≥1.5

Effective pressing time: Basic pressing time plus  
1 min per mm veneer thickness

The data shown is based on 8-12 % wood moisture, 20 °C room and material temperature, 65 % relative air humidity and 0.5 N/mm<sup>2</sup> pressure.

The actual open time and needed pressing time will depend heavily on the working conditions such as temperature, humidity and absorption of the wood, surface characteristics, stresses in the material and application thickness of the glue, etc.

The working temperature of the workpiece and glue should be at least + 10°C.

The parts are to be joined within the open time and kept under pressure till the initial adhesion is strong enough for further processing.

**Mixing****The ready-to-use glue mix:**

1 part by volume water,  
2 parts by volume AQUENCE FU 400

**Preparation of the glue mix:**

Put the water into the mix vessel first. Then add the glue powder until you receive a cream-soup-like liquid free of lumps. You may use the various mechanical types of agitation available.

**Potlife**

Pot life at ambient temperature  
of 20°C, hours: ~16  
of 30°C, hours: ~3 to 4

**Application**

Thinly and evenly by brush, toothed spatula, manual and automated glue spreader

**Cleaning**

Equipment used to apply the glue may be cleaned easily using cold or luke-warm water before the adhesive has dried hard. Hard dried glue remnants have to be removed mechanically.

**Storage:**

Storage life in a cool and dry place up to 9 months without significant loss of adhesion strength. Once opened the inner plastic bag should be tightly closed to keep the powder glue dry.

**Classification:**

Please refer to the corresponding **safety data sheets** for details on:

**Hazardous Information**  
**Transport Regulations**  
**Safety Regulations**

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The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

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