

AQUENCE WL 041

Known as DORUS MD 041
March 2013

PRODUCT DESCRIPTION

AQUENCE WL 041 provides the following product characteristics:

| | |
|---------------------|------------------------------|
| Technology | PVA Dispersion |
| Product Type | Assembly Glue |
| Application | Assembly |
| Appearance | white opaque after drying |

Application Areas

- Gluing solid wood
- Gluing of blockboard cores and composed solid wood panels
- Assembly and carcass gluing
- Dowel insertion as well as mortice and tenon gluing
- Gluing of laminate sheets to chipboard, block board and the like
- Edgebanding of veneer, solid and HPL edges in stationary presses, either cold or using heating elements

Product Properties

- High viscosity
- Very short setting time
- Gap filling
- Gives tough-elastic glue joints
- Workable glue joints
- Highest bonding strength with wood and furniture gluing
- High moisture resistance in compliance with D2 as per EN 204
- High water resistance through addition of cross-linker AQUENCE CATALYST R 397 = Durability class D3 as per EN 204

Technical Data

AQUENCE WL 041:

| | |
|--|---------------------|
| Minimum film formation temperature, °C (MFFT) DIN 53787 | ~+3 |
| Viscosity, Brookfield - RVT, 5/20/20, mPa.s ISO 2555 | 11,000 to 17,000 |
| pH value (20 °C) ISO 976 | 4.5 to 6 |

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 (HPL on chipboard) : | |
| Quantity applied 100 g/m ² , minutes | ~7 |
| Quantity applied 200 g/m ² , minutes | ~12 |

Pressing Time

| | |
|---|-----|
| (at 20°C) | |
| Surface bonding (Chipboard/HPL) : | |
| Quantity applied 100 g/m ² , minutes | ≥7 |
| Joint bonding (beech/ beech) : | |
| Quantity applied 150 g/m ² , minutes | ≥13 |
| Carcass bonding : | |
| Quantity applied 150 g/m ² , minutes | ≥8 |

Edgebanding with heating element at 120°C at 2 min.

For AQUENCE WL 041 with cross-linker AQUENCE CATALYST R 397:

Joints were increased water resistance is required

The data shown is based on 8-12 % wood moisture, 20 °C room and material temperature, 65 % relative air humidity and 0.5 N/mm² pressure.

The actual open and setting times 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 glue is supplied ready for use. If required, it can be thinned with water up to 3 %.

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

Ensure that the parts to be bonded are close fitting and free from dust and grease.

Fit tolerances increase the setting time and reduce the bonding strength.

AQUENCE dispersion glues themselves do not give rise to discoloration of the wood. Metal parts, however, may cause discoloration, due to their reaction with the tannin of the wood (especially with oak).

Usually, application of the glue to one side only is sufficient. Applying glue to both sides, however, is recommended when gluing difficult-to-bond woods and hardwood, in order to improve bonding strength; in this case the open time is increased.

Glue/Cross-linker Mixture

AQUENCE WL 041 plus 1% cross-linker AQUENCE CATALYST R 397 = durability class D3 according to EN 204

Glue and cross-linker should be mixed well and used within approx. 7 hours (pot life).

The setting and pressure times of the glue/cross-linker mixture are - depending on the amount of cross-linker used - about 2-3 min longer than AQUENCE WL 041 glue without cross-linker.

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

Store in the original tightly closed container in a cool, dry place away from frost.

Stir well before use.

Storage life up to 12 months.

Classification:

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

Hazardous Information
Transport Regulations
Safety Regulations

ADDITIONAL INFORMATION

Disclaimer

Note:

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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